2017 International Conference on Eating Disorders

June 7: Clinical Teaching & Research Training Day

Prague Congress Centre | Prague, Czech Republic

Final Program
EATING DISORDERS

Your focus should be on the research; let Wiley focus on providing a seamless publishing experience. Your research is important and delivers real impact in the field. Let Wiley lighten your load with our publishing expertise.

Publish with the *International Journal of Eating Disorders*  
http://bit.ly/PublishIJED

- Clear publication guidelines for authors
- Traditional and Open Access publishing options
- Quick and easy submission process
- Article tracking through each step: acceptance to publication
- Editing, language, and other resources for emerging authors and article collaborators
- Broad dissemination of your research to a global readership

Discover more about the *International Journal of Eating Disorders* at  
http://bit.ly/IJEatDis

WILEY
Dear Colleagues,

Vítejte v Praze!
Welcome to Prague!
¡Bienvenidos a Praga!

As the Academy approaches its 24th birthday, we are excited and privileged to start our celebration in a city of a hundred spires, a UNESCO monument and one of the most beautiful cities in the world. It is my great pleasure to welcome you to Prague, the Prague Congress Centre and to the 2017 International Conference on Eating Disorders (ICED) with this year’s theme: Diverse Perspectives, Shared Goals. We come with different perspectives while focusing on the common good for all, to protect and promote research, evidence based treatment, education and prevention in the field of eating disorders.

The ICED is widely recognized as the premier annual conference for the International Eating Disorder Community. Over the next three days, we will not only have a superb academic experience with multiple opportunities for face-to-face interaction and to bond with specialists and conference attendees from around the world, but we will also meet “old and new” friends and colleagues in the field. This is an experience I really look forward to every year!

Conference Co-Chairs Unna Danner, PhD and Jennifer Wildes, PhD, FAED, the 2017 Program Committee, Jenny Thomas, PhD our director for the Annual Meeting Portfolio and the AED headquarters staff have created an outstanding program. In addition to this enriching program, Ursula Bailer, MD, FAED chaired our ICED Clinical Teaching Day/Research Training Day Committee. Yesterday, Clinical Teaching Day provided an array of in-depth workshops on state-of-the-art-treatment, medical complications and neuroscience in the field to help expand clinical skills, while the Research Training Day provided helpful insights and information to those just beginning their careers. Thank you and congratulations to all of you for all your hard work!

To begin a very ambitious and well planned agenda, we anticipate an extraordinary keynote from Vikram Patel, PhD describing Psychological Treatments for the World followed by presenters in four outstanding plenary sessions covering complex issues in research and practice including: (I) setting the stage: clinical staging and personalized approaches to treating eating disorders; (II) atypical eating disorders: addressing the overlooked and misunderstood (III) eating disorders, obesity and addiction: a critical analysis; and (IV) neuroimaging and beyond: the clinical value of eating disorders brain research. We are offering 33 interactive workshops presented by leading scientists and clinicians in our field, 132 paper presentations and 240 poster presentations by scholars from around the globe. In addition, we have the Special Interest Groups (SIG) Discussion Panels and annual meetings, a Meet the Experts Session, the HLA Chapter annual meeting, the PCAC Global luncheon with colleagues from North America, South and Central America, Asia, Eastern and Western Europe, and the Global Think Tank Session entitled “Different Perspectives, Similar Goals: Integrating Research and Practice.”

I want to invite you to help shape the future of the ED Community in Europe by attending the inaugural meeting of the AED European Chapter later this afternoon, and remember that if you are practicing in Europe, this year you will be able to obtain European CME credits for attending this conference.
Continuing with our global mission, we are again offering simultaneous translations to all plenaries and selected workshops into Spanish. On behalf of the AED Board of Directors, I want to extend our deepest gratitude to all our distinguished guests, members, presenters, volunteers, exhibitors, sponsors, advocates, carers, supporters and everyone whose commitment to ICED and AED have served to build a real and powerful community every year.

I invite each of you to attend our opening reception this evening, talk with exhibitors and view the posters from 5:45 p.m. – 7:15 p.m. If you are not an AED member, please come to the non-member meet and greet event, being held in the same area.

There are many other ways for you to engage during ICED. Our Social Media Committee will be live on Facebook talking to attendees after sessions, and in fact, they are broadcasting now! You can also convert 140 character conversations into actual lengthy exchanges during our Tweet Up, Tweet Out sessions held during the morning break each day. And don’t forget to join me and other AED colleagues on Saturday for the Awards Ceremony during the business meeting where we will honor our 2017 AED Award recipients, research and clinical scholarship recipients, our new class of 2017 AED Fellows and will recognize several AED leaders.

We are truly excited to close this impressive learning experience in the oldest Gothic building in Bohemia (built between the years 1231-1234), the St. Agnes Convent, with our closing social event with a delicious dinner buffet and lots of dancing in a breathtaking atmosphere.

Besides our International Conference, our AED board of directors, volunteers and staff had a very busy year expanding our mission and vision worldwide. Clinicians, researchers and advocates from six continents and 51 countries, have joined AED in increasing numbers and opportunities for cross collaboration. Among many projects, this year we planned to start bringing knowledge and experience to corners of the world where there is little or no access to professionals trained to diagnose and treat eating disorders. We are developing plans to deliver education to medical professional teams in parts of the world where expertise on ED is almost non-existent through “AED emissaries.” With the help of our members, advocates and other partner organizations in the field, we can make a real impact on early diagnosis and appropriate treatment. If you are a member of the AED, I hope you are as excited as I am to see the expansion and development of our beloved organization, and I encourage you to continue to participate and work to reach our goals. If you are not a member, but you are already excited with all our plans, I invite you to stop by our Membership booth to explore the many benefits for joining during the conference!

Lastly, I want to thank all our members, volunteers, donors and advocates of AED for their continuous support, energy, time and commitment. My special thanks and warmest gratitude to our board of directors who have overseen all activities of AED: Carolyn Becker (immediate past president), Steffi Bauer (president elect), Bryn Austin (secretary), Guido Frank (treasurer), Jenny Thomas (director for annual meetings), Kyle De Young (director for communications), Annmarie van Elburg (director for membership), Donna Friedman (director for patient-carer relations), Lauren Muhlheim (director for outreach), Ursula Bailer (director for research-practice integration), Jennifer Lundgren (director for standards of excellence) and Lisa Myers (executive director). Big thanks to our headquarters staff (Dawn, Margaret, Yvette, Christine, Bethany and Lorna) led by our incredible Lisa.

I encourage you to enjoy our conference and the city: walk, visit, get inspired, engage, challenge, have fun, learn, share and at the end of the day... finish with a dance! Safe travels back home and see you next year for 2018 ICED in Chicago.

Warm wishes,

Eva Trujillo, MD, FAED, CEDS, FAAP, Fiaedp
President, Academy for Eating Disorders
Estimados Colegas,

Vítejte v Praze!
Welcome to Prague!
¡Bienvenidos a Praga!

Mientras nos acercamos al 24vo. cumpleaños de la Academia, nos sentimos muy contentos y privilegiados de empezar nuestra celebración en la ciudad de las cien torres, un monumento de la UNESCO y una de las ciudades más bellas del mundo. Es para mí un gran placer darles la bienvenida a Praga, el Centro de Convenciones de Praga y a la Conferencia Internacional de Trastornos de la Conducta Alimentaria 2017 (ICED) con el tema de este año: Diverse Perspectives, Shared Goals. Venimos de diferentes perspectivas mientras todos nos enfocamos en un bien común, proteger y promover la investigación, tratamientos basados en la evidencia, educación y prevención en el campo de los trastornos de la conducta alimentaria.

El ICED es ampliamente reconocido como la más importante y reconocida conferencia en la comunidad internacional de trastornos de la conducta alimentaria. En los próximos tres días no solamente tendremos una magnífica experiencia académica donde tendremos múltiples oportunidades para una interacción cara a cara y para hacer conexiones con especialistas y asistentes a la conferencia de todo el mundo, sino que también podremos convivir con “nuevos y viejos” amigos y colegas de nuestro campo. ¡Esta es una experiencia que espero con ansia cada año!

Las co-Directoras de la conferencia, Unna Danner, PhD y Jennifer Wildes, PhD, FAED, el Comité Científico del Programa 2017, Jenny Thomas, PhD nuestro director del portafolio de congreso anual y nuestro personal de nuestras oficinas sede han creado un programa excepcional. Además de este gran programa, Ursula Bailler, MD, FAED dirigió nuestro Comité del Día de Enseñanza Clínico/Entrenamiento en Investigación. Ayer, el Día de Enseñanza Clínico proporcionó a los asistentes una serie de talleres en profundidad sobre el estado del arte en el tratamiento, las complicaciones médicas y la neurociencia en los trastornos de la conducta alimentaria para ayudar a ampliar las habilidades clínicas, mientras que el Día de Entrenamiento en Investigación proporcionó a nuestros miembros estudiantes muchas ideas útiles e información para aquellos que apenas comienzan sus carreras. ¡Gracias y felicitaciones a todos ustedes por todo su duro trabajo!

Para comenzar con una agenda muy bien planeada y ambiciosa, anticipamos una conferencia de apertura extraordinaria con el profesor Vikram Patel, PhD describiendo Tratamientos Psicológicos en el Mundo. Posterior a esta conferencia de apertura, tendremos cuatro plenarias fuera de serie que cubrirán temas complejos en la investigación y práctica clínica, incluyendo: (I) establecer el escenario: estadificación clínica y abordajes personalizados para el tratamiento de los trastornos de la conducta alimentaria; (II) trastornos de la conducta alimentaria atípicos: abordando lo ignorado y lo mal comprendido; (III) trastornos de la conducta alimentaria, obesidad y adicción: un análisis crítico; y (IV) neuroimagen y más allá: el valor clínico de la investigación cerebral en los trastornos de la conducta alimentaria. Ofreceremos 33 talleres interactivos presentados por científicos y clínicos líderes en nuestro campo, 132 presentaciones orales y 240 presentaciones en póster por académicos de alrededor del mundo. Además, tenemos las juntas de los Grupos de Interés Especial (SIG) y los Páneles de Discusión de los SIG, la sesión de Conoce a los Expertos, la junta anual del Capítulo Hispano Latino Americano, el almuerzo del Comité Global de Organizaciones Asociadas y Capítulos con colegas de Norteamérica, Sur y Centro América, Asia, Europa Occidental y Oriental; y la sesión Global Think Tank con el título: “Different Perspectives, Similar Goals: Integrating Research and Practice”.

Te invitamos a que nos ayudes a moldear el futuro de la Comunidad Europea en Trastornos de la Conducta Alimentaria asistiendo a la reunión inaugural del Capítulo Europeo de la AED que será llevada a cabo hoy mismo por la tarde, y recuerda que si tu práctica clínica es en Europa, este año podrás obtener créditos CME Europeos por asistir a esta conferencia.

Continuando con nuestra misión global, otra vez estaremos ofreciendo traducciones simultáneas de todas las plenarias y talleres selectos al Español. A nombre de los miembros del Consejo de Directores de la AED quisiera extender un profundo agradecimiento a todos nuestros distinguidos invitados, miembros, presentadores, voluntarios, expositores, patrocinadores, cuidadores, defensores y todos aquellos comprometidos con el ICED y la AED que han ayudado a hacer una verdadera y poderosa comunidad año con año.
Invito a cada uno de ustedes a nuestra recepción de apertura hoy por la noche, a que platiquen con los expositores y vean los pósters de 5:45pm a 7:15pm. Y si aún no eres un miembro de la AED, te invito al evento para dar la bienvenida a no miembros que se llevará a cabo en esa misma área.

Hay muchas otras maneras en que puedes convivir durante el ICED. Nuestro Comité de Redes Sociales estará transmitiendo en vivo después de las sesiones, vía Facebook, las entrevistas a los asistentes a las sesiones! También puedes convertir conversaciones de 140 caracteres en largos intercambios durante nuestras sesiones de tweet out que se llevarán a cabo en el receso de cada mañana durante los días de congreso. Ah! Y no olvides acompañarme a mí y otros colegas de la AED este Sábado para la Ceremonia de Premiación durante la junta de negocios donde honraremos a los ganadores de premios, a los ganadores de becas clínicas y de investigación, a nuestra generación 2017 de Fellows de la AED y donde reconoceremos a diversos líderes de nuestra organización.

Estamos muy emocionados de cerrar esta impresionante experiencia de aprendizaje en el edificio Gótico más antiguo en Bohemia (construido entre los años 1231-1234), el Convento de St. Agnes, donde nuestro evento social de cierre se llevará a cabo con una deliciosa cena buffet, mucho baile y una atmósfera asombrosa.

Además de la Conferencia Internacional, el Consejo de Directores de la AED, voluntarios y colaboradores en nuestras oficinas centrales, han estado sumamente ocupados todo este año expandiendo la misión y visión de la AED por el mundo entero. Clínicos, investigadores y defensores de la AED de seis continentes y 51 países, se han unido para incrementar el número de oportunidades colaborativas. Entre muchos proyectos, este año planeamos empezar a llevar el conocimiento y la experiencia a rincones del mundo donde hay muy poco o ningún acceso a profesionales entrenados para diagnosticar y tratar los trastornos de la conducta alimentaria. Estamos desarrollando planes para llevar este aprendizaje a equipos profesionales médicos en partes del mundo donde la experiencia en trastornos de la conducta alimentaria es casi inexistente. Esto lo haremos a través de nuestro “Programa Emisario”. Con la ayuda de nuestros miembros, defensores y otras organizaciones asociadas en este campo, podemos causar un impacto real en el diagnóstico temprano y el tratamiento oportuno. Si eres miembro de la AED, espero estés tan emocionado como yo por ver el desarrollo y expansión de nuestra querida organización, y te invito a que continúes participando y trabajando para alcanzar nuestros objetivos. Si aún no eres miembro, pero ya te emocionaste leyendo todos estos planes, te invito a ir al stand de membresías ¡donde podrás explorar los muchos beneficios que hay por unirte durante la conferencia!

Finalmente, quisiera agradecer a todos nuestros miembros, voluntarios, donadores y defensores de la AED por su apoyo constante, su energía, su tiempo y su compromiso. Mi más sincero agradecimiento a nuestro Consejo de Directores que ha estado al pendiente y ha dirigido todas las actividades de la AED: Carolyn Becker (presidente saliente inmediato), Steffi Bauer (presidente electo), Bryn Austin (secretaria), Guido Frank (tesorero), Jenny Thomas (director de congresos anuales), Kyle De Young (director de comunicación), Annemarie van Elburg (director de membresías), Donna Friedman (director de relaciones con pacientes-cuidadores), Lauren Muhlheim (director de enlace), Ursula Bailier (director de integración investigación-clínica), Jennifer Lundgren (director para estándares de excelencia) y Lisa Myers (director ejecutivo). También, muchísimas gracias a nuestro equipo de colaboradores en la oficina central (Dawn, Margaret, Yvette, Christine, Bethany y Lorna) guiados por nuestra increíble Lisa.

Disfruten mucho la conferencia y la ciudad: ¡caminen, visiten, inspirense, involúcrense, reten, diviértanse, aprendan, compartan y al final del día… terminen con un gran baile! Buen viaje de regreso a su casa y nos vemos en el ICED 2018 en Chicago.

Mis mejores deseos y un abrazo,

Dra. Eva Trujillo, MD, FAED, CEDS, FAAP, Fiaedp
Presidente, Academy for Eating Disorders
Dear conference delegates,

I am pleased that the Academy for Eating Disorders has chosen Prague to be the venue of their international conference as it is a good opportunity for our city to show that it is able to meet all requirements of the delegates of international meetings.

Prague is one of the most beautiful European capitals and the city is known worldwide not only for its monuments, culture variety, and modern and traditional art, but also for its magical atmosphere, living history, for thriving business communities and rich social life. Our capital has become a very popular destination for congresses and scientific meetings, providing top quality services, one of the best public transportation systems in Europe and an excellent hotel and meeting infrastructure. Due to its constant development in meetings industry, Prague is being recognized as one of the leading cities worldwide.

Major events such as yours are a great benefit to our city and we are very honoured to host the 2017 International Conference on Eating Disorders in Prague. We hope that you take advantage of your time in Prague to not only learn about the latest advances in eating disorders research, advocacy, and treatment, but also to enjoy all that Prague has to offer.

Yours sincerely,

Mariánské nám. 2, 110 01 Praha 1
tel.: 236 003 400, fax: 236 007 106
e-mail: adriana.krnacova@praha.eu, www.praha.eu
The Academy for Eating Disorders gratefully acknowledges the following ICED 2017 sponsors. Thank you for supporting ICED and the eating disorders community!

WILEY Gold

Timberline Knolls Silver

Conference Materials
ICED 2017

Vítejte v Praze!
Welcome to Prague!
¡Bienvenidos a Praga!

Contents:

About AED | 10
2017 Awards | 12
General Information | 14
Keynote Address | 19
Schedule at-a-Glance | 20
Abstracts | 22
Poster Session I | 41
Abstracts (continued) | 99
Poster Session II | 103
Paper Session I | 159
Abstracts (continued) | 188
Paper Session II | 197
ICED 2017 Faculty | 226
Prague Congress Centre Floor Plans | 227
Exhibitors | 229
Disclosure Information | 234
Upcoming Events | 236
About The Academy for Eating Disorders

The AED is the largest multi-disciplinary professional society in the eating disorders field. Founded on September 11, 1993, the AED has grown to include almost 1,700 members worldwide who are working to prevent and treat eating disorders such as anorexia nervosa, bulimia nervosa and binge eating disorder.

AED’s membership is comprised of professionals and students working and studying in universities, hospitals, research centers and treatment facilities, and others committed to furthering empirical insight into diagnosing and treating eating disorders. Approximately 29% of AED members reside outside of the USA, representing 48 different countries.

The AED provides cutting-edge professional training and education; advances new developments in eating disorders research, prevention and clinical treatments; and advocates for the rights of people with eating disorders and their caregivers; and provides the field at large with a variety of services, resources and educational programs, including the invaluable support of a community of dedicated colleagues.

Since the organization was founded in 1993, the International Conference on Eating Disorders (ICED) has been AED’s flagship activity and the highlight of the AED year. The ICED is the primary gathering place for professionals and advocates engaged in research, treatment and prevention of eating disorders.

Specific Goals of the Academy for Eating Disorders

Generate knowledge and integrate collective expertise about eating disorders.

Provide platforms for the promotion of understanding, sharing of knowledge and research-practice integration in the field of eating disorders.

Build capacity in the next generation of Eating Disorders professionals.

Foster innovation and best practice by recognizing excellence in the field of eating disorders.

Visit www.aedweb.org for more information about AED

2016-2017
AED Leadership, Committees and Staff

AED Executive Committee
President | Eva Maria Trujillo, MD, FAED, CEDS, FAAP, Fiaedp
President-Elect | Stephanie Bauer, PhD
Immediate Past President | Carolyn Becker, PhD, FAED
Secretary | Bryn Austin, ScD, FAED
Treasurer | Guido K W Frank, MD, FAED

Board of Directors
Director for Annual Meetings | Jennifer J Thomas, PhD, FAED
Director for Communications | Kyle De Young, PhD
Director for Membership | Annemarie van Elburg, MD, PhD, FAED
Director for Outreach | Lauren Muhlheim, PsyD, CEDS
Director for Patient-Carer Relations | Donna Friedman
Director for Standards of Excellence | Jennifer D Lundgren, PhD, FAED
Director for Research-Practice Integration | Ursula Bailer, MD, FAED
Executive Director, Ex Officio | Elissa M Myers, CAE, IOM

ICED 2017 Scientific Program Committee
Unna Danner, PhD | Co-Chair
Jennifer Wildes, PhD, FAED | Co-Chair
Kelly Bhatnagar, PhD
Angela Celio-Doyle, PhD
Leah Dean
Kelsie Forbush, PhD
Anthea Fursland, PhD, FAED
Anja Hilbert, PhD
Hana Papežová, MD, PhD
Rachel Rogers, PhD
Kendrin Sonneville, ScD, RD, LDN
Annemarie van Elburg, MD, PhD, FAED
Ross Crosby, PhD, FAED

AED 2016-2017 Committees

Advisory Board
Donna Friedman | Chair
June Alexander
Judy Banker, MA, LLP, FAED
Amy Cunningham, MPH, MBA
Leah Dean
Marissa Fernandez-Garcia, Psych
Dawn Hynes
Joanna Kandel

Advocacy & Communication Committee
Alli Spotts-De Lazzer, MA, LMFT, LPCC, CEDS | Co-Chair
Kristine Vazzano, PhD | Co-Chair
Manuela Ferrari, MHSc, PhD
Norman Kim, PhD
Jocelyn Lebow, PhD
Cheri Levinson, MA
Christine Peat, PhD
Emily Pisetsky, PhD
Margarita Sala
Olivia Stumph, RN, DNP(c)
Denise Styer, PsyD
Lisabeth Wesely-Casella
Lazaro Zayas, MD
Awards and Scientific Review Committee
Kristin Javaras, DPhil, PhD | Chair
Rachel Bachner-Melman, PhD
Jennifer Coelho
Denise Davidson, PhD
Marc Gluck, PhD
Nadia Miceli, MD, PhD, FAED
Deborah Mitchison, M ClinPsych, MSc
Carly Pacanowski
Carolyn Pearson, PhD
Sarah Racine
TJ Raney, PhD
Graham Redgrave, MD
Robyn Sysko
Catherine Walker, PhD

Eating Disorders Coalition Liaison
Delegate | Bryn Austin, ScD, FAED

Electronic Media Committee
Alison Darcy, PhD | Co-Chair
Andrea Hartman, PhD | Co-Chair
Suzanne Dooley-Hash, MD
Seena Grewal
Jocelyn Lebow, PhD
Alexia Spanos, PhD

Fellows Committee
Susan Paxton, PhD, FAED | Chair
J Armando Barriguez Melendez, MD, PhD, FAED
Thomas B Hildebrandt, PsyD, FAED
Tamara Pryor, PhD, FAED

Finance Committee
Marisol Perez, PhD
Rachel Bachner-Melman, PhD
Judy Banker, MD, FAED
Marian McGavan, LCSW, BACS
Susan Mengden, PhD
Nadia Miceli, MD, PhD, FAED
Mark Norris, MD, FRCP C

Forum Newsletter Committee
Jessica Baker, PhD | Editor
Sherri Delinsky, PhD
Peter Doyle, PhD

ICED Clinical Teaching Day, Research Training Day & Webinars Committee
Ursula Bailer, MA, FAED | Chair
Wayne Bowers, PhD, FAED
Beth Brandenburg, MD
Caitlin Martin-Wagar
Abigail Matthews, PhD
Joan Orell-Valente, PhD, LP

Journal Advisory Committee
Jennifer Thomas, PhD, FAED
Chair/Associate Editor
Guido K.W. Frank, MD, FAED
Associate Editor
Kelly Klump, PhD, FAED
Associate Editor
Glenn Waller, DPhiL, FAED
Associate Editor
Ruth Weissman, PhD, FAED
Editor-in-Chief

Medical Care Standards Committee
Suzanne Dooley-Hash, MD | Co-Chair
Michael Spaulding-Clayton, MD, MS
Co-Chair
Nicole Cifra, MD
Angela Guarda, MD
Debbie Katzman, MD, FAED
Beth McGilley, PhD, FAED, CEDS
Debbie Michel, PhD
Ellen Rome, MD, MPH
Devdutta Sangvai, MD, MBA
Ed Tyson, MD
Therese Waterhouse, PhD, RD, LD

Member Retention/Recruitment Committee
Marc Gluck, PhD | Co-Chair
Cristin Runforla, PhD | Co-Chair
Ellen Astrachan-Fletcher, PhD
Katherine Balantekin, PhD, RD
Susan Catherine Kleinman, PhD
Kortney Parmar, RD, RN, MS, FNPC

Nominations Committee
Carolyn Becker, PhD, FAED | Chair
Ross Crosby, PhD, FAED
Patricia Fallon, PhD, FAED
Fernando Fernandez-Aranda, PhD, FAED
Debbie Franko, PhD, FAED
Pam Keel, PhD FAED
Nadia Miceli, MD, PhD, FAED

Partnership, Chapter & Affiliate Committee
Ashish Kumar, MRCPsych, MSc
Co-Chair
Sebastian Soneira, MD | Co-Chair
Laura Al-Dakhlieh Winkler, MD
Rachel Bachner-Melman, PhD
Francesca Brambilla
Tiiffany Brown, PhD
Hans-Christoph Frieridrich, MD
Bonnine Harken
Guennole Huong de Penanster
Melanie Jacob, RD, CSSD
Gry Kjaerstad Telleus, PhD
Gudrun Kristmannsdottir
Carolina Lopez, PhD
Umberto Nizzoli, PhD
Mark Norris, MD, FRCP C
Mayaro Ortega Luyando
Hana Papezova, MD, PhD
Susan Paxton, PhD, FAED
Conxsa Perpina Tordera, PhD
Mae Lynn Reyes Rodriquez, PhD
Ellen Rome, MD, MPH
Janice Russell, MD, FAED
Paulo PP Machado, PhD
Rasmus Ismaa, PhD
Maria Sobieszek
Margriet van Leeuwen
Johan Vanderlinden
Mette Waaddegaard, MD, PhD
Karim Waldherr
Lena Westin, RN, PsTherap
Lars Woeckel, PD, DR
Kazuhiro Yoshiuchi, MD, PhD

Patient Carer Committee
Leah Dean, BA | Co-Chair
Judy Krasna | Co-Chair
June Alexander
Nicole Cifra, MD
Beth Hartman McGilley, PhD, FAED, CEDS
Amy Cunningham, MPH, MBA
J Alane Park, LICSW, LCSW-C, LCSW
Blair Burnette
Joan Riederer
Miriam Roelink
Chevese Turner
Mark Warren, MD

Research-Practice Committee
Terry Fassih, PhD | Co-Chair
Kristen von Ranson, PhD, FAED
Co-Chair
Kelly Bhatnagar, PhD
Timothy Brewerton, MD, DFAPA, FAED
Suzanne Dooley-Hash, MD
Annie Haynos, PhD
Thomas B Hildebrandt, PsyD, FAED
Michael Strober, PhD, ABPP, FAED

Social Media Committee
Elizabeth Claydon, MPH | Co-Chair
Ashley Solomon, PsyD | Co-Chair
Liliana Almeida, MA
Carrie Arnold, MA, MPH
Jessica Baker, PhD
Tara Deliberti
Thorgerdur Maria Halidorsdottir
Nicholas Hudson-Swogger, MA, LCMS
Andrea LaMarre, MSC
Abigail Matthews, PhD
Millie Plotkin, MLS
Miri Roelink

Special Interest Groups Oversight Committee
Marc Gluck, PhD | Co-Chair
Marcia Herrin, EdD, MPH, RD, FAED
Co-Chair
Kelly Allison, PhD, FAED
Leslie K Anderson, PhD
Angela Derrick, PhD, CEDS
Alan Duffy, MS
Elizabeth Holm, DrPH, RD

AED Headquarters Staff
Drohan Management Group, Reston, VA
Executive Director
Elissa M. Myers, CAE, IOM
Deputy Executive Director
Dawn Cannon, MBA
Director of Meetings
Margaret Jamborsky
Creative Services Director
Micki Francis
Accountant | Ron Chatelain
Meetings Manager | Yvette Duron
Marketing/Communications Manager
Bethany Blackwell, MA
Administrator | Lorna Pranger Valle
Meetings Intern | Christine Woodyard
2017 Awards

The awardees below will be honored at the Awards Ceremony immediately following the Annual Business Meeting on Saturday, June 10, 2017, beginning at 1:00 p.m. in the Forum Hall, Second Floor of the Prague Congress Centre. All ICED attendees are invited to attend. Lunch will be provided.

AED Lifetime Achievement Award
Marsha Marcus, PhD

AED Leadership Award for Clinical, Administrative or Educational Service
Andreas Karwautz, MD

AED Leadership Award for Research
C. Barr Taylor, MD

AED Outstanding Clinician Award
Kelly Vitousek, PhD

Meehan/Hartley Award for Public Service and Advocacy
Katrina Velasquez, JD, MA

Past Awards and Honors
AED Lifetime Achievement Award
2016 | Walter H. Kaye, MD, FAED
2015 | Christopher Fairburn, MD
2014 | Janet Treasure, OBE, MD, FRCP, FAED
2013 | Terry Wilson, PhD
2012 | James Mitchell, MD
2011 | Bryan Lask, FRCPych
2010 | Bob Palmer
2007 | Francesca Brambilla, MD
2004 | Peter Beumont, MD
2000 | Paul Garfinkel, MD
1998 | Katherine Halmi, MD
1996 | Gerald Russell, MD
1996 | Arthur Crisp, MD
1995 | Albert Stunkard, MD

AED Leadership Award for Clinical, Administrative or Educational Service
2016 | Evelyn Attia, MD, FAED
2015 | Eric van Furth, PhD, FAED
2014 | Richard Kreipe, MD
2013 | Debbie Katzman, MD
2012 | Rachel Bryant-Waugh, DPhil, MSc
2011 | Judy Banker, MA, LLP, FAED
2010 | Howard Steiger, PhD
2009 | Ulrike Schmidt, MRCPsych Dr. Med, PhD
2008 | Ron Thompson, PhD, FAED
2008 | Roberta Sherman, PhD, FAED
2007 | Pat Fallon, PhD, FAED
2006 | Michael Strober, PhD, FAED
2005 | Robert Palmer, PhD

AED Leadership Award in Research
2016 | Kelly L. Klump, PhD, FAED
2015 | Fernando Fernandez-Aranda, PhD, FAED
2014 | Daniel Le Grange and Jim Lock, PhD, MD
2013 | Susan Paxton, PhD
2012 | Stephen Touyz, PhD, FAPS, FAED
2011 | Hans Hoek, MD, PhD
2010 | Dianne Neumark-Sztainer, PhD, MPH, RD
2009 | Steve Wonderlich, PhD
2008 | C. Terrence Wilson, PhD
2007 | Manfred Fichter, MD, PhD
2006 | Cynthia Bulik, PhD, FAED
2005 | Ruth Striegel-Moore, PhD, FAED
2004 | Janet Treasure, OBE, MD, FRCP, FAED
2003 | B. Timothy Walsh, MD
2002 | Christopher Fairburn, MD
2000 | W. Stewart Agras, PhD
1998 | Walter Kaye, MD
1995 | James Mitchell, MD

AED Outstanding Clinician Award
2013 | Lucene Wisniewski, PhD
2012 | Phil Mehler, MD, CEDS, FACP, FAED
2011 | Diane Mickley, MD
2010 | Ivan Eisler, PhD
2008 | Susan Willard, MSW, FAED
2003 | Marsha D. Marcus, PhD
2000 | Pauline Powers, MD
1998 | Arnold Andersen, MD

AED Meehan/Hartley Award for Public Service and Advocacy
2016 | June Alexander
2015 | Chevese Turner
2014 | Laura Collins
2013 | Karine Berthou
2012 | Mary Beth Krohel
2011 | Cynthia Bulik
2010 | Mary Tartilho
2008 | Susan Ringwood
2007 | Kitty Westin and Claire Vickery
2006 | Michael Levine, PhD, FAED
2005 | David Herzog, MD
2004 | Armando Barriguet, Fabian Melamed, Ovidio Bermudez, Paulo Machado, and Fernando Fernandez-Aranda, PhD, FAED

Fellows Class of 2017
Congratulations to the AED Fellows class of 2017. These members will be inducted as Fellows during the Annual Business Meeting and Awards Ceremony on Saturday, June 10, 2017 beginning at 1:00 p.m.

Drew Anderson, PhD
Phillippa Diedrichs, PhD, BSc
Theresa Fasshi, PhD, CEDS
Jennifer Gaudiani, MD, CEDS
Andrea Goldschmidt, PhD
Angela Guarda, MD
Lauren Muhlheim, PsyD, CEDS-S
Guillermina Rutsztein, PhD

AED Distinguished Service Award
2015 | Annie Cox and Jacqueline Schweinzer, CMP
2013 | Tim Walsh, MD
2012 | Michael Strober, PhD
2011 | Joe Ingram
2002 | Joel Yager, MD
1998 | Amy Baker Dennis, PhD

AED Public Service Award
2013 | Marisa Garcia, MHA
2011 | Beth Klarman
2009 | S. Kenneth Schonberg, MD
1995 | Susan Blumenthal, MD

AED Mental Health Advocacy Award
2007 | US Rep Patrick Kennedy

AED Global Impact Award
2008 | Judith Rodin

AED Corporate Award
2009 | Bos, International and Claude Carrier
2008 | Unilever

AED Research Practice Partnership Award
2012 | Michael Levine, PhD
2009 | Tri Delta International Fraternity and Carolyn Becker, MD

AED Research Practice Partnership Award
2012 | Michael Levine, PhD
2009 | Tri Delta International Fraternity and Carolyn Becker, MD

Fellows Class of 2017
Congratulations to the AED Fellows class of 2017. These members will be inducted as Fellows during the Annual Business Meeting and Awards Ceremony on Saturday, June 10, 2017 beginning at 1:00 p.m.

Drew Anderson, PhD
Phillippa Diedrichs, PhD, BSc
Theresa Fasshi, PhD, CEDS
Jennifer Gaudiani, MD, CEDS
Andrea Goldschmidt, PhD
Angela Guarda, MD
Lauren Muhlheim, PsyD, CEDS-S
Guillermina Rutsztein, PhD
### AED thanks members and friends who have made contributions to the Scholarship and General Funds. The Scholarship Fund provides funding to support the research and clinician scholarships for the 2017 International Conference on Eating Disorders. The General Fund provides essential support to AED educational, research, clinical and outreach programs. Thank you to all who have so graciously contributed. Special thanks to the participants in the United States Combined Federal Campaign Program.

### AED Student/Early Career Investigator Travel Scholarship

Thanks to the generosity of AED members, AED is able to offer the AED Student/Early Career Investigator Travel Scholarships. Eligible recipients are AED members who are current and or are less than three years out of training. Additionally, eligibility requires evidence of academic excellence. These awards support attendance at the AED International Conference on Eating Disorders.

#### The AED Student/Early Career Investigator Travel Scholarship

The 2017 Recipients are:

- Kendra Becker, PhD
- Scott Griffiths, PhD
- Tyler Mason, PhD
- Vanja Rozenblat, MA
- Lauren Schaefer, MA
- Courtney Simpson, MSc
- Trevor Coronado Steward, MA
- Samantha Hahn, PhD/RD
- Helen Murray, BA

### AED Early Career Investigator Travel Scholarship

AED is pleased to offer the AED Early Career Investigator Travel Scholarships. Eligible recipients are AED members who are clinical scholars from around the world.

The 2017 Recipients are:

- Laura Eckman, Psy.D.
- Eve Bridget Hermansson-Webb, PhD
- Tiffany Yu Nakamura, MA
- Jennifer Scarborough, MSW

### AED Doctoral Student Research Grant

This award is to support innovative and cutting-edge research conducted by student members of AED.

The 2017 Recipients are:

- Samantha Hahn, PhD, RD
- Helen Murray, BA

### AED Scholarships

- **AED Scholarship for Low and Middle Income Countries**
  Thanks to the generosity of AED members, AED is able to offer the AED Scholarship for Low and Middle Income Countries. These awards support attendance at the AED International Conference on Eating Disorders. The 2017 Recipients are:
  - Latika Ahuja, MPH
  - Hrvoje Rendulic
  - Maria Luz Scappatura, PhD
  - Monica Vanderlei Vianna, MA

- **AED Patient Carer Travel Scholarships**
  Thanks to the generosity of AED members, AED is able to offer AED Scholarships in the Patient Carer community. These awards support attendance at the AED International Conference on Eating Disorders. The 2017 Recipients are:
  - Leah Dean, MA
  - Donald Graham Irvine
  - Tanya Maree Kretschmann, BA
  - Kristina Saffran, BA

- **HLA Chapter Scholarship Award**
  The Hispano Latino American Chapter of the AED is a multidisciplinary group of therapists and researchers from Spanish- and Portuguese-speaking areas of the world. Each year the HLA Chapter awards a scholarship to attend ICED. This year, scholarships are awarded for both 2016 and 2017.
  **Recipients are:**
  - 2016 | Marina Gallego Jimenez
  - 2017 | Fernanda Tapajoz Pereira de Sampaio

- **Erin Riederer Memorial Scholarship Award**
  The Erin Riederer Foundation is a legacy foundation dedicated to improving eating disorder treatment in Wisconsin and across the globe. We support the development of professional interest in eating disorders through ICED scholarship to medical students and PhD candidates at the Medical College of Wisconsin, University of Wisconsin, Madison Medical Schools as well as University of Wisconsin, Milwaukee. In addition our mission supports credential advancement through IAEDP. Since inception we are proud to have presented ten scholarships to worthy candidates.
  **The 2017 Recipient is:**
  - Eva C Igler, MA, Clinical Psychology PhD candidate
  - University of Wisconsin, Milwaukee

- **Alex DeVinney Memorial Scholarship Award**
  The Alex DeVinney Memorial Award is presented through a generous donation in loving memory by the DeVinney family for the top two abstracts submitted for ICED 2017, which investigate the overlap between eating disorders and obsessive-compulsive disorder and/or compulsive exercise. Only abstracts in which the first author is an early career investigator (i.e., not more than 5 years post terminal degree) are eligible.
  The 2017 Recipients are:
  - Molly Vierhile, BA
  - Sarah Young, DClInPsy/PhD Candidate

### International Journal of Eating Disorders Awards for Outstanding Scientific Contribution and Best Paper

Each year, two prizes are awarded by the International Journal of Eating Disorders for the previous year’s Outstanding Scientific Contribution Award and the Award for Best Paper by an Early Career Scholar.

The IJED editorial board members nominate candidates and the winners are then selected by the journal’s Editor-in-Chief and Associate Editors. Winners are honored with a certificate and prize at the next International Conference on Eating Disorders (ICED), the annual meeting of the Academy for Eating Disorders (AED). This year’s awardees are being recognized for their contributions in 2016.

The 2017 Awardees are:

- **The IJED Outstanding Scientific Contribution in 2016 Award**

- **The IJED Best Paper in 2016 Award**
  - The Award for the Best Paper by an Early Career Scholar has been awarded jointly for 2016:
Full Disclosure Policy Affecting CME Activities

CE Learning Systems and PeerPoint Medical Education require faculty and members of the planning committee to disclose whether or not they have any relevant commercial relationships or if they will be discussing unlabeled and/or investigational uses of any products, pharmaceuticals, or medical devices.

This MUST be made known in advance to the audience in accordance with the ACCME Standards of Commercial Support guidelines.

Disclosures are located on page 234.

Solicitations

Solicitations by unauthorized persons are strictly prohibited. Sales and promotional activities are restricted to exhibitors and must take place in their own exhibit booths. Unauthorized marketing items will be discarded.

Official ICED 2017 Hotel

Kongresova 1 | Prague 4, 140 69
Czech Republic
Tel: +420 261 191 111 | Fax: +420 261 225 011

Location

The Hotel is connected to the grounds of the Prague Congress Centre via aerial bridge. The Vysehrad Metro station is a one-minute walk from the hotel, and is two stops away from the city center. The hotel is easily accessible by car, with the driveway connected to the main highway Prague-Brno.

ICED 2017 Co-Locates with the 5th Annual Weight Stigma Conference

The AED is pleased to co-locate the ICED 2017 with the Weight Stigma Conference, taking place on Tuesday and Wednesday, June 6 & 7, 2017 on the First Floor of the Prague Congress Centre.

For more information on the Weight Stigma Conference, please visit: https://stigmaconference.com/
General Conference Information & Special Events

AED Mentor/Mentee Breakfast
Thursday, June 8 | 7:00 a.m. - 8:30 a.m.
Panorama Room, First Floor

The AED is actively facilitating mentoring relationships for members as part of its Membership Recruitment and Retention Initiative. At ICED, interested AED trainee and early professional members will be paired with seasoned AED members at the Mentor/Mentee Breakfast on Thursday, June 8 from 7:00-8:30 a.m. The aim of this event is to provide an opportunity for members to receive short-term (and potentially lasting) mentorship from experienced AED members/leaders. Mentors may also benefit from interaction with up-and-coming professionals by networking and facilitating optimal training and retention of promising professionals who will be the future of the AED. Prospective mentees and mentors will be paired based on interests (for example, research, clinical, advocacy, genetics and epidemiology). Sign up to become a mentor or mentee during the ICED registration process.

Mentee Eligibility:
All AED members who are trainees, early career professionals and new AED members (less than five years out).

Mentor Eligibility:
» All past Presidents of the AED
» Fellows
» Board Members (past and present)
» Committee Chairs, SIG Chairs and Committee Members
» Seasoned professionals with an advanced degree and five or more years of experience in the eating disorders field
» All disciplines welcomed!

Welcome, Conference Goals and Presidential Address
Thursday, June 8 | 9:00 a.m. - 9:30 a.m.
Forum Hall, Second Floor

ICED Program Co-Chairs and AED President Eva Trujillo, MD, CEDS, FAAP, Fiaedp, FAED, will welcome all attendees to the ICED.

Tweet Up, Tweet Out
Thursday, June 8 | 10:45 a.m. - 11:15 a.m.
North Hall, First Floor

Join the AED’s Social Media Committee for a Tweet Up!

Come connect with fellow social media users, share tips, and learn to set up a twitter handle, a Facebook page, or join LinkedIn if you are new to social media. We look forward to meeting up with you at #ICED2017!

Special Interest Group (SIG) Annual Meetings
Thursday, June 8 and Friday, June 9

All attendees are invited to attend any of the SIG Annual Meetings scheduled at different times throughout the meeting. Information on specific SIG meeting dates, times and locations are available in the Final Program, Schedule at-a-Glance, through the mobile app, and on signs throughout the Congress Centre.

AED Non-Member Meet and Greet
Thursday, June 8 | 6:00 p.m. - 7:00 p.m.
North Hall, Second Floor

The Membership Recruitment and Retention Committee, the Student SIG and New Investigator SIG invite non-members to mingle with current AED members during the Welcome Reception on Thursday, June 8 in the North Hall beginning at 6:00 p.m. Students, junior investigators and professionals new to the field of eating disorders are encouraged to attend.

Meet the Experts
Friday, June 9 | 12:45 p.m. - 2:00 p.m.
Terrace 2, Second Floor

This session offers an opportunity for informal discussions on various topics with Academy fellows. You can register for the event prior to ICED and at the Registration Desk until Thursday, June 8th at 5:00 p.m.

AED Awards Ceremony & Business Meeting
Saturday, June 10 | 1:00 p.m. - 2:30 p.m.
Forum Hall, Second Floor

The AED Awards Ceremony and Business Meeting is available to all registered attendees.
Research-Practice Global Think Tank
Saturday, June 9 | 4:30 p.m. – 6:00 p.m.
Panorama, First Floor
As the final event of the International Conference on Eating Disorders, the Research-Practice Global Think Tank provides an opportunity for reflection and discussion of issues that are critical to conference attendees.

Closing Social Event
Saturday, June 10 | 7:00 p.m. – 10:00 p.m.
St. Agnes Convent
Join your colleagues on Saturday, June 10, for this year’s festive closing social event, at the St. Agnes Convent, a 13th century convent built by King Wenceslas for his sister—with torch-lit passage ways, a special German art exhibit, and of course, delicious food and dancing. Buses will transport attendees to and from the event, with the first bus leaving the Corinthia Hotel at 6:30 p.m.

ICED Conference Recordings
Cannot figure out how to be in two places at once? Want to bring the ICED back to your institution? Problem solved by visiting the sales desk in the registration area to purchase electronic versions of the conference sessions from IntelliQuest Media.
Discounts will be extended for onsite orders. You may contact them at: +1-866-651-2586 or visit www.intelliquestmedia.com

REGISTRATION INFORMATION
Participation in the 2017 ICED is limited to registered delegates. Your full registration includes:
❱ Admission to all sessions (Thursday, June 8 through Saturday, June 10), excluding Clinical Teaching Day and Research Training Day (an additional fee is required for these workshops)
❱ Access to all exhibits
❱ Entry to poster sessions
❱ Welcome Reception on Thursday, June 8
❱ Daily refreshment breaks
❱ Closing Social Event on Saturday, June 10
❱ Conference Program

Spouse/Guest Rate
This rate is applicable only to attendees outside of the eating disorders field and includes:
❱ Admission to the keynote address, exhibit hall and poster sessions
❱ Welcome Reception
❱ Closing Social Event
AED Registration
The registration desk, located at the Registration Counters in Forum Hall, Foyer 1, will be open:

- **Tuesday, June 6 | 3:00 p.m. – 6:00 p.m.**
- **Wednesday, June 7 | 7:00 a.m. – 5:00 p.m.**
- **Thursday, June 8 | 7:00 a.m. – 5:00 p.m.**
- **Friday, June 9 | 7:00 a.m. – 5:00 p.m.**
- **Saturday, June 10 | 7:00 a.m. – 12:00 p.m.**

Continuing Education Desk
The CE/CME desk, located near the registration counter, will be open during registration hours.

Speaker Ready Room
The Speaker Ready Room will be available daily in Dressing Room 122 on the First Floor as follows:

- **Wednesday, June 7 | 8:00 a.m. – 5:00 p.m.**
- **Thursday, June 8 | 8:00 a.m. – 5:00 p.m.**
- **Friday, June 9 | 8:00 a.m. – 5:00 p.m.**
- **Saturday, June 10 | 8:00 a.m. – 5:00 p.m.**

Exhibits
Vendor exhibits will be located in Congress Hall Foyer B & C, Second Floor. Exhibit hours are:

- **Thursday, June 8 | 10:15 a.m. – 7:10 p.m.**
- **Friday, June 9 | 10:15 a.m. – 5:45 p.m.**
- **Saturday, June 10 | 10:45 a.m. – 3:00 p.m.**

Light snacks and beverages will be available in the exhibit hall during the refreshment breaks each day. A directory of exhibitors is included in this program on pages 229-231.

Poster Sessions
Posters will be presented by authors during the conference and will be available for viewing on **Thursday and Friday**. The poster presentations are located in Congress Hall Foyer B & C on the Second Floor next to the exhibits.

**Poster Session Schedule**
**Poster Session I: Thursday, June 8**
- **Set-Up | 7:00 a.m. – 8:00 a.m.**
- **Viewing | 8:00 a.m. – 7:15 p.m.**
  (presenters need not be present)
- **Presentations | 5:45 p.m. – 7:15 p.m.**
  (presenter attendance is required)
- **Dismantle | 7:15 p.m. – 7:45 p.m.**
  (all posters must be removed)

**Poster Session II: Friday, June 9**
- **Set-Up | 7:00 a.m. – 8:00 a.m.**
- **Viewing | 8:00 a.m. – 5:45 p.m.**
  (presenters need not be present)
- **Presentations | 12:45 p.m. – 2:00 p.m.**
  (presenter attendance is required)
- **Dismantle | 5:45 p.m. – 7:15 p.m.**
  (all posters must be removed)

Presenters are responsible for dismantling posters. Posters left behind at the close of the dismantling period will be disposed of and are not the responsibility of AED or the Prague Congress Center.

Meeting Evaluation
The ICED Scientific Program Committee needs your input to enhance future AED meetings. You will receive an online meeting evaluation via email shortly after the conference. AED greatly appreciates your input.

Special Needs
Notify AED staff members of any special needs by visiting the AED registration desk on the first floor, or the AED information table on the second floor.

Questions
If you have questions regarding the program or registration, visit the AED registration desk on the First Floor or the AED Information Table on the Second Floor.

Meet the Experts Session
**Friday, June 9 | 12:45 p.m. – 2:00 p.m.**
Terrace 2 on the Second Floor
Do you have specific questions that you would like to discuss with established experts in your field? Are you looking for consultation on clinical cases, practice issues or ethical dilemmas? Are you interested in developing or evaluating an intervention to treat or prevent eating disorders? Do you want advice on writing a grant application or publishing your work? The Meet the Experts session offers an opportunity for informal discussions on these topics.

Attendance is limited, so sign up early. In order to attend this session, we ask that you sign up at the Meet the Experts table, located near the registration area. Please sign up for this event by **Friday at 8:30 a.m.**, or as long as space is available.

Submit your questions for the experts. If you have a specific question to be addressed by experts, complete a “Meet the Experts Question Form” at the Meet the Experts table and deposit it in the basket on the table.
Mark Your Calendar

2018 ICED
April 19–21, 2018

Clinical Teaching Day & Research Training Day | April 18, 2018

Chicago Marriott Downtown Magnificent Mile
Chicago, Illinois, USA

IMPORTANT DATES:

Call for Abstracts: July 1–September 2, 2017
Registration Opens: December 1, 2017
Visit: www.aedweb.org
Dr. Vikram Patel is the first Pershing Square Professor of Global Health with the Department of Global Health and Social Medicine at Harvard University. He is a co-founder of Sangath, an Indian NGO which works in the fields of child development, adolescent health and mental health. He is a Fellow of the UK’s Academy of Medical Sciences and serves on two WHO expert committees: for mental health, and for maternal, child and adolescent health. He has served on several Government of India committees including the Core Committee on Health of the National Human Rights Commission and the Mental Health Policy Group.

He is a recipient of the Chalmers Medal from the Royal Society of Tropical Medicine and Hygiene (UK), the Sarnat Medal from the US Institute of Medicine, an Honorary Doctorate from Georgetown University, the Chanchlani Global Health Research Award from McMaster University and an Honorary OBE from the UK Government. He was listed in TIME Magazine’s 100 most influential persons of the year in 2015.

Abstract:

Despite the robust evidence of the effectiveness of psychological treatments for a range of mental disorders, the vast majority of affected persons, in particular in low and middle income countries, do not receive these treatments due to a range of demand and supply side barriers. This lecture will present the findings of a recent systematic review of the approaches taken by innovators in the global south to address these barriers in the context of adult common mental health problems, redefining how we conceptualize and deliver psychological treatments. The lecture will finally consider the implications of this evidence for psychological treatments in highly resourced settings.

Learning Objectives:

1) To describe the effectiveness of psychological treatments for adult common mental health problems in low and middle income countries
2) To discuss the approaches taken for the design and delivery of such treatments
3) To assess the suitability of these approaches to improving access to effective psychological treatments in high income settings.
## SCHEDULE
### AT-A-GLANCE

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THURSDAY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:00 a.m. – 5:00 p.m.</td>
<td>Registration Open</td>
<td>Forum Hall, Foyer 1, First Floor</td>
</tr>
<tr>
<td>7:00 a.m. – 8:30 a.m.</td>
<td>Mentor/Mentee Breakfast</td>
<td>Panorama, First Floor</td>
</tr>
<tr>
<td>7:30 a.m. – 8:30 a.m.</td>
<td>SIG Chairs Meeting</td>
<td>Club E, First Floor (breakfast provided)</td>
</tr>
<tr>
<td>7:30 a.m. – 8:30 a.m.</td>
<td>Finance Committee Meeting</td>
<td>Meeting Hall II, First Floor (breakfast provided)</td>
</tr>
<tr>
<td>8:00 a.m. – 9:00 a.m.</td>
<td>2018 Program Committee Meeting</td>
<td>Club C, First Floor (breakfast provided)</td>
</tr>
<tr>
<td>9:00 a.m. – 10:45 a.m.</td>
<td>Welcome &amp; Keynote Address</td>
<td>Forum Hall, Second Floor</td>
</tr>
<tr>
<td>1:00 p.m. – 2:00 p.m.</td>
<td>SIG Annual Meetings</td>
<td>See Detailed Schedule for Locations (lunch provided)</td>
</tr>
<tr>
<td>1:00 p.m. – 2:00 p.m.</td>
<td>PCAC Global Lunch</td>
<td>Panorama, First Floor</td>
</tr>
<tr>
<td>1:00 p.m. – 2:15 p.m.</td>
<td>Lunch with Exhibitors</td>
<td>Forum Hall Foyer BC, Second Floor</td>
</tr>
<tr>
<td>2:15 p.m. – 3:45 p.m.</td>
<td>Workshop Session 1</td>
<td>See Detailed Schedule for Locations</td>
</tr>
<tr>
<td>3:45 p.m. – 4:15 p.m.</td>
<td>Refreshments with Exhibitors</td>
<td>Forum Hall Foyer BC, Second Floor</td>
</tr>
<tr>
<td>4:15 p.m. – 5:45 p.m.</td>
<td>SIG Panel Discussions</td>
<td>See Detailed Schedule for Locations</td>
</tr>
<tr>
<td>5:45 p.m. – 6:45 p.m.</td>
<td>European Chapter Formation Meeting</td>
<td>Terrace 1, Second Floor</td>
</tr>
<tr>
<td>5:45 p.m. – 7:15 p.m.</td>
<td>Opening Reception, Poster Session I</td>
<td>Forum Hall Foyer BC, Second Floor</td>
</tr>
<tr>
<td>6:00 p.m. – 7:00 p.m.</td>
<td>AED Non-Member Meet &amp; Greet</td>
<td>North Hall, Second Floor</td>
</tr>
<tr>
<td><strong>TUESDAY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3:00 p.m. – 6:00 p.m.</td>
<td>Registration Open</td>
<td>Forum Hall, Foyer 1, First Floor</td>
</tr>
<tr>
<td><strong>WEDNESDAY</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7:00 a.m. – 5:00 p.m.</td>
<td>Registration Open</td>
<td>Forum Hall, Foyer 1, First Floor</td>
</tr>
<tr>
<td>10:00 a.m. – 6:00 p.m.</td>
<td>AED Board Meeting</td>
<td>Meeting Hall II, First Floor</td>
</tr>
<tr>
<td>2:00 p.m. – 6:00 p.m.</td>
<td>Clinical Teaching Day/Research Training Day</td>
<td></td>
</tr>
<tr>
<td>4:00 p.m. – 5:00 p.m.</td>
<td>Plenary/Conference Chairs/Translator Rehearsal</td>
<td>Forum Hall, Second Floor</td>
</tr>
</tbody>
</table>
## FRIDAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 a.m. – 5:00 p.m.</td>
<td>Registration Open</td>
<td>Forum Hall, Foyer 1, First Floor</td>
</tr>
<tr>
<td>7:30 a.m. – 8:30 a.m.</td>
<td>ICED 2019 Committee Meeting</td>
<td>Club C, First Floor</td>
</tr>
<tr>
<td></td>
<td>(breakfast provided)</td>
<td></td>
</tr>
<tr>
<td>7:30 a.m. – 8:30 a.m.</td>
<td>HLA Chapter Meeting</td>
<td>Club E, First Floor</td>
</tr>
<tr>
<td></td>
<td>(breakfast provided)</td>
<td></td>
</tr>
<tr>
<td>8:30 a.m. – 10:15 a.m.</td>
<td>Plenary II</td>
<td>Foyer Hall, Second Floor</td>
</tr>
<tr>
<td>10:15 a.m. – 5:45 p.m.</td>
<td>Exhibits Open</td>
<td></td>
</tr>
<tr>
<td>10:15 a.m. – 11:15 a.m.</td>
<td>Committee Chair Orientation</td>
<td>Panorama, First Floor</td>
</tr>
<tr>
<td>10:15 a.m. – 11:15 a.m.</td>
<td>Refreshments with Exhibitors</td>
<td>Forum Hall Foyer BC, Second Floor</td>
</tr>
<tr>
<td>11:15 a.m. – 12:45 p.m.</td>
<td>Workshop Session 2</td>
<td>See Detailed Schedule for Locations</td>
</tr>
<tr>
<td>12:45 p.m. – 1:45 p.m.</td>
<td>Meeting of the Minds</td>
<td>Invitation ONLY</td>
</tr>
<tr>
<td></td>
<td>Meeting Room II, First Floor</td>
<td></td>
</tr>
<tr>
<td>12:45 p.m. – 1:45 p.m.</td>
<td>Eating Disorders</td>
<td>Invitation ONLY</td>
</tr>
<tr>
<td></td>
<td>Working Group of the Psychiatric Genomics</td>
<td>Club C, First Floor</td>
</tr>
<tr>
<td></td>
<td>Consortium (PGC-ED)</td>
<td></td>
</tr>
<tr>
<td>12:45 p.m. – 2:00 p.m.</td>
<td>Meet the Experts</td>
<td>Terrace 2, Second Floor</td>
</tr>
<tr>
<td>12:45 p.m. – 2:00 p.m.</td>
<td>Lunch with Exhibitors &amp; Poster Session II</td>
<td>Forum Hall Foyer BC, Second Floor</td>
</tr>
<tr>
<td>2:00 p.m. – 3:30 p.m.</td>
<td>Paper Session I</td>
<td>See Detailed Schedule for Locations</td>
</tr>
<tr>
<td>3:30 p.m. – 4:00 p.m.</td>
<td>Refreshments with Exhibitors</td>
<td>Forum Hall Foyer BC, Second Floor</td>
</tr>
<tr>
<td>4:00 p.m. – 5:45 p.m.</td>
<td>Plenary Session III</td>
<td>Forum Hall, Second Floor</td>
</tr>
<tr>
<td>5:45 p.m. – 6:45 p.m.</td>
<td>SIG Annual Meetings</td>
<td>See Detailed Schedule for Locations</td>
</tr>
<tr>
<td>5:45 p.m. – 7:15 p.m.</td>
<td>IJED Editorial Board Reception</td>
<td>Invitation ONLY</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Terrace 2, Second Floor</td>
</tr>
</tbody>
</table>

## SATURDAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 a.m. – 12:00 p.m.</td>
<td>Registration Open</td>
<td>Forum Hall, Foyer 1, First Floor</td>
</tr>
<tr>
<td>7:00 a.m. – 8:00 a.m.</td>
<td>ICED 2020 Program Committee Meeting</td>
<td>Club A, First Floor</td>
</tr>
<tr>
<td></td>
<td>(breakfast provided)</td>
<td></td>
</tr>
<tr>
<td>8:00 a.m. – 9:00 a.m.</td>
<td>Past Presidents’ Breakfast</td>
<td>Club C, First Floor</td>
</tr>
<tr>
<td>8:00 a.m. – 9:00 a.m.</td>
<td>SOC Meeting</td>
<td>Club E, First Floor</td>
</tr>
<tr>
<td></td>
<td>(breakfast provided)</td>
<td></td>
</tr>
<tr>
<td>9:00 a.m. – 10:45 a.m.</td>
<td>Plenary IV</td>
<td>Forum Hall, Second Floor</td>
</tr>
<tr>
<td>10:15 a.m. – 3:00 p.m.</td>
<td>Refreshments with Exhibitors</td>
<td>Forum Hall Foyer BC, Second Floor</td>
</tr>
<tr>
<td>11:15 a.m. – 12:45 p.m.</td>
<td>Workshop Session 3</td>
<td>See Detailed Schedule for Locations</td>
</tr>
<tr>
<td>1:00 p.m. – 2:30 p.m.</td>
<td>Awards Ceremony &amp; Business Meeting</td>
<td>Forum Hall, Second Floor</td>
</tr>
<tr>
<td></td>
<td>(lunch provided)</td>
<td></td>
</tr>
<tr>
<td>2:45 p.m. – 4:15 p.m.</td>
<td>Paper Session II</td>
<td>See Detailed Schedule for Locations</td>
</tr>
<tr>
<td>4:15 p.m. – 4:30 p.m.</td>
<td>Refreshments with Exhibitors</td>
<td>Forum Hall Foyer BC, Second Floor</td>
</tr>
<tr>
<td>4:30 p.m. – 6:00 p.m.</td>
<td>Research Practice Global Think Tank</td>
<td>Panorama, First Floor</td>
</tr>
<tr>
<td>7:00 p.m. – 10:00 p.m.</td>
<td>Closing Social Event</td>
<td>St. Agnes Convent</td>
</tr>
</tbody>
</table>

### Schedule-at-a-Glance

For updates, please visit:
## Using New Understandings of Brain and Behavior to Develop More Effective Treatments for Eating Disorders

### Purpose:
Anorexia nervosa (AN) is a severe, biologically based brain disorder with significant medical complications requiring new, effective treatments to interrupt the persistent course of the illness. AN treatment attempts have been diverse, however, evidence shows that impact is weak and effects are generally small. This workshop will integrate current neurobiological AN research from diverse perspectives into a shared goal that translates into various forms of clinical practice.

### Subject Samples:
Adolescent and adult AN cohorts in partial hospital and intensive outpatient eating disorder programs from two counties and three treatment sites.

### Methods:
Translational models will be described that address cognitive and emotional domains integrated into a cognitive remediation manual for clinical practice. In addition, a 5-day, 40 hour AN treatment targeting AN temperament that integrates neurobiological research will be described interactively. A manual will be introduced.

### Results Obtained:
Data, both quantitative and qualitative, will be shared on each treatment approach and manual development.

### Summary:
Participants will be encouraged to participate in both discussions and clinical tools involvement in treatment programs.

### Learning Objectives:
- Integrate current neurobiological anorexia nervosa research into various forms of clinical practice.
- Describe how neuro-progressions changes the form and content of anorexia nervosa.
- Discuss how therapists can integrate research findings on cognitive and emotional processing with patients to help in recovery.
- Introduce preliminary data suggesting reward, inhibition, and salience in ED improve treatment response.
- Apply recent imaging data, on interoceptive processing and the mismatch between anticipated and actual experience, to a 5-day eating disorder treatment structured environment that reduces internal ‘noisy’ signals that evoke anxiety and avoidance.
- Summarize how the above research findings are integrated into a 5-day ED treatment involving multifamily/supports with adults and adolescents, will be detailed in an interactive electronic text.
## Integrating Family Based Treatment with the Unified Protocols for the Treatment of Emotional Disorders in Children and Adolescents: A Novel Treatment for Avoidant Restrictive Food Intake Disorder

**Julie Lesser**, MD | Center for the Treatment of Eating Disorders, Minneapolis, Minnesota, USA  
**Sarah Eckhardt**, PhD | Children's Hospitals & Clinics, Minneapolis, Minnesota, USA  
**Daniel Le Grange**, PhD, FAED | University of California, San Francisco, California, USA  
**Jill Ehrenreich-May**, PhD | University of Miami, Coral Gables, Florida, USA

With the addition of Avoidant Restrictive Food Intake Disorder (ARFID) to the broader DSM-5 category of Feeding and Eating Disorders, increasing numbers of young patients are presenting for treatment of this condition. Patients with ARFID appear to fall into several sub-categories including those with: lifetime picky eating, selective eating and an Autism Spectrum disorder, selective eating in the context of comorbid anxiety conditions, and selective eating in patients with a medical condition and fear of eating due to worries about pain. This workshop will present an integrated treatment approach that combines an adapted form of family based treatment (FBT) for patients with ARFID, together with the Unified Protocols for the Treatment of Emotional Disorders in Children and Adolescents (UP-C/A), a manualized, transdiagnostic cognitive behavioral treatment. The UP-C/A is well suited for all categories of ARFID as it includes modules on mindfulness, flexible thinking, avoidance, and interoceptive and situational exposures. This workshop will demonstrate how to deliver this integrative approach by focusing first on nutritional stabilization and weight regain, using principles of FBT. Role plays will be used to highlight the differences when using FBT for ARFID patients. An overview of the UP-C/A will be presented with interactive exercises to show key modules and techniques used in treating young patients with ARFID. The workshop will support discussion of treatment for patients with different categories of ARFID, and will include a detailed discussion of the use of rewards for behavior change in patients with ARFID.

### Learning Objectives:

- Describe adaptations of Family Based Therapy (FBT) for ARFID.
- Demonstrate key interventions from the Unified Protocols for the Treatment of Emotional Disorders in Children and Adolescents (UP-C/A) to treat anxiety and avoidance in patients with ARFID.
- Understand the protocol for clinician decision-making when combining strategies from both FBT and UP-C/A with youth presenting with varied clinical challenges associated with ARFID.

---

## Binge Eating Disorder—State of the Art of Current Treatment Strategies

**James E. Mitchell**, MD, FAED | Neuropsychiatric Research Institute, Fargo, North Dakota, USA

This session will review the current state of knowledge regarding the treatment of those with binge eating disorder. The literature will be reviewed, and a number of areas will then be addressed:

1. Psychotherapy approaches, with an in depth session by session presentation of a CBT approach, the manual for which will be provided to interested participants after the conference by email.  
2. Pharmacotherapy approaches, targeting binge eating and mood, and when appropriate weight loss for those patients who are also obese.  
3. The use of bariatric surgery for those that are severely obese.  
4. A brief review of medical complications and medical evaluation for those who are normal weight, overweight and obese.  
5. Practical recommendations for individual patients based on binge eating status, mood disorders, other comorbidities, and weight. Discussion will include case discussions and suggestions/questions from participants.

### Learning Objectives:

- Participants will be able to discuss the currently available, empirically supported psychotherapies for those with binge eating disorder.  
- Participants will be able to discuss the currently available, empirically supported pharmacotherapies for those with binge eating disorder.  
- Participants will be able to discuss when bariatric surgery should be considered in the treatment of those with for binge eating disorder.  
- Participants will be able to discuss the medical complications and medical evaluation for those with binge eating disorder.  
- Participants will be able to discuss the important key elements of CBT for those with binge eating disorder.
Treatment of EDs in Males and Ethnic Minorities: Cultural and Gender Tailoring

Mae Lynn Reyes-Rodriguez, PhD | Neurosciences Hospital, University of North Carolina, Chapel Hill, North Carolina, USA
Arnold Andersen, MD, FAED | Iowa City, Iowa, USA

Eating disorders (EDOs) have been inaccurately stereotyped as a disorder of white females. Therefore, most of the treatments have been developed primarily for Caucasians and females. However, the literature of EDOs among males and diverse populations has increased significantly during the past years. It is clear that EDOs do not discriminate by gender, race/ethnicity, or age. Providing culturally tailored treatments that appreciate the culture, context, language and gender differences is essential to reduce health disparities. With the increasing recognition of diversity in prevalence and presentation of disordered eating behaviors comes a need for understanding the etiology, course, treatment and specific needs for males and people who self-define themselves as being members of diverse groups who also have eating disorders. The goal of this clinical workshop is to provide the skills necessary for clinicians who work with males and culturally diverse populations, appreciating how these differences alter the origin, presentation, clinical course, and treatment.

Learning Objectives:
- understand the differences in the internal and external psychosocial and developmental milieu of males and diverse populations compared to Caucasian females;
- discuss the differences in presentation of the eating disorder symptoms in males and in culturally diverse populations;
- identify differences in the approach to treating males and patients from diverse cultural backgrounds with eating disorders and;
- identify the appropriate assessment protocol to be used with males and diverse populations.

Medical Complications of Anorexia Nervosa, ARFID and Bulimia, and Their Treatments

Phil Mehler, MD, CEDS, FACP, FAED | Eating Recovery Center, Denver, Colorado, USA

There are many serious medical complications associated with anorexia nervosa and bulimia. This presentation will address these complications and their treatments. It will also deal with how to recognize when a patient needs a higher level of care for ongoing management of medical issues. There are also many complications associated with attempts to discontinue the purging behaviors associated with self-induced vomiting, diuretic and laxative abuse. These serious, and often difficult to manage, complications include, severe edema, electrolyte and acid-base abnormalities, gastrointestinal and cardiovascular-related complications and those which adversely affect body image. Some of these complications, or the memories thereof, often impede the bulimic patient’s attempts to successfully “detox” from harmful purging behaviors and results in these patients reverting back to purging behaviors. A description of the medical complications associated with anorexia nervosa, ARFID and bulimia and with attempts to discontinue the different modes of purging, and their treatments, embedded in evidenced case-based vignettes, will be presented in an understandable and clinically salient manner.

Learning Objectives:
- Identify medical problems related to bulimia nervosa, and how to manage them
- Identify medical problems related to anorexia nervosa, and how to manage them
- Recognize when a patient needs a higher level of care for ongoing management of medical problems
**THURSDAY, JUNE 8**

7:00 a.m. – 5:00 p.m.  
**ICED Registration Open** | Forum Hall Foyer 1, First Floor

7:00 a.m. – 8:30 a.m.  
**Mentor/Mentee Breakfast** | Panorama, First Floor

7:30 a.m. – 8:30 a.m.  
**SIG Chairs Meeting** | Club E, First Floor  
(breakfast provided)

7:30 a.m. – 8:30 a.m.  
**Finance Committee Meeting** | Meeting Hall II, First Floor  
(breakfast provided)

8:00 a.m. – 9:00 a.m.  
**2018 Program Committee Meeting** | Club C, First Floor  
(breakfast provided)

9:00 a.m. – 9:30 a.m.  
**Welcome and Conference Goals** | Forum Hall, Second Floor  
_Simultaneously Translated to Spanish_

Unna Danner, PhD | The Netherlands  
Jennifer Wildes, PhD, FAED | USA  
_Scientific Program Committee Co-Chairs_

**Presidential Address**  
Eva Trujillo, MD, FAED, CEDS, FAAP, Fiaedp | Mexico, AED President

9:30 a.m. – 10:45 a.m.  
**Keynote Address**  
_Simultaneously Translated to Spanish_

**Psychological Treatments for the World**  
Vikram Patel, PhD | Harvard University, Cambridge, MA USA

**Abstract:**

Despite the robust evidence of the effectiveness of psychological treatments for a range of mental disorders, the vast majority of affected persons, in particular in low and middle income countries, do not receive these treatments due to a range of demand and supply side barriers. This lecture will present the findings of a recent systematic review of the approaches taken by innovators in the global south to address these barriers in the context of adult common mental health problems, redefining how we conceptualize and deliver psychological treatments. The lecture will finally consider the implications of this evidence for psychological treatments in highly resourced settings.

**Learning Objectives:**

1. To describe the effectiveness of psychological treatments for adult common mental health problems in low and middle income countries
2. To discuss the approaches taken for the design and delivery of such treatments
3. To assess the suitability of these approaches to improving access to effective psychological treatments in high income settings.
<table>
<thead>
<tr>
<th><strong>Plenary Session I: Treatment</strong></th>
<th>Forum Hall, Second Floor</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Simultaneously Translated to Spanish</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Setting the Stage: Clinical Staging and Personalized Approaches to Treating Eating Disorders</strong></td>
<td>Chairs: Kelsie Forbush, PhD and Kelly Bhatnagar, PhD</td>
</tr>
<tr>
<td><strong>Clinical Staging across the Illness Spectrum: From Emerging Psychopathology to Chronic and Enduring Psychopathology</strong></td>
<td>Professor Stephen Wood, PhD</td>
</tr>
<tr>
<td>Clinical staging models have been used in medicine for decades to define illness progression. Within the field of psychiatry, burgeoning research has sought to develop similar trans-diagnostic models to characterize symptoms across the illness course in order to better link to appropriate prevention and intervention. Clinical staging models help to define mild manifestations of the illness from later, impairing features. Within the field of depression and psychosis, clinical staging models are supported by several lines of research, including research from treatment and neuroimaging studies. However, despite the promise of clinical staging models, there are also a number of alternative explanations for differences that occur along the continuum of illness, including effects of medication and symptom heterogeneity. The field of eating disorders has much to gain by learning about how clinical staging models have been applied to other serious forms of mental illness. The implications for developing and testing new clinical staging models for eating disorders will be discussed.</td>
<td></td>
</tr>
<tr>
<td><strong>This Time it’s “Personal”: Adapting Empirically Based Therapies in the Era of Personalized Medicine</strong></td>
<td>Daniel Le Grange, PhD, FAED</td>
</tr>
<tr>
<td>A staging model for anorexia nervosa (AN), albeit preliminary, is helpful in terms of prognostic information as well as matching stage of illness with intervention. Such a model remains absent for bulimia nervosa (BN). One corollary of a staging model is that the identification of eating disorders when they onset, typically in early to mid adolescence, provides advantages in terms of positive outcomes. For instance, early interventions for subsyndromal AN hold great promise. Similar findings for adolescents with subsyndromal BN remain elusive. However, empirically based interventions have been evaluated for adolescents with full syndromal presentations of both AN and BN. In particular, the prognostic value of early change in treatment, e.g., the critical 4-week intervention period, has been demonstrated in several recent studies. This, as well as moderator analyses, allow us to better match adolescent patients and their families with treatment. Moreover, empirically based therapies such as FBT have been adapted for early non-responders, e.g., FBT plus Intensive Family Counseling (FBT+IPC), with promising findings in terms of improved remissions rates. Going forward, personalized approaches should be emphasized, e.g., stepped care models, delivering empirically based therapies via Telehealth, determining when a separated rather than conjoint family intervention is more suitable, or whether multi-family therapy rather than single family therapy holds greater advantage. Taken together, it is clear that ‘one size does not fit all’.</td>
<td></td>
</tr>
<tr>
<td><strong>Get “SMART”: Using Innovative Methods to Test Sequential (Steped) versus Simultaneous Clinical Change in Eating Disorders</strong></td>
<td>Carlos Grilo, PhD</td>
</tr>
<tr>
<td>Although research has identified specific psychological and pharmacological approaches that are effective for treating binge eating (i.e., binge eating disorder (BED) and bulimia nervosa (BNI)), many patients fail to derive sufficient benefit. The clinical strategy of combining methods has generally failed to enhance outcomes and identifying reliable moderators of treatment response to inform treatment-matching has been elusive. There exists a need for novel research designs to inform evidence-based guidelines for selecting sequential or additional treatment approaches for patients in general and especially for those who are non-responsive to initial treatments. A typical strategy might involve comparing stepped-care approaches (e.g., ‘least costly’ or ‘most scalable’) to an established effective approach. In addition to reviewing relevant issues and studies, a recently-completed RCT testing a ‘SMART’ or ‘ADAPTIVE’ approach for patients with BED will be presented. In this approach, rather than ‘typical’ strategies of starting with ‘less intensive’ treatments first or prescribing ‘more intensive’ treatments to ‘more complex’ patients, patients ‘early response’ to treatment determined the sequence. Within the stepped-care approach, all subjects started with standard behavioral weight loss (BWL) treatment; treatment rapid-responders continued with BWL while non-responders moved on to a specialist treatment (CBT) combined with pharmacotherapy. Acute outcomes for the 6-month treatments and longer-term maintenance outcomes through 18 months of follow-up (i.e., 12 months after completing and discontinuing treatments) will be presented along with implications for both clinical practice and future ‘SMART’ designs.</td>
<td></td>
</tr>
</tbody>
</table>
Discussant:
Embarking on New Adventures—Are we Ready to use a Staging Model to Map the Course of Eating Disorders?
Heather Thompson-Brenner, PhD, FAED | Boston University, Somerville, MA, USA

Abstract:
In recent years, there has been growing concern over the utility of existing diagnostic procedures in psychiatry. Namely, the procedures categorize symptoms appearing only in the later stages of illness when it has already been consolidated. Some believe this method hampers the development of treatments geared towards earlier forms of the illness and thus, increases the risk of illness progression (Treasure et al., 2015). Clinical staging offers an alternative to conventional diagnostic practice in that it a) defines the extent of a progression of a disorder at a particular point in time and b) identifies where a person lies at any given time along the continuum of the course of an illness (McCory et al., 2007). Clinical staging has the potential to allow clinicians to select treatments relevant to earlier stages of an illness and assumes that such interventions will be more effective than treatments delivered later in the course of illness (McCory et al., 2007). The clinical staging framework has been used with some success in other psychiatric disorders (Cosci et al., 2013; Hickie et al., 2013; Scott et al., 2013), which begs the question—Is it time for a staging model to map the course of eating disorders? This plenary strives to examine the evidence surrounding this question and explore treatment implications that may come about as a result.

Learning Objectives:
The goals of this plenary are to:
- Explore the utility of using a staging approach to map the course of illness in eating disorders.
- Examine how a staging or adaptive (personalized) model may influence treatment recommendations and approaches during different phases of illness.
- Describe new methods for testing personalized approaches and propose ways in which these methods could be applied to eating disorders.

1:00 p.m. – 2:00 p.m. | PCAC Global Lunch | Panorama, First Floor
1:00 p.m. – 2:15 p.m. | Lunch Provided in the Exhibit Hall | Forum Hall Foyer BC, Second Floor
1:00 p.m. – 2:00 p.m. | Special Interest Group (SIG) Annual Meetings (Boxed lunch available in the exhibit area) | Assessment & Diagnosis | Dressing Room #121, First Floor
Bariatric Surgery | Club A, First Floor
Body Image & Prevention | Club C, First Floor
Child & Adolescent Eating Disorders | Club E, First Floor
Dialectical Behavior Therapy & Suicide | Club H, First Floor
Epidemiology & Public Health Practice | Meeting Hall 1B, First Floor
Family-Based Therapy | Meeting Hall IV, Second Floor
Genes & Environment | Meeting Hall V, Second Floor
Health at Every Size | North Hall, Second Floor
Lesbian, Bi-sexual, Gay, & Transgender | Meeting Hall II, Second Floor
Males & Eating Disorders | Terrace 1, Second Floor
Medical Care | Terrace 2, Second Floor
Sports & Exercise | Meeting Hall 1A, First Floor
### Workshop Session I

**W 1.1 | Family-Based Treatment: From the Ivory Tower to the Real World, at All Levels of Care | Club A, First Floor**

**Ellen Astrachan-Fletcher, PhD** | Eating Recovery Center and Insight Behavioral Health Centers, Chicago, Illinois, USA  
**Daniel Le Grange, PhD, FAED** | University of California, San Francisco, San Francisco, California, USA  
**Erin Accurso, PhD** | University of California, San Francisco, Department of Psychiatry, San Francisco, California, USA

Although Family-Based Treatment (FBT) is an evidence-based psychological/behavioral treatment for adolescent anorexia nervosa, it is not routinely implemented in community-based clinical settings. In an effort to bridge the research-practice gap (ivory tower vs real world), we have begun research seeking to generate knowledge to inform the adaptation, implementation, and sustainment of evidence-based treatments in community practice. This workshop will include the following outline: We will begin our workshop with a welcome, introduction, and a review of some recent research on FBT (10 minutes). We will then discuss our work that led to the “Family-Based Informed Treatment for Anorexia Nervosa: Handbook for Partial Hospital Program/Intensive Outpatient Adolescent Program” and an overview of FBT in higher levels of care (HLOC). This would include why and how we are adapting FBT for HLOC (30 minutes). Next, we plan to hand out a Questionnaire and give participants time to take the questionnaire regarding attitudes and beliefs about FBT (15 minutes). We will then divide participants into groups to discuss the results of the questionnaire (15 minutes). Following the group discussion, presenters discuss potential solutions for the barriers to using FBT in the “real world,” including role playing difficult situations that might intimidate clinicians and interfere with FBT adoption. The workshop will be concluded by a 20 minute questions and answer period.

**Learning Objectives:**
- Describe the evidence-base supporting FBT for adolescent anorexia nervosa.
- Identify and understand barriers to using FBT in the “real world.”
- Problem-solve solutions to increase adoption and implementation of FBT.

### Workshop Session I (Continued)

**W 1.2 | Cognitive-Behavioral Therapy for Avoidant/Restrictive Food Intake Disorder (CBT-AR): Children, Adolescents, and Adults | Club C, First Floor**

**Jennifer J. Thomas, PhD, FAED, Kamryn T. Eddy, PhD, FAED, and Kendra R. Becker, PhD** | Eating Disorders Program, Massachusetts General Hospital/Harvard Medical School, Boston, Massachusetts, USA

Avoidant/Restrictive Food Intake Disorder (ARFID) was recently added to the Feeding and Eating Disorders section of DSM-5 to describe children, adolescents, and adults who cannot meet their nutritional needs, typically because of sensory sensitivity, fear of aversive consequences, and/or apparent lack of interest in eating or food. ARFID is so new that there is currently no evidence-based treatment for the disorder. We have recently developed and manualized a novel treatment—Cognitive Behavioral Therapy for ARFID (CBT-AR)—that we are testing in a foundation-funded pilot study at Massachusetts General Hospital in Boston. CBT-AR can be offered in an individual or family-supported format and comprises four stages: (1) psychoeducation and regular eating; (2) re-nourishment and treatment planning; (3) addressing maintaining mechanisms (including sensory sensitivity, fear of aversive consequences, and/or apparent lack of interest in eating or food); and (4) relapse prevention over 20-40 sessions. A case report describing the successful treatment of an 11-year-old girl with CBT-AR is currently in press in the New England Journal of Medicine, and we are actively recruiting CBT-AR trial participants from our ongoing National Institute of Mental Health-funded grant on children and young adults with ARFID entitled “Neurobiological and Behavioral Risk Mechanisms of Youth Avoidant/Restrictive Eating Trajectories” (R01MH108595). Although CBT-AR is still being formally testing for efficacy, we have already achieved promising results in clinical practice, and our workshop will fulfill the critical need of clinicians who are already seeing such patients and as yet have no resources on which to base treatment plans. Our interactive workshop will begin with a brief didactic description of the rationale for and goals of CBT-AR and detailed case examples drawn from a heterogeneous group of children and adults who have benefitted from this treatment (35 minutes). We will then use role-plays and experiential exercises (e.g., in-session food exposure for sensory sensitivity, interoceptive exposure for low appetite) to demonstrate CBT-AR techniques across the four stages of this flexible, modular treatment (40 minutes). We will leave ample time for questions and discussion at the workshop’s conclusion (15 minutes).
Learning Objectives:
- Describe the basic structure, goals, and session format of CBT-AR for children, adolescents, and adults with ARFID.
- Implement the four basic stages of CBT-AR including (1) psychoeducation and regular eating; (2) re-nourishment and treatment planning; (3) addressing maintaining mechanisms in each ARFID domain; and (4) relapse prevention.
- Tailor CBT-AR to a patient’s unique ARFID presentation by implementing optional modules (e.g., food exposure for sensory sensitivity, interoceptive exposure for low appetite, situational exposure for fear of aversive consequences) as needed.

W 1.3 | Thinking Critically about Risk and Causality: Implications for Work with Patients and Families | Forum Hall, Second Floor
Simultaneously Translated to Spanish

Michael Levine, PhD, FAED | Kenyon College, Gambier, Ohio, USA
Janet Treasure, OBE, MD, FRCP, FAED | Kings College, London, United Kingdom
Anne Becker, MD, MSc, PhD, FAED | Harvard University, Boston, Massachusetts, USA
Howard Steiger, PhD, FAED | McGill University, Montreal, Canada

It is common in publications, conference presentations, and clinical work with patients and families to hear phrases such as “Now we know that eating disorders (EDs) are ‘biologically-based mental illnesses’” or “Now we know that EDs are not caused by sociocultural influences.” However, examination of the “evidence base” for these contentions reveals a lack of clarity about logical concepts and evidentiary standards for determining causality and risk. This inattention to detail nurtures an imprecision in language that threatens to render meaningless phrases such as ‘X is an underlying influence in anorexia nervosa’ or ‘Y sets the stage for bulimia nervosa.’

This workshop invites treatment professionals, clinical researchers, and advocates for families to consider in depth several perspectives on the nature of scientific “evidence” in “evidence-based” claims about the causes of EDs. Specifically, this workshop integrates work by a U.S. psychiatrist and medical anthropologist who examines social and cultural mediation of body image and eating disturbance; a Canadian clinical psychologist who studies, and applies in his clinical work, how certain individuals carry real biological susceptibilities that are “switched on” by specific environmental triggers; a British psychiatrist who integrates our understanding of aetiology and how this impacts interpersonal relationships into training for patients, friends, and family; and a U.S. experimental psychologist who applies sociocultural models of risk to prevention programming. Thus, the presenters combine theory, empirical findings, and clinical experiences to help participants improve their ability to be accurate and authentic in talking with patients and families about what we know and do not know in regard to causality and risk, while endeavoring to increase self-acceptance, reduce shame and anxiety, and increase hope and motivation for change.

Learning Objectives:
- Define—in conceptual and methodological terms—and thus distinguish between, a correlate, a risk factor, a protective factor, and a causal (risk) factor for eating disorders
- List three specific ways in which what we know about genetics and brain science can be translated into plain language that will improve work with patients and families in the treatment of anorexia nervosa
- List two important reasons why standard approaches to thinking about and studying risk factors have limitations.
W 1.4 | Implementing the ‘Happy Being Me’ Body Image Intervention Programme: Learning from United Kingdom and Australian experiences | Club H, First Floor

Susan Paxton, PhD, FAED and Siân McLean, PhD | La Trobe University, Melbourne, Australia
Catherine Stewart, DClinPsy, Elizabeth Goddard, PhD, Mima Simic, MSc, and Gill Allen, MA South London and Maudsley NHS Foundation Trust, London, United Kingdom

Schools are ideal settings for body dissatisfaction prevention; however, dissemination is limited by lack of opportunities for training in evidence-based approaches. This workshop will provide practical training in delivery of the Happy Being Me (Dunstan, Paxton & McLean, 2016) body image programme. The workshop will first review empirical support for the intervention including previous research trials of Happy Being Me in Australia and the UK, and a recent implementation in UK schools by a clinical service to whole classes of 11-12 year old girls and boys (N=150). Preliminary analysis reveals significant changes in body satisfaction, appearance comparison and self-esteem (p ≤ 0.001). The workshop will use an interactive format to involve participants in experiential learning to become competent presenters of body image interventions addressing peer environments and appearance conversations, media pressure to conform to appearance ideals, engagement with social media, internalisation of appearance ideals, and body comparison. Participants will participate in guided small group role plays of key intervention activities, and engage in collaborative learning to experience media literacy and dissonance approaches to attitude and behavioural change. Program materials will be made available to participants. The workshop will conclude with a discussion of challenges in implementation and dissemination of school-based prevention, including: timetabling; required expertise, training of school based professionals, and alignment of positive body image approaches with curriculum and policies regarding obesity prevention, mental health, and social media engagement. The workshop structure will be as follows:

Review of evidence (15 minutes); Role plays (20 minutes); Engagement in media literacy (20 minutes); Exploring social media engagement and effects on body dissatisfaction through representative profile pictures (20 minutes); Challenges of program implementation (15 minutes).

Learning Objectives:

- Apply skills to implement key intervention activities in small group formats
- Apply media literacy strategies to deconstruct traditional and social media messages to reduce persuasive influence of media and social media-based peer interactions
- Identify challenges and implement strategies to overcome barriers to school-based body image intervention delivery.

W 1.5 | Medical Complications of Severe Malnutrition | Meeting Hall 1A, First Floor

Margherita Mascolo, MD and Philip Mehler, MD | ACUTE Center for Eating Disorders at Denver Health, Denver, Colorado, USA

This workshop will focus on the common medical complications of severe malnutrition and their management, is based on the expertise developed at the ACUTE Center for Eating Disorders at Denver Health. It will include complications special to anorexia nervosa restrictive subtype, binge-purge subtype as well as complications common to both. This is a case-based interactive presentation in which 9 cases are discussed. The cases will focus on common complications of malnutrition and offer practical guidelines for their evaluation and management. There are two cases specific to binge-purge subtype of anorexia nervosa and the remaining 7 are based on complications common to both subtypes. Each case will last about 4 minutes with additional time for questions. Discussion is based on a combination of expertise gained over years of caring for severely malnourished patients as well as based on scientific data and literature review.

- Case 1: Vital sign abnormalities: bradycardia, hypotension, and hypothermia. When to worry?
- Case 2: Hepatitis: What’s the work up? What is the mechanism? Case 3: Pancytopenia: Do we need a bone marrow biopsy? What’s the mechanism? Case 4: Hypoglycemia: How do we treat it?
- Case 5: Osteoporosis: What do we recommend to these young patients? Is treatment different for males and females? Case 6: Refeeding syndrome: With focus on hypophosphatemia and edema
- Case 7: Gastroparesis: Who is at risk? Do we need radiology studies to diagnose? How do we treat?
- Case 8: PseudoBartter syndrome seen in bulimia nervosa and binge-purge anorexia: What does it mean? Why do patients become edematous? Can edema be prevented? How can we treat it?
- Case 9: Purging, diuretic and laxative abuse: how do we detox patients? What long term sequelae can patients have? Do we taper abused laxatives and diuretics? How do we deal with the ensuing electrolyte abnormalities?

Learning Objectives:

- Identify the most common medical complications of severe malnutrition due to anorexia nervosa and bulimia nervosa.
- Understand evidence-based management of severely malnourished patients.
- Recognize criteria for admission to the hospital for treatment of severe malnutrition.
### W 1.6 | International Perspectives on Nutrition Counseling *(Not NBCC Approved)*  
**Meeting Hall 1B, First Floor**

**Marcia Herrin**, EdD, MPH, RD, FAED | Dartmouth Geisel School of Medicine, Hanover, New Hampshire, USA  
**Shane Jeffrey**, RD, BSc., Grad Dip Nut & Diet | Royal Brisbane and Women’s Hospital, Brisbane, Australia  
**Hala Abu Taha**, BSc, Dietitian | American Center for Psychiatry and Neurology, Abu Dhabi, UAE  
**Anna Oliver**, BSc, BPhEd, PGDipDiet, RD | Royal Free Hospital, London, UK

Nutritional rehabilitation is a key element in the treatment of eating disorders. In most inpatient and outpatient settings throughout the world, dietitians provide the clinical management necessary to correct abnormal nutritional status and dietary patterns that characterize eating disorders. Yet, standards for nutrition practice have not been established.

This workshop will be a step toward developing consensus-based standards. Workshop leaders will summarize the nutrition guidelines and standard practices from across the world and present the results of in-depth interviews with some of the world’s most experienced dietitians. The workshop will conclude with participants having the opportunity to participate in a Nominal Group Technique to reach consensus on best nutrition practices.

**Lesson Plan:**  
- Introduction of speakers and topic (10 minutes)  
- Survey audience (10 minutes)  
- Content (40 minutes)  
- Nominal Group Technique (20 minutes)  
- Concluding remarks (10 minutes)

**Learning Objectives:**  
- Describe the difference in guidelines and practices in nutrition settings across the world.  
- Identify best nutrition practices and discuss implications for various treatment settings.  
- Integrate three advanced nutrition counseling techniques into their practice.

### W 1.7 | One Size Does not Fit All: How Moderators and Follow-up Data from Randomized Controlled Trials can Inform Integrative Treatments and Matching Interventions to Patients Beyond Eating Disorder Symptoms  
**Terrace 2, Second Floor**

**Heather Thompson-Brenner**, PhD, FAED | Boston University, Cambridge, Massachusetts, USA  
**Stephan Zipfel**, MD | University Medical Hospital Tuebingen, Tuebingen, Germany  
**Susanne Lunn**, MSc | University of Copenhagen, Copenhagen, Denmark  
**Eytan Bachar**, PhD | Hadassah University Medical Center, Jerusalem, Israel  
**Dana Satir**, PhD | University of Denver, Boulder, Colorado, USA

Ongoing research efforts to improve existing treatment outcomes for EDs often assume homogeneity within groups, in spite of empirical efforts suggesting high rates of diagnostic cross-over as well as significant within group variability in personality and overall functioning. While several randomized controlled trials have compared the relative efficacy of psychodynamic and cognitive behavioral approaches in particular, recent analyses of moderators and follow-up data inform matching treatment approaches to patients beyond manifest ED symptoms and integrating behavioral with affective and relationally focused interventions to promote long-term positive outcomes. The purpose of this workshop is to bring together three prominent clinical research groups from across the world to lead an interactive discussion and answer the following key questions:  
1) what particular treatments help specific ED patients subgroups improve and maintain progress;  
2) how do the research data, including moderator and follow-up analyses, inform mechanisms of change;  
3) and ultimately how can clinicians integrate different theories and tailor interventions at various stages of treatment. We will first present an overview of major theoretical accounts of EDs in the treatment of adult AN and BN.

Next, panelists will discuss treatment outcome research and recent data analyses from three separate clinical trials, including predictors of outcome in psychodynamic psychotherapy (PPT), CBT, and nutritional counseling from a mixed community sample of recently hospitalized patients; moderators of drop-out in CBT and PPT for BN; and long-term outcome of CBT, TAU and PPT for AN. Panelists will demonstrate treatment techniques, therapy process and approaches to the assessment of key areas of functioning in EDs and related symptoms. The latest findings in ED research and their direct clinical applications will be reflected in a group process that informs what works best for the individual patient.

**Learning Objectives:**  
- Describe current theories and their evidence bases in the treatment of adult AN and BN  
- Identify moderators of treatment outcome and predictors of follow-up in EDs for CBT, PPT, and TAU  
- Assess specific interventions by patient subtype.
W 1.8 | A Triple Perspective on Barriers to Eating Disorder Treatment
(Not NBCC Approved) | Terrace 1, Second Floor

Mark Warren, MD, MPH, FAED | The Emily Program—Ohio, (formerly Cleveland Center for Eating Disorders), Cleveland, Ohio, USA
Leah Dean, BA | F.E.A.S.T. (Families Empowered and Supporting Treatment of Eating Disorders), Milwaukee, Wisconsin, USA
Mirjam Roelink, BS, MS | Recovery Warriers LLC., Amsterdam, Netherlands

Three members of the Patient-Carer Committee—a clinician, a former patient, and a parent—will offer unique, multi-perspective insights into (perceived) barriers to treatment, in order to spark a dialogue on efforts to improve patient care, strengthen family and community support services, and empower parents to be effective and engaged caregivers.

Each presenter will be given equal time and will draw upon personal experience as well as the reported experiences of peers. Barriers presented from the clinician perspective include the lack of access to a full clinical team—especially well trained medical providers, the lack of access to a full range of care services, the tenuous and often misunderstood relationship between research results and clinical results, inadequate treatment options to support connection, commitment and motivation for patients/families, and the need for better quality evidence based treatments overall. Barriers from the patient perspective will focus on internal factors such as anosognosia, stigma, shame, negative attitudes towards seeking help, complex fears, and the walls of resistance that must be broken down in order to allow for recovery. Barriers presented from the parent perspective will focus on external factors, and include compromised standards of medical care, financial limitations, legal complications, lack of communication between treatment team professionals, and the marginalization, blaming and disempowerment of parents.

Each presenter will offer solutions for how to identify and address barriers to treatment that pose potential harm to patients and families, and which can derail the best efforts of clinical care. Workshop participants will be able to relate to the barriers presented through a personal and experiential narrative that is authentic, genuine, and heartfelt; and, will better empathize with the frustrations these barriers cause for patients and carers.

Learning Objectives:
- Recognize the importance of including multiple perspectives in formulating a treatment plan, and learn to listen to clinician, patient and carer experiences, observations and concerns in a manner that illuminates the specific barriers that are preventing
- Identify universal and pervasive barriers to effective treatment and integrate into their practices strategies for facilitating better workarounds that strengthen the patient/parent/clinician relationship and maximize the potential for recovery.
- Advocate for improvements to early identification and first interventions, educate others in order to reduce shame, stigma and to debunk myths, provide accessible information about eating disorders that improve public understanding and promote evidence-based treatment.

W 1.9 | Transforming Treatments for Child and Adolescent Eating Disorders by Investing in Early Intervention and Rapid Access to Specialist Community Based Services | Meeting Hall V, Second Floor

Ivan Eisler, CPsychol, PhD, FAED and Mima Simic, MD, MRCPsych, MSc, CCSTCap, DipMFT, DipGA | South London and Maudsley NHS Foundation Trust, UK, London, United Kingdom
Rachel Bryant-Waugh, BSc, DPhil, MSc, FAED and Dasha Nicholls, MBBS, MD (Res), MRCPsych, FAED | Great Ormond St Hospital, NHS Foundation Trust, London, United Kingdom
Annemarie van Elburg, MD, PhD, FAED | Rintveld Center for Eating Disorders, Bilthoven, Netherlands
Sloane Madden, BA, MBBS, PhD, FRANZCP, CAPCert, FAED | Sydney Children’s Hospital Network, Sydney, Australia
Leora Pinhas, MD, MSc, FRCP(C) | Eating Disorder Unit, Ontario Shores Centre for Mental Health Sciences, Toronto, Canada
In recent years significant progress has been made in developing effective treatments for ED with a degree of consensus as to what works. Nevertheless, disseminating effective treatments has been slow and for those suffering from ED, finding access to expertly delivered evidence-based treatments is often difficult particularly early on in the course of the illness when the chances of rapid recovery are highest. In December 2014 the UK Government decided address this problem by investing £150m over 5 years to transform services in England for children and adolescents with ED. A specific aim of this investment was to provide easy and rapid access from primary care to specialist community based multidisciplinary services to ensure early, effective treatment is available to all, regardless of the severity of their illness. We will describe some of the factors that led the Government to allocate this funding at a time when other health service budgets were being cut and the way this pledge is being implemented across England. We will present new health-economic data from the London Care Pathways study which had a key role in convincing the UK Government that investing in specialist community based child and adolescent ED services would not only improve clinical outcomes by providing access to expert evidence-based treatments but would also achieve significant cost savings. The major part of the workshop will be to explore the potential applicability of this type of service model in different health service contexts and the range of opportunities, strengths as well as potential pitfalls that large funding initiatives of this kind may bring. Discussants from several countries with different health service contexts will work with the workshop participants to consider:

a) the range of service provisions for eating disorders available in their country b) how treatment is funded and the opportunities and constraints this provides and c) the extent to which the service model being developed across England might be applicable to their own health service context and how it would need to be modified. Workshop structure: London Care Pathways study (10 minutes). Access and waiting times transformation plans in England (20 minutes). Brief comments by discussants (10 minutes). Discussion in small groups (30 minutes). General discussion (20 minutes).

Learning Objectives:

- Following the workshop participants will be able to describe key features of specialist and non-specialist care pathways of child and adolescent eating disorders
- Following the workshop participants be able to demonstrate the cost effectiveness of different service models for treating child and adolescent eating disorders
- Following the workshop participants will be able to evaluate the strengths and weaknesses of different service level approaches to the treatment of child and adolescent eating disorders

**W.110 | Becoming a Leader: What Does it Mean for Us and Our Field?**

Meeting Hall IV, Second Floor

**Dianne Neumark-Sztainer**, MPH, PhD, RD, FAED | University of Minnesota, Minneapolis, Minnesota, USA

**Debra Franko**, PhD, FAED | Northeastern University, Boston, Massachusetts, USA

As we move forward in our careers within the field of eating disorders, many of us will be asked, or will choose, to move into administrative and leadership positions. The choice provides us with dilemmas and opportunities at both the individual level and in the work we do in our field. In administrative positions, we may have less time to work as clinicians or researchers, after many years of gaining skills in these areas. We may have less time to devote to the field of eating disorders within our specific areas of expertise. On the other hand, these positions offer us opportunities to have an influence in a different manner as we determine agendas, create budgets, and work toward changes in our work environments. Recently, we (i.e., the workshop leaders) have taken on large administrative/leadership roles within our academic institutions and are dealing with new kinds of challenges. The focus of this workshop will be on sharing our experiences—the good, the hard, and the ugly!

The format of the workshop will include 15-minute presentations by both of us about our own journeys and experiences, highlighting our trajectories and decision-making processes. This will be followed by an hour of interactive activities and discussion. We will teach leadership skills that participants can take with them to use as they transition over the course of their careers. Hands-on activities focusing on creating teams, understanding power and influence, and identifying strengths will provide a toolkit for participants that can be called upon as they move into leadership roles of any type (research, clinical, or administrative leadership). Small group work, brief assessments, and role play will be used to enhance active learning. We also will promote a discussion among others in the audience who have either moved into administrative or other leadership roles—or are thinking about doing so. Come ready to share!

Learning Objectives:

- Describe factors to be considered in making the choice to transition to leadership positions.
- Learn tools to be better leaders, including, but not limited to, leading better teams, dealing with conflicts, and making decisions.
- Discover strategies for advancing the field of eating disorders from within leadership positions.
The authors will present the modality of health promotion and primary prevention (universal, selective, indicated) in the Czech Republic and its development on the background of international European collaboration and Czech Reform of Psychiatry. The reform activities comprise prevention and de-stigmatization in eating disorders and other mental illness. Andreassen et al. demonstrated in 2007 that 71% internet users of European Union (e.g. 44% of total population) look for health information on the internet.

In 2011-2014, we started with 7 EU countries an international prevention project ProYouth targeting adolescent population older than 15 years (coordinated by Univerzity in Heidelberg) based on results of 3 months programs Essprit and YoungEssprit (Moessner et al., 2008; Bauer et al., 2009; Lindenberg et al., 2011) with significant impact on decrease of onset of clinical cases (5.9% vs. controls 10.4%). During 2 years Czech program, we had 10 000 unique website visitors, 1300 screenings, 243 active participants and 30 chat users. But similarly to other countries only 1% of all visitors left any content on website. And 18% of visitors were already treated for eating disorders. Participants mostly valued the information, anonymous professional support but disliked the registration and monitoring. The ongoing internet program Healthy and Free reached already 7700 unique visitors in 18 months. And the health promotion program Zippy’s friends targets coping strategies improvement in first grade students of 5-7 years in Czech schools. We demonstrate pre-post test results of the controlled randomized study of exposed students (N=466) and controls (N=341) and discuss the prevention modalities and methods (age of target population, rate of primary prevention and health promotion, commercial influence on prevention) to be supported in the future.

Learning Objectives:
- To increase familiarity with new technology programs and their impact on different age population.
- To contribute to better understanding of the complex interplay of the cultural and economic issues in culture bounded prevention.
- To discuss directions to plan the methods of new interventions.
Regardless of specific diagnosis, individuals with eating disorders have strikingly high rates of self-injurious behavior and suicidal ideation (SI). It is essential that clinicians working with eating disorders conduct regular and thorough assessments of suicidality and self-harm in their patients, and understand a variety of strategies for intervention with these problems. Dialectical Behavior Therapy (DBT) is a well-validated treatment that was developed specifically for patients with suicidality and self-harm, and it has also been adapted for use with eating disorder patients. Perhaps more than any other treatment for suicidality, DBT has thoroughly articulated a series of treatment strategies for interacting with suicidal patients in a way to minimize risk of immediate suicide, as well as risk of recurrence of suicidality in the future.

Additionally, DBT describes how to prioritize the targeting of suicidal behaviors in a context of multiple, comorbid high-risk behaviors. This panel will outline evidence-based approaches to assessment and intervention with suicidality and self-harm, and discuss how to adapt and utilize these strategies with both acutely and chronically suicidal eating disorder patients. We will talk about how to prioritize targeting suicidality, self-harm, and high-risk eating disorder behaviors from a DBT approach. We will outline strategies from DBT for managing both self-harm and suicide risk, such as contingency management, diary card self-monitoring, telephone coaching, and behavioral chain analysis. The panel will also discuss the fears that providers feel when working with these high-risk patients, and self-care strategies for coping and avoiding burnout.

Learning Objectives:
- Outline evidence-based approaches to assessment and intervention with eating disorder patients experiencing suicidal ideation and self-harm. Highlight DBT strategies to help shape and manage these behaviors.
- Identify similarities and differences between acutely and chronically suicidal eating disorder patients, while explaining treatment adaptations to fit patient need.
- Discuss fears that clinicians and mental health providers feel when working with high-risk patients and examine research related to those fears. DBT skills based self-care strategies for treatment providers to cope with and avoid burnout will also be considered.

**SP 1.2 | International Forum on Integrated Treatment for Traumatized Eating Disorder Patients with Substance Use Disorders: What We Know and What We Still Need to Figure Out**

**Amy Baker Dennis**, PhD, FAED | Dennis & Moye & Associates, Bloomfield Hills, Michigan, USA

**Tamara Pryor**, PhD, FAED | Eating Disorder Center of Denver, Denver, Colorado, USA

**Timothy Brewerton**, MD, FAED | Medical University of South Carolina, Charleston, South Carolina, USA

**Umberto Nizzoli**, MPH, PhD | University of Bologna and Modena IPU., Bologna, Italy

**Christina Tortolani**, PhD | Rhode Island College, Providence, Rhode Island, USA

For the past decade, the mental health field has been moving toward integrated treatment for patients with comorbid and complex disorders. Research funding priorities, in the United States, have changed and are now primarily focused on defining mechanisms of complex behaviors, e.g., endophenotypes, and attempting to discover when, where and how to intervene. In 2010, the eating disorder/substance abuse special interest group was established at AED with the primary mission of exploring how the eating disorder community might better serve this comorbid population. In the past 15 years we have discovered a great deal about the lack of services available in either Substance Abuse or Eating Disorder facilities. And, to date, there are very few centers even attempting to develop fully integrated treatments in either field. This forum is designed to discuss what we have discovered about treating this complex subgroup of eating disorders, and exposing some of the significant barriers treatment providers and programs have encountered when attempting to provide integrated treatment. The remainder of the forum will be a round table discussion (think tank). The forum organizers will pose numerous questions to the audience and encourage discussion and debate about how to treat these patients. The long-range goal is to develop an international research consortium that will collaborate on finding evidence-based protocols for this comorbid population. We encourage treatment providers from around the world to help us move this project forward.

Learning Objectives:
- Identify the barriers to providing fully integrated treatment for ED/SUD patients in both ED and SUD treatment programs
- Outline what we have discovered about the ED/SUD patient that impedes successful recovery from both disorders
- Create an international consortium to promote research on evidence-based interventions for this comorbid population.
SP 1.3 | Show Me the (Grant) Money! Identifying and Applying for Funding as a Student and Early Career Researcher *(Not NBCC Approved)*

**Panelists:**
- **Helen Murray**, BA and **Adrienne Juarascio**, PhD | Drexel University, Philadelphia, Pennsylvania, USA
- **Lisa Hail**, MA | University of California, San Francisco, San Francisco, California, USA
- **Siân McLean**, PhD | La Trobe University, Melbourne, Australia
- **Jennifer J. Thomas**, PhD, FAED | Massachusetts General Hospital; Harvard Medical School, Boston, Massachusetts, USA
- **Linsey Utzinger**, PsyD | Stanford University School of Medicine, Stanford, California, USA
- **Andrea Goldschmidt**, PhD | Alpert Medical School of Brown University, Providence, Rhode Island, USA

**Abstract:**
Early career researchers are increasingly reliant on grant funding to develop and sustain their research careers. Grant funding is necessary to promote new knowledge on eating disorders, and importantly, provides integral training opportunities for new investigators. As the funding climate progressively becomes more competitive, mentorship in crafting and obtaining grants is valuable to young professionals. This workshop will create an interactive forum for discussing the process of applying for research grants as a new investigator (i.e., trainee or professional for whom research is a career objective). International panelists representing multiple early career stages—from graduate students to faculty—will discuss challenges and successes in applying for research grants from private foundations, professional organizations, and federal institutions in multiple countries.

Panelists will share their successful experiences with several prestigious grant awards (e.g., U.S. National Institutes of Health R01 and K23 and NEDA Feeding Hope for Clinical Research Grant; Australian Rotary Health PhD funding) and discuss important lessons learned from proposals that were not ultimately funded. Panelists will offer unique perspectives on identifying appropriate funding sources; brainstorming research ideas and selecting a project; navigating the application process; tailoring an application to fit the funding opportunity; assembling a mentorship and/or research team; and processing and responding to reviewer feedback. Experiential exercises will mirror critical decision points during the application process, such as constructing effective project aims and significance statements (e.g., audience discussion of mock proposal), and responding to reviews (e.g., breakout group activity to generate responses to difficult grant reviews). By the end of the workshop, attendees will have enhanced skills and competencies necessary for navigating the grant application process.

**Learning Objectives:**
- Become familiar with the variety of funding opportunities that are available to student and early career researchers across the globe.
- Learn how to identify fundable research topics and develop testable hypotheses that will effectively build a programmatic line of research.
- Understand how to craft components for a successful grant proposal, including resubmissions, that align with the funding source.

SP 1.4 | Optimizing the Dietitian's Role in Multidisciplinary Treatment

**Panelists:**
- **Julia Cassidy**, BS, MS, RD | Center for Discovery, Los Alamitos, California, USA
- **Douglas Bunnell**, PhD, FAED | Chief Clinical Development Officer, Monte Nido & Affiliates, Westport, Connecticut, USA
- **Shane Jeffrey**, RD | Eating Disorder Outreach Service, Queensland, Australia
- **Leah Graves**, RD, FAED | Veritas Collaborative, Tulsa, Oklahoma, USA
- **Marcia Herrin**, EdD, MPH, RD, FAED | Geisel School of Medicine and Children’s Hospital at Dartmouth, Lebanon, New Hampshire, USA

**Abstract:**
Four dietitians from diverse backgrounds and three continents will describe their roles and the challenges of serving on a multidisciplinary team in diverse settings: outpatient solo practice, outpatient center, residential, partial hospitalization, and acute inpatient.

The panel will be moderated by a psychotherapist who will review the state of the evidence around the efficacy of multidisciplinary teams in the treatment of eating disorders. The moderator will also interact with the panel and the audience to clarify the often overlapping roles and responsibilities of dietitians and therapists on a treatment team and highlight shared goals.

**Learning Objectives:**
- Following the training, participants will be able to identify four ways to improve their role on a multidisciplinary team.
- Following the training, participants will be able to differentiate the effects and challenges of diverse treatment settings on the role of a dietitian.
- Following the training, participants will be able to describe the evidence for efficacy of multidisciplinary team treatment.
Common to all eating disorders are alterations in the motivation to eat. Here, we review evidence for distortions of the neural circuitry that underlies feeding behaviors. In eating disorders there are both bottom-up differences, related to the sensory experiences associated with consuming food, as well as top-down differences, related to the emotional and cognitive experiences of thinking about, selecting, and deciding on food. Further, the physiological consequence of starvation may impact this circuit. The relative role of bottom-up and top-down disruptions in perpetuating eating disorder behaviors may vary by diagnosis and individual patient. The efficacy of treatments to alter these processes may also vary. Here, we review these circuits and their disruptions in AN, BN, and BED, and provide evidence for neuroplasticity related to both bottom-up and top-down processes.

Dr. Ehrlich will provide an overview of the neural circuits involved in feeding behaviors, and how these circuits may be altered by the effects of starvation and re-alimentation. Dr. Wierenga will review evidence for sensory disturbances related to taste and texture in eating disorders. Dr. Bohon will discuss how emotional processing impacts this circuit.

Dr. Harrison will review social biases and the evidence for top-down controls during feeding behaviors. Dr. McAdams will moderate the discussion, and provide clinical cases reflective of differences in how this circuit may be disrupted.

Learning Objectives:
1. Recognize the neurocircuits that underlie eating behaviors
2. Identify differences in these circuits related to different eating disorder diagnoses including anorexia nervosa, bulimia nervosa, and binge-eating disorder.
3. Develop an awareness of how physiology, sensation, emotion, and cognition can change brain function.

Eating disorder treatment poses a challenge for therapeutic alliance. The symptoms are often ego-syntonic, and consequently, patients tend to present with some degree of ambivalence towards recovery. Alliance is further complicated in working with adolescents. Young patients are often brought to treatment against their preference, and, depending on the provider’s orientation, adolescents may not agree with the goals or methods of therapy. The current evidence-base is fairly conclusive that working within the family system is an essential aspect of providing effective treatment for adolescent eating disorders. Therapeutic alliance, then, involves more than just the patient, which can lead to complicated balancing acts, in which the provider is charged with establishing alliance with both patient and parent without inadvertently colluding with the eating disorder. Evidence-based treatments such as Family Based Treatment (FBT), Dialectical Behavioral Therapy (DBT), or behavior therapy approach this balance differently, though all treatments recognize and attempt to leverage therapeutic alliance in order to affect change. The proposed panel will address the following questions:
1. What are the specific stances of leading evidence-based treatments (FBT, DBT and behavior therapy) on alliance with patients and parents? 2. Is therapeutic alliance with a young eating disorder patient possible? 3. Is alliance with the patient necessary in a family treatment? 4. How should a provider balance establishing alliance without inadvertently colluding with the eating disorder?

The proposed panel will be comprised of 3 clinicians specializing in adolescent eating disorders. Dr. Renee Rienecke will speak about alliance in FBT approaches. Dr. Kelly Bhatnagar will speak about alliance in DBT and DBT/FBT combination treatments. Finally, Dr. Leslie Sim will discuss alliance in behavioral family-based approaches.
### Learning Objectives:

- Describe different strategies for establishing provider/patient alliance across child and adolescent treatment modalities.
- Apply methods of establishing provider/parent alliance across child and adolescent treatment modalities.
- Recognize the impact of both parent and patient alliance on treatment outcomes.

### SP 1.7 | Using & Developing Technology to Improve the Treatment of Eating Disorders Worldwide (Not NBCC Approved)

**Meeting Hall IV, Second Floor**

**Sean Kerrigan, MD** and **Tara Deliberto, PhD** | Weill Cornell Medicine & New York Presbyterian Hospital, Westchester Division, White Plains, New York, USA

**Jennifer Henretty, PhD** | Center for Discovery, Los Alamitos, California, USA

**Anna-Charlotte Wiberg, BA, Kristofer Ekstrom, BA, and William Hamilton, BA** | Karolinska Institutet, Stockholm, Sweden

Recent advances in technology present us with the opportunity to improve treatment for people with eating disorders worldwide with the use of telemedicine and novel electronic-based treatments. Presenters on the Technology & Innovations SIG panel will discuss the ways in which they have developed or used technology to improve eating disorder treatment. Kerrigan & Deliberto will review influential research projects on telemedicine in the treatment of eating disorders and discuss its application through a new technological platform, NYP On Demand, currently in use at New York-Presbyterian Hospital. Henretty will then present on a technological tool, The Recovery Report Card, created by a residential treatment center to aid clinicians in the treatment of eating disorders. The Recovery Report Card is a convenient visual tool that can help clinicians with case conceptualization, targeting interventions, tracking progress in treatment, communicating with utilization reviewers, and involving family members. Henretty will guide audience members through using the The Recovery Report Card with clinical vignettes. Similarly, Wiberg & Ekstrom will discuss a smartphone application developed at the Stockholm Center for Eating Disorders that functions as a digital meal diary and behavior tracker. Wiberg & Ekstrom will also discuss the barriers encountered in the development of this application and how they were each overcome. Taken together, the panel presenters for the Technology & Innovations SIG will each discuss ways in which they have used technology to improve the treatment of eating disorders and encourage as well as advise others on how to do the same.

### Learning Objectives:

- Foster an understanding of how to integrate eating disorder technologies and innovations into one’s practice in an effort to improve the standard of eating disorder treatment.
- Reflect on ways to enhance current eating disorder treatments with the use of ancillary emerging technology (e.g. apps).
- Consider potential barriers to the development and use of technology in the treatment of eating disorders.

### SP 1.8 | Transdisciplinary Research on Eating Disorder Etiology

**Meeting Hall V, Second Floor**

**Karen Mitchell, PhD** | VA Boston Healthcare System/Boston University School of Medicine, Boston, Massachusetts, USA

**Zeynep Yilmaz, PhD** | University of North Carolina-Chapel Hill, Chapel Hill, North Carolina, USA

**Alexis Duncan, PhD** | University of North Carolina-Chapel Hill, Chapel Hill, North Carolina, USA

**Tracey Wade, PhD, FAED** | Flinders University, Adelaide, Australia

**Linda Mustelin, PhD** | University of Helsinki, Helsinki, Finland

**Cynthia Bulik, PhD, FAED** | University of North Carolina-Chapel Hill/Karolinska Institutet, Chapel Hill, North Carolina, USA

Recent advances in technology present us with the opportunity to improve treatment for people with eating disorders worldwide with the use of telemedicine and novel electronic-based treatments. Presenters on the Technology & Innovations SIG panel will discuss the ways in which they have developed or used technology to improve eating disorder treatment. Kerrigan & Deliberto will review influential research projects on telemedicine in the treatment of eating disorders and discuss its application through a new technological platform, NYP On Demand, currently in use at New York-Presbyterian Hospital. Henretty will then present on a technological tool, The Recovery Report Card, created by a residential treatment center to aid clinicians in the treatment of eating disorders. The Recovery Report Card is a convenient visual tool that can help clinicians with case conceptualization, targeting interventions, tracking progress in treatment, communicating with utilization reviewers, and involving family members. Henretty will guide audience members through using the The Recovery Report Card with clinical vignettes. Similarly, Wiberg & Ekstrom will discuss a smartphone application developed at the Stockholm Center for Eating Disorders that functions as a digital meal diary and behavior tracker. Wiberg & Ekstrom will also discuss the barriers encountered in the development of this application and how they were each overcome. Taken together, the panel presenters for the Technology & Innovations SIG will each discuss ways in which they have used technology to improve the treatment of eating disorders and encourage as well as advise others on how to do the same.

### Learning Objectives:

- Foster an understanding of how to integrate eating disorder technologies and innovations into one’s practice in an effort to improve the standard of eating disorder treatment.
- Reflect on ways to enhance current eating disorder treatments with the use of ancillary emerging technology (e.g. apps).
- Consider potential barriers to the development and use of technology in the treatment of eating disorders.
Abstract:
Eating disorders (EDs) are multifactorial disorders, with biological, psychological, and social factors contributing to their onset and maintenance. The complexity of EDs underscores the need for transdisciplinary research in order to integrate and move beyond discipline-specific theoretical and methodological approaches to study their etiology. This panel discussion reviews empirical findings from genetic and epidemiologic studies of EDs as well as methodological considerations in conducting transdisciplinary research.

Four panelists will discuss research relevant to this topic area. 1) Within the unifying theme of understanding etiology in order to develop better interventions for EDs, Dr. Wade will present on diverse aspects of her research, from etiological models, including gene x environment interactions, interventions, and predicting outcomes of these interventions that can inform model development. 2) Dr. Mustelin will present on methods to combine twin data and epidemiologic data to investigate the etiology of eating disorders. 3) Dr. Yilmaz will discuss how epidemiological data could aid in following up on significant genomic findings in eating disorders and present examples from the Avon Longitudinal Study of Parents and Children. 4) Dr. Bulik’s presentation will focus on methodological considerations and how to assemble a transdisciplinary team in genetic epidemiology research. Discussion: The etiological and translational implications of this research will be discussed.

Learning Objectives:
- Participants will identify methodological considerations in transdisciplinary research on eating disorders.
- Participants will interpret genetic and environmental findings regarding the etiology of eating disorders.
- Participants will demonstrate understanding of the advantages of conducting transdisciplinary research on eating disorders.

SP 1.9 | Athletes with Disordered Eating and Exercise: Key Issues, Opportunities, and Challenges | Terrace 2, Second Floor

Carolyn Becker, PhD, FAED | Trinity University, San Antonio, Texas, USA
Karin de Bruin, PhD | University of Amsterdam, Amsterdam, Netherlands
Marianne Martinsen, PhD | Hedmark University, Lillestrøm, Norway
Tiffany Stewart, PhD | Pennington Biomedical Research Center, Baton Rouge, Louisiana, USA
Jorunn Sundgot-Borgen, PhD | Norwegian School of Sport Sciences, Olso, Norway
Lisa Smith Kilpela, PhD | University of Texas Health Science Center at San Antonio, San Antonio, Texas, USA

The overarching aim of this SIG panel is to provide participants with the chance to interact with experts in the areas of eating disorders, body image, and sport and to address aspects of diagnosis, treatment, and prevention of eating disorders and associated risk factors and syndromes (e.g., contextual body image, Relative Energy Deficiency in Sport (REDs), and risk assessment in the return to play decision) in athletes. This session will include a moderated panel designed facilitate dialogue on the challenges and opportunities in working with athletic populations, to provide lessons learned from those who have successfully partnered with athlete organizations, and to elucidate future directions needed in this field. To maximize the interactive nature of this panel, initial “jumping off” questions will be generated by the Sport and Exercise SIG co-chairs with input from SIG members via the AED online community; feedback will be gathered in the spring to maximize the up-to-date nature of the panel. In addition, ample time will be allocated during the panel for participants to ask questions and guide discussion. In summary, this panel will not include a series of talks followed by questions but will be an interactive discussion between the panelists, the online SIG community (via the initial questions) and audience participants. Format: Specific presentations will not be made. Rather, speakers will speak briefly about their area of expertise. This will be followed by discussion points facilitated by moderator and fielding of audience questions, group and audience discussion.

Learning Objectives:
- Identify and define key issues in the diagnosis, treatment, and prevention of eating disorders and associated risk factors in athletes.
- Facilitate discussion to address important aspects included in treatment, education, and research with athletic populations.
- Evaluate challenges and opportunities in working with athlete populations and organizations, including strategies for maximizing opportunities and overcoming barriers in working with this population.
SP 1.10 Anorexia Nervosa Narratives: Patients’ Perspective and Primary Caregivers

Forum Hall, Second Floor

Simultaneously Translated to English

Special Invited Speaker: Laura Gonzalez Macias, PhD | Hospital Medica Sur, Ciudad de Mexico, Mexico

Considering that Anorexia Nervosa (AN) is the only mental suffering that leads to death by compromising the body’s integral functioning due to the nutritional status, and considering that arises during adolescence, family plays a major role in the suffering maintenance. The investigation objective is to get to know the narratives about Binge-Purge subtype of Anorexia Nervosa, from the sufferer’s point of view (patient) and from the people that coexist with it (parents). The purpose is to obtain information of four different moments of the disorder: the symptom appearance, the treatment itself, symptomatology remission and the relapse significance. A structural analysis was developed based on qualitative investigation as exploration method and the narrative analysis for data interpretation. It was observed that family relations condition the way the ANBP symptom appears, through overprotection mechanisms and negligent care, driven by a mother with a great need of taking control and an absent father, this family dynamic results on symbiotic relations with emotional emptiness that do not allow child’s individuation, this dynamic is not the cause of ANBP, but it is a maintenance factor. According to every family member’s life situation, the ANBP has a different meaning but they all conclude that it is a difficulty on emotions management and relapse is a part of the treatment that leads to observing the needed changes for recovery.

Learning Objectives:
- Learn the importance of support nets on Patients with ANPB
- Identify different moments on patients evolution
- Acknowledge the importance of relapse

5:45 p.m. – 6:45 p.m. European Chapter Formation Meeting | Terrace 1, Second Floor

5:45 p.m. – 7:15 p.m. Welcome Reception | Poster Presentations Session I | Congress Hall Foyer BC, Second Floor

6:00 p.m. – 7:00 p.m. Non-Member Meet & Greet | North Hall, Second Floor

Some patients come a long way to get here. All of our patients come a long way while they are here.

People travel from all over the country to receive treatment at the Center for Eating Disorders Care at University Medical Center of Princeton. It may be due to our national reputation, our expert care with access to on-site medical treatment, or our healing approach that provides the tools for long-term recovery. But no matter how far you travel to get here, you’ll definitely go far while you are here.

Take the first step today.
877.932.8935
princetonhcs.org/eatingdisorders

Center for Eating Disorders Care
University Medical Center of Princeton at Plainsboro
CELEBRATING 20 YEARS OF CARING
POSTER PRESENTATIONS SESSION I

**T001: A Test of a State-Based, Self-Control Theory of Binge Eating in Adults with Obesity**

Carolyn Pearson Carter, PhD, University of Minnesota, Minneapolis, Minnesota
Tyler Mason, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Li Cao, MS, Neuropsychiatric Research Institute, Fargo, North Dakota
Andrea Goldschmidt, PhD, Brown University, Providence, Rhode Island
Jason Lavender, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Ross Crosby, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Scott Crow, MD, University of Minnesota, Minneapolis, Minnesota
Scott Engel, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Stephen Wonderlich, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Carol Peterson, PhD, University of Minnesota, Minneapolis, Minnesota

It has been theorized that state levels of self-control depletion (as caused by negative affect and restraint) may lead to binge eating behavior when individuals also endorse momentary expectancies that eating will make them feel better. Given commonalities in precipitants of binge eating across populations, the current study tested this state-based, self-control theory in a sample of adults with obesity using ecological momentary assessment (EMA). Fifty obese adults completed a two-week EMA protocol during which they provided pre-eating episode ratings of negative affect, restraint, and eating expectancies, as well as post-eating episode ratings of loss of control and overeating experienced during the eating episode (used to define episodes of binge eating). Generalized estimating equations (GEE) supported the proposed theory and identified a 3-way interaction between within-person pre-eating episode variables, such that higher self-control depletion (e.g., higher restraint and higher negative affect) was predictive of binge eating episodes only when individuals also endorsed higher momentary expectancies that eating would make them feel better (B = .07, p = .023). To our knowledge, this is the first empirical test of this theory, highlighting the impact of momentary self-control depletion and eating expectancies on binge eating in obese adults. These findings suggest the potential utility of including strategies that target eating expectancies and self-control depletion in interventions for eating- and weight-related problems.

**T002: Interpersonal Relationships and Eating Disorders: Development and Validation of a New Measure—The IR-ED**

Stephen Jones, MSc, BSc, University of Sheffield, Sheffield, Yorkshire
Glenn Waller, BA, MPhil, DPhil, FAED, University of Sheffield, Sheffield, Yorkshire
Bronwyn Raykos, PhD, Centre for Clinical Interventions, Perth, Western Australia
Anthea Fursland, PhD, Centre for Clinical Interventions, Perth, Western Australia
Susan Byrne, DPhil, PhD, School of Psychology, The University of Western Australia, Perth, Western Australia

It is commonly contended that interpersonal relationships can drive and maintain eating pathology. However, existing measures of such interpersonal problems are only weakly associated with eating pathology, suggesting that those existing models are not sufficiently specific to eating disorders. This paper reports on the international development of a new, brief measure to assess interpersonal problems specifically associated with problematic eating - the Interpersonal Relationships and Eating Disorders (IR-ED) scale. The sample consisted of 531 individuals from the UK. Each completed an online survey of their interpersonal relationship status (the IR-ED), along with measures of eating pathology, general interpersonal problems, fear of negative evaluation, anxiety and depression. IR-ED items were generated by a team of Australian and UK clinicians and academics. Principal component analysis demonstrated three main factors within the IR-ED - Food-related isolation; Avoidance of Body Evaluation; and Food-related Interpersonal Tension – measured using only 15 items. Those scales had strong test-retest reliability and internal consistency, and were moderately associated with a more generic measure of interpersonal problems (the IPP-32 scale). The IR-ED was more consistently associated with eating pathology than the IPP-32. Furthermore, the IR-ED scales were superior at distinguishing individuals in different weight status categories, and at distinguishing those individuals who reported any history of eating disorder. The IR-ED is a robust and reliable measure, with greater clinical validity of existing, generic measures of interpersonal problems when working with eating disorder. It is therefore a potentially useful tool for psychological formulation and treatment for individuals experiencing interpersonal problems and pathological eating.
T003: Increased Psychological Symptoms at the Conclusion of AN treatment: True Exacerbation of Distress or an Artifact of Baseline Denial and Minimization?

Lisa Hail, MA, University of California San Francisco & Fairleigh Dickinson University, San Francisco, California
Katharine L. Loeb, PhD, FAED, Fairleigh Dickinson University, San Francisco, California
Stuart B. Murray, PhD, PsyD, University of California San Francisco, San Francisco, California
Daniel Le Grange, PhD, FAED, University of California San Francisco, San Francisco, California

Much has been written about the diagnosis of anorexia nervosa in children and adolescents being a challenging pursuit given the unintentional and strategic denial and minimization that is characteristic of this disorder, along with the developmental limitations of youth. Despite these challenges, self-reported symptoms measured via the Eating Disorder Examination (EDE) are a frequent way in which treatment outcomes are evaluated. While weight status (Criterion A) can be evaluated objectively, the psychological symptoms of Fear of Weight Gain, Feeling Fat, and the Importance of Weight and Shape, which inform Criteria B and C, rely on the child’s willingness to disclose symptoms and an ability to introspect. Thus, relying on youth self-reported symptoms to evaluate treatment outcome may not capture the full impact of treatment if these diagnostic items were underreported at baseline. It is hypothesized that a subset of patients will appear to have an exacerbation of psychological symptoms based on the difference between pre- and post-treatment scores on the diagnostic items as an artifact of initial minimization. In a sample of youth with anorexia spectrum presentations who were participating in a research based treatment study (N=48; 87.4% Female; Age: 9-18; M=13.7), 21.3% reported an increase in psychological symptoms at the end of treatment (EOT). Being older, a potential proxy for cognitive maturation, was a significant predictor of reporting increased symptoms (F (1, 45) = 10.009, p = .003). However, neither percent expected body weight at EOT, a proxy for severity of illness (F (1, 45) = 2.251, p = .140), nor change in weight status (i.e., above or below 85% of expected body weight: F (1, 45) = 3.051, p = .088) were significant predictors of this pattern. These findings suggest that a reported exacerbation of symptoms at EOT may not be due to an objective increase in severity but rather an artifact of initial denial and minimization exacerbated by a potential lack of insight.

T004: Predictors of Weight Restoration in a Family-Based Partial Hospitalization Program

Johnny Berona, MS, University of Michigan, Ann Arbor, Michigan
Rebekah Richmond, BA, Medical University of South Carolina, Charleston, South Carolina
Renee Rienecke, PhD, Medical University of South Carolina, Charleston, South Carolina

Evidence-based outpatient treatments for anorexia nervosa (AN) such as family-based treatment (FBT) have been successfully adapted for implementation in partial hospitalization program (PHP) settings. However, less is known about predictors of favorable PHP treatment outcomes such as weight restoration. This study sought to identify predictors of weight gain across two weeks of PHP within 102 PHP patients with AN (n=79) or EDNOS-AN subtype (n=23). Patients and their parents completed the Eating Disorders Examination (EDE), Mini International Neuropsychiatric Interview (MINI), and the Family Questionnaire (FQ) to assess parental expressed emotion (EE). Most patients were female (92.2%), Caucasian (93.1%), and from intact families (78.4%) with a mean (SD) age of 16.3 (2.9) years of age, illness duration of 18.3 (20.1) months, BMI of 17.61 (2.1), 82.9% (7.4) expected body weight, and global EDE score of 2.9 (1.6). Prevalent MINI diagnoses were mood disorders (38.2%) and anxiety disorders (43.1%). Curvilinear latent growth curve models displayed good fit (TLI=.99, CFI=.99, RMSEA=.07). Covariates included mood and anxiety diagnoses, binge eating, purging, and expressed emotion. Anxiety disorder (b=133, p < .01) and high parental EE (b=0.7, p < .01) were associated with lower baseline BMI. Mood disorder (b=-11, p < .001) and high parental EE (b=-0.04, p = .042) predicted significantly slower weight gain. Binge/purging pathology was not associated with baseline or change in BMI. The relatively short time span of two weeks may have limited our ability to detect relationships. Overall, the pattern of findings suggests that it is feasible to implement FBT principles in a PHP setting and some previously identified predictors of weight restoration (e.g. internalizing psychopathology, parental EE) are informative across settings even within acute, brief treatment. Future studies should replicate and extend these findings over longer time frames and with larger samples with more demographic and clinical heterogeneity.

T005: Who Women Compare to in their Everyday Lives and the Impact of those Comparisons on their Body Image

Jasmine Fardouly, PhD, BSc, Macquarie University, Sydney, NSW
Rebecca Pinkus, PhD, BSc, University of Sydney, Sydney, NSW
Lenny Vartanian, PhD, BSc, UNSW Australia, Sydney, NSW

Appearance comparisons are an important sociocultural factor influencing body dissatisfaction among young women. There are a variety of different types of people (i.e., targets) that women can compare themselves to (e.g., celebrities, close friends) and comparisons to these different groups may differentially impact women's body image and mood. However, little is known about the frequency and outcome of appearance comparisons to different
targets in women’s everyday lives. We conducted an Ecological Momentary Assessment study in which female undergraduate students (n = 150) completed a brief online survey at five random times every day for five days. In this survey, participants were asked if they had made an appearance comparison. If they had, they were also asked who they compared themselves to (i.e., family member, close friend, acquaintance, stranger, celebrity/model), how they rated compared to that person (i.e., more attractive, less attractive), and how attainable that person’s appearance is to them. All participants then completed state measures of mood, appearance satisfaction, and intention to diet and exercise. Participants reported comparing their appearance most often to strangers and acquaintances, then close friends and celebrities, and rarely to female family members. The appearance of close friends and family were rated to be the most attainable, followed by strangers and acquaintances, and then celebrities. Appearance comparisons to celebrities were associated with less appearance satisfaction and a less positive mood than comparisons to all other target groups. These findings suggest that celebrities may be particularly harmful appearance comparison targets in women’s everyday lives and that the perceived attainability of a celebrity’s appearance may influence the outcome of comparisons to that target group.

T006: Binge Eating and Attention Deficits

Daniel Stein, MD, Safra Children’s Hospital, Sheba Medical Center, Tel Hashomer, No
Roni Halevy-Yosef, PhD, Safra Children’s Hospital, Sheba Medical Center, Tel Hashomer, No
Eytan Bachar, PhD, Hadassah Medical Center, Jerusalem the Hebrew University at Jerusalem, Jerusalem, No
Lilach Shalev-Mevorach, PhD, School of Education, Tel Aviv University, Tel Aviv, No

The study of the associations of attention deficit hyperactivity disorder (ADHD) with binge/purge type eating disorders (B/P EDs) has gained considerable interest in recent years. ADHD and EDs involving binge-eating may share common clinical features, including impulsivity, emotional and behavioral dysregulation, and lack of self-awareness. Consequently, it has been suggested that inattention and/or impulsivity may foster binge eating. In this study we sought to explore whether objective attention deficits which go beyond the shared symptomatology of ADHD and B/P EDs would be related to binge-eating. For this purpose, we conducted a three-group design, including a binge-eating group (n=51), a non-binge eating group (n=59) and a control group (n=58). Patients with EDs were assessed following the stabilization of their weight and ED symptomatology. The attention battery included diagnostic assessment of ADHD, neuropsychological assessment of attention, and self-report questionnaires. Comorbid symptoms (depression, anxiety and obsessionality) were also monitored. No association was found between binge-eating and attention deficits according to the neuropsychological assessment. Nonetheless, patients with binge-eating scored higher on the self-report ADHD questionnaires compared with the non-binge eating group. Patients with anorexia nervosa B/P type had the highest rates of ADHD symptomatology and were the only subgroup showing sustained neuropsychological attention deficits. Lastly, significant correlations were found between self-reported ADHD, ED and comorbid symptomatology. The results of this study suggest that binge-eating is not associated with objective attention deficits. Engaging with binge-eating and purging behaviors on a regular basis, may foster a disorganized lifestyle, potentially increasing the risk of subjective self-reported attention difficulties.

T007: Labeling and Defining Difficult-to-treat Anorexia Nervosa: A Systematic Review and Critical Analysis

Catherine Broomfield, BSc, Student; Bachelor (Honours), University of Sydney, Sydney, New South Wales
Kristin Stedal, PhD, Oslo University Hospital, Oslo, Oslo, Norway
Paul Rhodes, PhD, Associate Professor, University of Sydney, Sydney, New South Wales
Stephen Touyz, PhD, Professor, University of Sydney, Sydney, New South Wales

With Anorexia Nervosa (AN) having various presentations, attention has been directed towards particularly durable forms of the condition in both research and clinical contexts. A major hinder in terms of advancing the field, however, is the inconsistent labelling and defining of this subgroup. This has two implications; First, the inconsistent recruitment of participants when researching this sample of AN, and second, the misdiagnosing of individuals who may or may not have a durable course of the disease. The aim of the current systematic review was to provide an unbiased overview of the current labels and criteria used for defining difficult-to-treat presentations of AN. In accordance with PRISMA guidelines, a literature search was conducted using four electronic databases (PsycINFO, MEDLINE, Web of Science and Scopus) in order to identify 37 records that met the standards stipulated by the criteria. Data extraction included explicit labelling, the definition or criteria used to describe the subgroup, along with participant age, sample size and study design. It was found that the terms chronic and severe and enduring were the most commonly used adjectives when referring to this subgroup. In terms of criteria, duration of illness, and the number of previously failed treatment attempts were the most common defining features within the literature. It is the aim of the authors to inspire further research into what is the most appropriate label and defining features for the subgroup in order to move towards a better approach and outcome for the individuals affected.
In recent years, several eating disorders (ED) Internet-based prevention programs have been developed such as ProYouth, a program aiming to promote mental health and provide early identification and prevention of ED. While recent studies have suggested that ED Internet-based programs may have great potential for enhancing the prevention of ED, little is known regarding the characteristics of individuals who enroll in these programs. Therefore, the aims of the current study were (a) to identify the typology of college students who completed the screening questionnaire of ProYouth and (b) to examine whether the resulting profiles differ in terms of their subsequent enrollment in ProYouth. A sample of 676 college students, mainly women (n = 582, 86%) completed the online screening (Mage = 21.3, SD = 2.5). Participants were invited to complete a brief questionnaire assessing several ED-related symptoms: body perception, compensatory behaviors, weight concerns and anxiety/depressive symptoms. Cluster analysis revealed two profiles among those who completed the online screening questionnaire: A low and a high ED symptoms group. An analysis of variance indicated significant group differences regarding ED and anxiety/depressive symptoms (p < .001). Furthermore, rates of enrollment in ProYouth were significantly different between the two groups (p < .001), with the high ED symptoms group more likely to enroll. These findings suggest that ProYouth might be successful in targeting participant at-risk of ED. Given the high number of college students who completed the screening questionnaire, and the reach of the program, ProYouth shows promise as a tool for enhancing the awareness of ED symptoms among college students. To our knowledge, this study is the first to identify profiles students engaging with an ED Internet-based prevention program disseminated among French college students. Further clarification of the successfullness of ProYouth in reducing ED symptoms is needed.
access, stigma reduction, cost-effectiveness and dissemination. Specialized apps may represent users’ attempts to use technology to address their ED, with or without accompanying traditional face-to-face treatment. Delineating the profile characteristics of users may augment understanding of ED app users and propel further research on whether such characteristics are clinically meaningful for etiological and treatment purposes. This study explored how users of Recovery Record (RR) clustered into subgroups based on their self-reported ED symptoms. Participants (N=1280) were 77.4% non-hispanic white and 91.3% female with a mean age of 27 years (range 15-65) and mean BMI of 27. All participants self-initiated RR use, and reported not being in an evidence based form of treatment for their ED. A hierarchical cluster analysis distinguished 5 groups of participants who differed based on gender, age, current ED symptoms (including binge eating, compensatory behavior, degree of restraint), duration of ED symptoms, and measures of perceived suitability and predicted helpfulness of the RR app. Results indicated that the RR clusters resembled symptoms depicted by the DSM-5 ED categories (including mild binge eating disorder, mild and moderate bulimia nervosa, and unspecified ED). Aggregate participant ratings of suitability and helpfulness of the RR app in addressing their ED were 7.1 and 6.4 out of 10, respectively. Mean number of RR food records logged over the previous month were M=96 (SD=255). While these groups warrant further study and replication, findings enhance our understanding of the clinical presentations of users and propel further research on whether such clusters or profiles may augment understanding of ED app treatment purposes. This study explored how users of Recovery Record (RR) clustered into subgroups based on their self-reported ED symptoms. Participants (N=1280) were 77.4% non-hispanic white and 91.3% female with a mean age of 27 years (range 15-65) and mean BMI of 27. All participants self-initiated RR use, and reported not being in an evidence based form of treatment for their ED. A hierarchical cluster analysis distinguished 5 groups of participants who differed based on gender, age, current ED symptoms (including binge eating, compensatory behavior, degree of restraint), duration of ED symptoms, and measures of perceived suitability and predicted helpfulness of the RR app. Results indicated that the RR clusters resembled symptoms depicted by the DSM-5 ED categories (including mild binge eating disorder, mild and moderate bulimia nervosa, and unspecified ED). Aggregate participant ratings of suitability and helpfulness of the RR app in addressing their ED were 7.1 and 6.4 out of 10, respectively. Mean number of RR food records logged over the previous month were M=96 (SD=255). While these groups warrant further study and replication, findings enhance our understanding of the clinical presentations of individuals who are not presenting for traditional forms of treatment. Such data may inform the development and evaluation of app-based ED platforms that could meet the needs of unique patient groups.

**T011: Difficulties with Emotion Regulation as a Predictor of Subjective Binge Eating Episodes**

*Molly Atwood, BA, MA, Student, Ryerson University, Toronto, Ontario*

*Stephanie Cassin, BA, MA, PhD, Ryerson University, Toronto, Ontario*

Explanatory theoretical models of binge eating highlight that this disordered eating behaviour functions to regulate or escape from negative affect. Indeed, negative affect is the most commonly cited antecedent of objective binge episodes (OBEs) in women with AN, BN, BED, and non-clinical women, and recent evidence suggests that increases in negative affect also precede subjective binge episodes (SBEs). Some women are vulnerable to engaging in OBEs, in part, because they lack adaptive emotion regulation skills; however, less is known about the relationship between difficulties with emotion regulation and SBEs. The present study examined whether women who report SBEs experience greater general difficulties regulating emotions than non-binge eating controls, and whether these difficulties explain unique variance in SBE frequency beyond negative affect. Female undergraduate students (N = 111) aged 17 to 30 years (M = 19.41, SD = 2.43) completed the Eating Disorder Examination Questionnaire, Difficulties with Emotion Regulation Questionnaire, and Depression Anxiety Stress Scales. Approximately 32% (n = 36) of the sample reported engaging in SBEs over the previous month; 28% (n = 31) met criteria for regular (i.e., once per week) occurrence. As compared to non-binge eating controls (n = 27), women who reported regular SBEs demonstrated greater emotion dysregulation (F(1,56) = 6.79, p = 0.012). Controlling for negative affect, a hierarchical regression analysis showed that DERS total score significantly predicted frequency of SBEs (F(4,109) = 6.89, p = 0.000); the model accounted for 20.2% of the variance. A multiple regression analysis, with DERS subscales entered simultaneously as predictors, showed that difficulty in inhibiting impulsive behaviour when distressed uniquely predicted SBE frequency (B = 0.35, p = 0.027); lack of emotional clarity also approached significance (B = 0.24, p = 0.051). Findings suggest that difficulty with emotion regulation may play a role in maintaining subjective binge eating.

**T012: Can Taking an Online Survey Reduce Eating Disorder Risk Factors in College Students? Evaluation of a Minimal Prevention Strategy**

*Jennifer L. O’Flynn, MEd, Northeastern, Boston, Massachusetts*

*Chloe Richard, BA, Northeastern, Boston, Massachusetts*

*Debra L. Franko, PhD, FAED, Northeastern, Boston, Massachusetts*

*Rachel F. Rodgers, PhD, Northeastern, Boston, Massachusetts*

The extant literature suggests that self-assessment alone may change risky health behaviors. To date, however, this has not been applied to eating disorder prevention. The purpose of the present study was to examine the effect of a brief online survey on the report of eating disorder symptoms. Undergraduate students were recruited to take two online surveys. At baseline, participants were randomly assigned to a control or intervention group. Participants in the control group completed a well-established personality test and the intervention group completed the intervention survey assessing eating disorder symptoms using the Eating Disorder Examination Questionnaire (EDE-Q). Approximately 2.5 months later all participants were invited to complete the intervention survey (including the EDE-Q). To date, 283 participants have fully completed both surveys who range from 18 – 24 years of age (M=19.81, Md = 20), including 216 females (76.3%) and 65 males (23%). Preliminary findings revealed that participants in the intervention group showed decreased eating disorder symptoms at follow-up, with statistically significant decreases in eating concerns (p < .01), shape concerns (p < .01), restraint (p < .05) and weight concerns (p < .01) from Time 1 to Time 2. A Mann_Whitney U Test revealed that at Time 2 levels of restraint were significantly lower in the...
The current study assessed ED symptoms and comorbid psychopathology in patients enrolled in a family-based partial hospitalization program (PHP) three months after discharge. Thirty-one adolescents and young adults (mean age = 16.32; SD = 3.78) (n = 20 AN, n = 8 OSFED AN-type, n = 3 BN, n = 2 ARFID) and their parents (n = 41) completed questionnaires at baseline, end of treatment (after approximately five weeks in PHP; M = 27.39 treatment days), and three months post-discharge. Patients completed the Eating Disorder Examination Questionnaire (EDE-Q) and a measure of depression; parents completed the Parent Versus Anorexia Scale (PVA), assessing parental self-efficacy, and the Family Questionnaire (FQ), assessing expressed emotion. Remission status was classified as reaching 95% of expected body weight (EBW) and having an EDE-Q global score within one standard deviation of established population norms. Partial remission was defined as reaching either one of these criteria. EDE-Q global score did not change from end of treatment to follow-up, nor did depression symptoms. Patients’ %EBW was significantly higher at follow-up (M = 93.99, SD = 7.07) than at end of treatment (M = 99.81, SD = 7.49), t(29) = -7.63, p < .001. Twenty-four patients (80%) reached at least 95% of their EBW. Twenty-two (71%) met full criteria for remission, seven (22.6%) met partial criteria for remission, and two (6.5%) did not meet any remission criteria. Mothers reported significant improvement in their emotional overinvolvement subscale of the FQ, t(19) = 3.67, p = .002. Findings suggest that symptom improvement found at the end of treatment in a PHP is maintained at three months post-discharge, and that full remission can be reached and maintained after a relatively short stay in treatment.

**T015: Objective Predictors of Outcome at One-Year Follow-up in Recently Weight-Restored Females with Anorexia Nervosa**

- **Marwan El Ghoch**, MD, Department of Eating and Weight Disorders, Villa Garda Hospital, Garda (VR), Verona
- **Simona Calugi**, PhD, Department of Eating and Weight Disorders, Villa Garda Hospital, Garda (VR), Verona
- **Riccardo Dalle Grave**, MD, Department of Eating and Weight Disorders, Villa Garda Hospital, Garda (VR), Verona

We aimed to investigate the association between objective clinical parameters at inpatient treatment discharge and normal weight maintenance (BMI ≥ 18.5 kg/m2) and resumption of menses at one-year follow-up, in patients with anorexia nervosa (AN). In three different studies anthropometric, body composition and physical activity variables were assessed by DXA scan and Sense Wear Armband in two samples of 54 and 32 patients (mean age: 25.2±7.3 and 22.5±7.0 years, respectively), who had restored normal body weight (mean BMI: 19.8±0.8 and 19.2±1.0 kg/m2, respectively) at the end of a specialist inpatient treatment. These variables were compared between participants who had maintained normal weight and/or resumed regular menses and those who did not, one year after inpatient discharge. Two major findings were
revealed. First, patients who maintained normal weight at one-year follow-up had higher BMI at inpatient discharge (20.2±0.7 kg/m²) with respect to those who had lost weight (19.4±0.6 kg/m², p<0.001), and the risk of relapse was associated with a higher BMI at the time of inpatient discharge, as confirmed by logistic regression analysis (Exp[B] = 5.27, P = 0.002). Second, patients who resumed regular menses with respect to those who still were amenorrheic at one-year follow-up were characterized by higher total body fat percentage (27.7±5.7% vs. 23.7±5.8%, p=0.019), and lower daily steps (12347.2±4437.1 vs. 17775.6±5396.1, p=0.004) at inpatient discharge, as confirmed by logistic regression analysis (OR=1.14, 95% CI 1.001-1.303, P=0.049) and (OR=0.80, CI 0.66-0.97, P=0.026), indicating that a small increase in total body fat percentage (~1%) and decrease in daily steps (~1,000 steps) substantially increased the probability to have regular menses by 14% and 20% respectively. These data support the use of objective measures to predict the outcome of anorexia nervosa.

**T016: Mechanisms and Moderators in Third-Wave Treatments for Binge Eating Spectrum Disorders: A Systematic Review**

Jennifer Barney, BA, Drexel University, Philadelphia, Pennsylvania
Helen Burton-Murray, BA, Drexel University, Philadelphia, Pennsylvania
Stephanie Manasse, MS, Drexel University, Philadelphia, Pennsylvania
Cara Dochat, BA, Drexel University, Philadelphia, Pennsylvania
Adrienne Juarascio, PhD, Drexel University, Philadelphia, Pennsylvania

A growing body of evidence supports the efficacy of third-wave psychotherapies for binge eating spectrum disorders (i.e. bulimia nervosa (BN) & binge eating disorder (BED)). Given recent calls for increased research focused toward experimental therapeutics, a review of the current available research related to how and why these treatments are working to produce change is necessary. We systematically reviewed current literature to (1) determine how many third-wave treatment studies for BN and BED assess moderators and mechanisms of action, (2) identify which moderators emerge and whether significant mechanisms of action are consistent with the putative mechanisms of the third-wave model being tested, and (3) make future recommendations for treatment research investigating third-wave treatment models for BN and BED. PsycINFO and Google Scholar databases were used to identify clinical trials of third-wave treatments for BN or BED and each article was examined for use of mediator and moderator analyses in relation to treatment outcome. 33 studies met inclusion criteria for the review. Few studies included any assessment of mechanisms of action and those that did used subpar analysis methods (e.g. 20 studies only reported pre-post changes in process measures). Only 1 study used formal mediation analyses and generally found support for hypothesized mechanisms of action. Overall, findings of pre-post change data related to process measures were largely consistent with existing third-wave theories, but inconsistencies in measurement tools, study designs, data analytic procedures, and underlying theories of the third wave approaches limit the ability to draw strong conclusions from this body of research. Similar patterns emerged with moderators of outcome, with few studies including this type of analysis (n=4). Minimal research has tested mechanisms of action and moderators of outcome in third wave treatments for BN and BED. To improve treatment, more focused and consistent research is needed to examine how and for whom treatments work.

**T017: The Gothenburg Anorexia Nervosa Study: A Randomized Control Trial Comparing Individual Cognitive Behavioural Therapy and Family Based Therapy**

Erika Nyman-Carlsson, BSc, Doctoral Student, Faculty of Medicine, Örebro University, Örebro, Stockholm
Lauri Nevenen, Associated Professor, Faculty of Medicine, Örebro University, Örebro, Stockholm
Claes Norring, CPsychol, Professor, Department of Clinical Neuroscience, Karolinska Institute, Stockholm, Stockholm
Ingemar Engström, Professor, Faculty of Medicine, Örebro University, Örebro, Stockholm
Sanna Aila Gustafsson, Doctor in Medicine, Faculty of Medicine, Örebro university, Örebro, Örebro
Gunilla Paulsson-Karlsson, PhD, Department of Clinical Neuroscience, Karolinska Institute, Stockholm, Gothenburg
Karolin Lindberg, CPsychol, Doctoral student, Department of Clinical Neuroscience, Karolinska Institute, Stockholm, Stockholm

Until today no specific psychotherapeutic treatment has been proven to hold consistent superiority in the treatment of adult Anorexia Nervosa (AN). The aim of the study was to evaluate the efficacy of individual cognitive behaviour therapy (CBT) and Family Based Therapy (FBT) for young adults with AN. Two questions were sought to be answered: Are these treatments effective for young adult patients with AN? Are there any differences between these treatments related to outcome? Young adults with AN, aged 17-25 (n=74) and their parents were consecutively assigned to the study, which is a randomized controlled trial. They were consecutively recruited from the waiting list at a specialized treatment unit in Gothenburg, Sweden. They were randomized to either CBT or FBT, each therapy with a maximum length of 18 months. Assessment was made pre- and post-treatment and at 18 months follow-up. Primary outcome measure is BMI. Secondary outcomes are measures of eating related psychopathology and depression. There are no missing data at any time point except for four study dropouts. Analysis of the data showed that both groups changed from pre to post and sustained the improvements on all measures at 18 months follow up. There were no significant differences between the two.
treatments. The primary outcome, mean BMI, went from underweight to normal weight in both groups. At post treatment and at follow-up about 80 % of the patients were in full remission in both groups. The secondary outcomes showed large effect sizes from pre- to post treatment.

**T018: Sexual Functioning Predicts Long Term Outcome of Eating Disorders Patients: A Two Year Follow up Study**

**Giovanni Castellini**, MD; PhD, University of Florence, Florence, APO AE  
**Lorenzo Lelli**, MD, University of Florence, Florence, APO AE  
**Valdo Ricca**, MD, University of Florence, Florence, APO AE

Eating disorders (EDs) patients often report severe sexual dysfunctions. However, only few studies have provided longitudinal information on sexual functioning in patients with EDs. The aim of the present study was to evaluate the role of sexual functioning in predicting the outcome of EDs patients. A total of 52 patients with Anorexia Nervosa (AN) and 24 with Bulimia Nervosa (BN) were assessed at baseline, at one year follow-up after a standard individual cognitive behavioral therapy (CBT), and one year after this first follow up. Subjects were studied by means of a clinical interview and several self-reported questionnaires, including the Female Sexual Function Index (FSFI), the Eating Disorder Examination Questionnaire (EDE-Q), the Beck Depression Inventory (BDI), Spielberg’s State–Trait Anxiety Inventory (STAI), Symptom Checklist-90 (SCL-90). After treatment, both patients with AN and BN showed a significant improvement in the FSFI total score and all FSFI subscales (all p<0.01), without significant differences between groups. For both AN and BN groups, patients who met recovery at first follow up had higher FSFI total scores (p=0.001 and p=0.031 respectively). In AN group patients reporting higher FSFI total score and regular menses at first follow up were more likely to show recovery at the second follow up. The results of the present study challenges a concept of recovery in EDs, exclusively based on weight restoration or behavioral changes. A psychopathological assessment including sexual functioning and core psychopathology might identify the residual pathological condition, and it is able to provide information regarding the long term recovery process.

**T019: Brief, Intensive CBT for Normal Weight Eating-Disordered Outpatients: Australian Case Series**

**Mia Pellizzer**, BPsych(Hons), PhD Candidate, Flinders University, Adelaide, South Australia  
**Tracey Wade**, BSc, MPsych, PhD Flinders University, Adelaide, South Australia  
**Glenn Waller**, BA; MPsych, DPhil, University of Sheffield, Sheffield, Sheffield

This case series design investigates the outcome of using Intensive Cognitive Behavioural Therapy (CBTi) with people who have eating disorders (where body mass index [BMI] > 17.5). CBTi, a 10-session therapy,

was developed by Waller, Turner, and Tatham and is designed to be delivered by novice therapists, thus overcoming cost and accessibility barriers to treatment. Participants completed a 4-week wait-list control condition in which they received information only. Assessments were conducted at baseline, beginning end of treatment, and at 1- and 3- month follow-up. There were significant improvements in the eating disorder psychopathology such that by post-treatment and follow-up mean scores fell below clinical cut-offs in both completer (N = 13) and intent-to-treat (ITT; N = 27) analyses. In addition, objective binges significantly reduced from baseline to mid-treatment, post-treatment, and follow-up in both completer and ITT analyses with moderate to large effect sizes. In the completer sample, large effect sizes were observed for reductions in vomiting at all points; however statistical significance was not reached. For ITT analyses small, non-significant reductions in vomiting were found. Depression, anxiety, and stress symptoms also demonstrated significant moderate to large reductions at post-treatment and follow-up for both groups. Thus far, CBTi looks to be a promising short outpatient intervention for eating disorders where BMI > 17.5. However there was a high loss to treatment (51.9%), and so the design was modified to explore whether wait-lists affect treatment engagement, with participants randomized to either a 4-week wait control period or starting therapy the week after initial assessment. Preliminary results of this new design will be reported. Further investigation of CBTi will be required in randomised controlled investigations in order to make more robust conclusions about its efficacy.

**T020: Therapist Autonomy Support and Autonomous Motivation in Outpatient Eating-Disorder Treatment**

**Howard Steiger**, PhD; FAED, Douglas Mental Health University Institute, Montreal, Quebec  
**Jeanne Sansfaçon**, MD, Douglas Mental Health University Institute, Montreal, Quebec  
**Lise Gauvin**, PhD, Université de Montréal, Montreal, Quebec  
**Lea Thaler**, PhD, Douglas Mental Health University Institute, Montreal, Quebec  
**Mimi Israël**, MD, FAED, Douglas Mental Health University Institute, Montreal, Quebec  
**Danaëlle Cottier**, Student, Douglas Mental Health University Institute, Montreal, Quebec  
**Esther Kahan**, BSc, Douglas Mental Health University Institute, Montreal, Quebec  
**Erika Rossi**, BA, Douglas Mental Health University Institute, Montreal, Quebec  
**Emilie Fletcher**, BA, Douglas Mental Health University Institute, Montreal, Quebec

Self-determination theory (SDT), an empirically supported theory of human motivation, has been applied to diverse clinical problems. According to SDT, autonomy-supportive therapist actions help patients become self-motivated for treatments of various kinds. Patients’ autonomous motivation, in turn, is
associated with superior therapy outcomes. Recent data suggest that these tendencies apply also to the in- and outpatient treatment of adults with Anorexia and Bulimia Nervosa. To further explore associations among therapist stance, patient motivation and clinical outcome in the eating disorders, we measured changes in motivational status occurring between the beginning and end of time-limited (15-16 week) segments of outpatient therapy in 85 adults with Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder, or Other Specified Feeding and Eating Disorders. At a mid-point in treatment, we measured the extent to which patients perceived their individual and group therapists, and their relatives and peers, as being autonomy supportive. Motivation was assessed using the Autonomous and Controlled Motivations for Therapy Questionnaire (ACMTQ) and autonomy support was assessed using the Health Care Climate Questionnaire (HCCQ). Linear regression analyses revealed that individuals with lower initial autonomous motivation showed largest increases in autonomous motivation (between the start and end of therapy) when they perceived their individual and group therapists to have been autonomy supportive. Furthermore, regardless of diagnosis, higher autonomous motivation at later points in therapy was associated with more-pronounced reductions in eating and shape concerns, restraint, and total Eating Disorders Examination Questionnaire (EDEQ) score. These findings provide further evidence to support the concept that clinicians’ autonomy support can optimize therapy for adults suffering eating disorders.

T021: Loss-of-Control Eating and Impulsivity Moderate the Relationship between Triggers and Dietary Lapses: An EMA Investigation

Stephanie Manasse, MS, Drexel University, Philadelphia, Pennsylvania
Leah Schumacher, MS, Drexel University, Philadelphia, Pennsylvania
Stephanie Goldstein, MS, Drexel University, Philadelphia, Pennsylvania
Ross Crosby, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Meghan Butryn, PhD, Drexel University, Philadelphia, Pennsylvania
Evan Forman, PhD, Drexel University, Philadelphia, Pennsylvania

Empirical tests of the prediction that changes in internal states would lead to dietary lapses (unintended breaks of eating restraint) have yielded mixed results, potentially because this relation would only be evident for those high in impulsivity or with loss-of-control (LOC) eating. The current study examined impulsivity (inhibitory control, the ability to withhold an automatic response, and negative urgency, the tendency to act rashly while in distress) and LOC eating as moderators of the relation between affective and physical states and the likelihood of dietary lapses in overweight and obese adults (n=190) completing 2 weeks of ecological momentary assessment at the beginning of an obesity intervention. Generalized estimating equations indicated that for those without LOC, overall greater levels of irritation, loneliness, and boredom were associated with higher lapse likelihood, while for those with LOC eating, likelihood of lapse was elevated regardless of overall levels of negative affect (bs = -.74 - -.45, ps<.05). The relation between motivational increases in stress and lapse was more pronounced for those with poorer inhibitory control (b=.001, p=.01), and the relation between increases in loneliness and subsequent lapse likelihood was strongest for those higher in negative urgency (b=.32, p=.03). Interestingly, the relation between increases in hunger and subsequent lapse was strongest for those lower in negative urgency (b=-.23, p<.01). Results suggest that those with LOC appear to be at greater risk for dietary lapses even if overall levels of negative affect are low. Impulsivity may strengthen the relationship between affective states and subsequent lapses, while increases physical states may be predictive of lapses for those lower in impulsivity. With replication, results could point towards tailoring the provision of weight control strategies based on LOC status and impulsivity level.

T022: Psychological Characteristics and Eating Psychopathology Associated with Severity Classification in Women with Anorexia Nervosa

Verónica Vázquez-Velázquez, PhD, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City
Ingrid Rocha-Velis, MPsych, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City
Sylvana Stephano-Zúñiga, MD, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City
Marcela Rodriguez-Flores, MSc, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City
Valeria Soto-Fuentes, MPsych, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City
Eduardo García-García, MD, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City

The aim of this study was to describe the behavioral and psychological traits common in patients with anorexia nervosa (AN) depending on the level of body mass index (BMI) severity. Patients were identified in the service of an Eating Disorders Clinic in an Internal Medicine Hospital in Mexico City. Clinical diagnosis was made to establish disordered eating behavior and BMI was also obtained. All patients answered the Eating Disorder Inventory-2 (EDI-2), which measures eating psychopathology divided into eleven subscales: Drive for thinness, Bulimia, Body dissatisfaction, Ineffectiveness, Perfectionism, Interpersonal distrust, Interceptive awareness, Maturity fears, Asceticism, Impulse Regulation and Social Insecurity. Level of
severity was established for each patient according to DSM-5 criteria of AN: Mild (BMI > 17), Moderate (BMI 16-16.99), Severe (BMI 15-15.99), Extreme (BMI < 15). The frequency for each group was: 105 patients for Mild AN, 33 Moderate, 15 Severe and 39 Extreme. Using ANOVA analysis the four groups were compared. Results shows that there are no differences in any of the EDI-2 scales except for Drive for thinness (Mild 13.7±6.9, Moderate 8.9±7.3, Severe 8.8±8.2, Extreme 8.2±7.4; F=8.203, p<.001) and Body dissatisfaction (Mild 16.6±8, Moderate 11.4±6.4, Severe 11.4±8.8, Extreme 12.8±6.3; F=6.329, p<.001). In both scales, the Mild AN group had higher scores compared to the other levels of severity. We conclude that regardless of the severity of BMI, women with AN have the same behavioral, psychological traits and eating psychopathology and that Mild AN even have a higher degree of drive for thinness and body dissatisfaction. This underscores the importance of early diagnosis and not bias the judgment of medical and psychological attention depending on the weight/ BMI (via severity) of the patient. It is advisable that a lower weight is not the main condition to define the need for supervision and the convenience of immediate diagnosis and treatment.

T023: Features of Binge Eating Associate with Weight Trajectories and Psychological Distress in Adolescence and Young Adulthood

Linda Mustelin, MPH; MD, PhD, University of Helsinki, Helsinki, Helsinki
Cynthia Bulik, PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
Jaakko Kaprio, MD, PhD, University of Helsinki, Helsinki, Helsinki
Anna Keski-Rahkonen, MPH; MD, PhD, University of Helsinki, Helsinki, Helsinki

Binge eating increases the risk of obesity, but the distribution of binge eating and related behaviors in the population has not been comprehensively studied. How such behaviors associate with long-term weight development is also incompletely known. We investigated features of binge eating and their association with body mass index (BMI) and psychological distress in a longitudinal community-based cohort. We assessed features of binge eating among men (n=2423) and women (n=2825) from the community-based longitudinal FinnTwin16 cohort (born 1975-1979). Seven items related to binge eating were extracted from the Eating Disorder Inventory-2 and were assessed at a mean age of 24. BMI was assessed at ages 16, 17, 18, 24, and 34. We used linear mixed models to assess the association of features of binge eating with BMI trajectories from age 16 to 34. We also assessed the association of binge-eating features with psychological distress, as measured with the General Health Questionnaire at ages 24 and 34. We found that more than half of our participants reported at least one binge-eating feature; clustering of several features in one individual was less common, particularly among men. All individual binge-eating features were associated with higher BMI in both sexes. Their clustering was consistently associated with steeper BMI trajectories from age 16 to 34, as well as with more psychological distress both cross-sectionally and prospectively, independent of BMI. This was true both for men and women. Features of binge eating were associated with BMI in a cumulative manner: those reporting more of these behaviors had higher mean BMI and steeper BMI trajectories. Binge-eating features also predicted increased psychological distress.

T024: What Do I Look Like? Perceptual Confidence in Bulimia Nervosa

Samantha Wilson, BA, Student, Université de Montréal, Montréal, Québec
Frederick Aardema, PhD, Université de Montréal, Montréal, Québec
Kieron O’Connor, PhD, Université de Montréal, Montréal, Québec

Previous studies have reported mixed results regarding perceptual body size distortion in eating disorders. The purpose of the present study was to investigate the relationship between perceptual confidence and body image disturbance in bulimia nervosa (BN). Body checking has been associated with body image disturbance and is conceptually comparable to compulsive checking as observed in obsessive compulsive disorder (OCD). Recent research suggests that checking in OCD may be associated with low cognitive and perceptual confidence rather than actual deficits in these areas. Given the similarities that exist between BN and OCD, it was hypothesized that perceptual confidence may be relevant in BN as well. Twenty-one women with BN and 24 healthy controls (HC) completed a body checking task. During this task, participants were asked to estimate the size of several body parts and then asked to assess their degree of confidence in the accuracy of these estimations. Confidence was assessed a second time following body checking of a selected body part. Repeated measures ANOVA revealed a main effect of time F(1, 43) = 9.47, p = .004 as well as a time by group interaction F(1, 43) = 5.07, p = .03. Post hoc analyses indicated that there was no significant difference between groups with regards to confidence at baseline F(1, 43) = .5, p = .48, but that there was a statistically significant decrease in confidence in the BN group post-checking F(1, 43) = 7.78, p = .008. Satisfaction regarding the selected body part did not change as a result of body checking F(1, 43) = .06, p = .81. Furthermore, significant correlations were observed between the change in perceptual confidence and general body checking behaviours (r = -.43, p = .003) as well as a novel eating disorders-specific measure of the tendency to distrust sensory information (r = -.35, p = .019). These findings suggest that body image disturbance in BN may be due to low confidence in perceptual abilities. Like compulsive checking in OCD, body checking may paradoxically decrease confidence regarding one’s appearance.
**T025: Relationship between Desired Weight and Eating Disorder Pathology in Youth**

**Hope Boyd**, BA, University of Chicago, Chicago, Illinois  
**Andrea Kass**, PhD, University of Chicago, Chicago, Illinois  
**Erin Accurso**, PhD, University of California, San Francisco, San Francisco, California  
**Andrea Goldschmidt**, PhD, Brown University, Providence, Rhode Island  
**Jennifer Wildes**, PhD, University of Chicago, Chicago, Illinois  
**Daniel Le Grange**, PhD, University of California, San Francisco, San Francisco, California

Preference for a smaller body size has been associated with body dissatisfaction and disordered eating. Discrepancies between actual (i.e., current) and desired weight have also been associated with heightened eating disorder (ED) behaviors. However, no study has examined desired weight in relation to ED pathology in a clinical population. Given that desired weight may impact weight restoration and normalization of eating patterns, we tested the relationship between desired weight and ED pathology, and between actual-desired weight discrepancies and ED pathology in youth with anorexia nervosa (AN) or bulimia nervosa (BN). Participants were 340 youth ages 7-18y (mean age=15.61±2.14y) presenting to an outpatient ED clinical research program. Height and weight were measured, and youth completed the EDE. Desired weight percentage was calculated as (desired weight/expected body weight)x100. Participants’ mean desired weight percentage was 90.41% and mean weight difference percentage was 4.13%. Youth with AN wanted to be a lower percentage of their expected body weight than youth with BN (desired weight percentage for AN=84.20%; BN=96.66%; p<.001). However, weight difference percentages showed youth with AN, on average, wanted to gain 5.28% of their body weight and youth with BN wanted to lose 13.60% (p<.001). Thus, youth with AN wanted to be a smaller size than youth with BN, but had smaller differences between current and desired weight. Both desired weight percentage and weight difference percentage were associated with restraint and eating, weight, and shape concerns, controlling for ED diagnosis, age, and sex (p<.001), but there were no significant associations with objective binge eating or purging (p>0.05). The association with elevated ED pathology suggests desired weight may be an important intervention target and should be studied as a prognostic indicator of treatment outcome.

**T026: Attentional Underpinnings of Preoccupation with Body Image and Body Weight: An ERP Study**

**Kirsti Akkermann**, PhD, University of Tartu, Tartu, APO AE  
**Helen Uusberg**, MA, University of Tartu, Tartu, APO AE  
**Krista Peet**, MA, University of Tartu, Tartu, APO AE  
**Andero Uusberg**, PhD, University of Tartu, Stanford University, Tartu, California

Misjudging one’s body and preoccupation with body image and weight is one of the key mechanisms in the etiology of eating disorders. We conducted EEG study to investigate the attentional underpinnings of this risk factor in a social comparison setting. 36 women (age M=20.31, SD=2.01; BMI M=21.70, SD=2.56) varying in self-reported preoccupation with body image and weight viewed a series of digitally size-modified images (from -10% to +10% in 2% intervals) of themselves and a size-matched model with the task to compare each image to their actual body size (‘smaller/bigger than me’). The 50% psychometric threshold was used to estimate perceived body size. Late Positive Potential (LPP) was considered an index of attentional deployment towards the stimuli. The dynamics of later event related potential (ERP) components suggest that at more deliberate processing stages highly preoccupied women attended selectively to modifications of their own body size images. Specifically, during the P3 window, their brain responses were increased in response to enlarged (+4% to +10%), and during the LPP window also in response to reduced (-10% to -4%) images of themselves, but not of the model. In women with low preoccupation the body size differentiation occurred later, was independent of stimulus identity, and apparent only for enlarged images. Increased preoccupation with one’s body image and weight enhanced the tendency to overestimate one’s body size in relation to the model. Thus, preoccupation with body image and weight increased LPP differences between body sizes for the images of the self, but not for the images of the model. Collectively, these results indicate that preoccupation with body image and weight involves an attentional bias towards one’s own body that may interfere with adequate social comparisons and further result in biases in body size perception.

**T027: Gold Standard Assessment in the Real World: AN, Atypical AN, and ARFID**

**Helene Keery**, PhD, Children’s Hospitals and Clinics of Minnesota, Minneapolis, Minnesota  
**Beth Brandenburg**, MD, Children’s Hospitals and Clinics of Minnesota, Minneapolis, Minnesota  
**Sarah Eckhardt**, PhD, Children’s Hospitals and Clinics of Minnesota, Minneapolis, Minnesota  
**Julie Lesser**, MD, Children’s Hospitals and Clinics of Minnesota, Minneapolis, Minnesota  
**Amy Beadle**, BA, Children’s Hospitals and Clinics of Minnesota, Minneapolis, Minnesota
The purpose of this study is to describe the prevalence of eating disorder diagnoses and clinical characteristics of patients presenting for eating disorder treatment at a Children’s Hospital. Participants (N=124), ages 7-18, were evaluated and consented at initial presentation to the eating disorder service. Of the 124 participants, 45.2% met DSM-V criteria for ARFID, 21.8% for AN, 16.1% for Atypical Anorexia, 7.3% for UFED, 4.8% for BN, 1.6% for BED, 1.6% for Purging Disorder, and <1% for subthreshold BN and BED. Given the high prevalence of restrictive eating disorders (n=103), we compared baseline characteristics for AN (n=27), Atypical AN (n=20), and ARFID (n=56). Continuous data were analyzed using medians and interquartile ranges, and significance was assessed using an alpha of 0.05. The AN (median=15) and Atypical AN (m=15) participants did not differ on age, and both were significantly older than ARFID (m=13). Participants with ARFID (m=84.6) and AN (m=84) had significantly lower %EBW compared to participants with Atypical AN (m=101.6). AN and Atypical AN did not differ on measures of self-esteem (RSE) or perfectionism (CPQ). The ARFID group did report significantly higher self-esteem and lower perfectionism than AN and Atypical AN patients. Similarly, AN (m=18, m=2.54) and Atypical AN (m=24, m=2.39) did not differ from one another on the Clinical Impairment Assessment or EDE Global Scale. Both CIA and EDE Global scores were significantly higher in the ARFID group (m=9, m=0.15, respectively). CDI-2 Total T score only differed between the Atypical AN (m=68) and ARFID (m=51.5) groups. Results highlight similarities in psychopathology for AN and Atypical AN despite difference in their %EBW. Also of note, levels of psychopathology were lower in ARFID despite being equally low in weight when compared to AN. These findings are important in terms of targeting assessment and treatment of patients with restrictive eating disorders.

T029: Hunger and Satiety: How Bodily Awareness, Attentional focus on the body, and Affect Intensity is related to BMI and EDs?

Maria Gaete, DClinPsy, DipIPsych, PhD. University of Chile, Santiago, Región Metropolitana

Attentional focus on the body (AFB) is an inherent aspect of bodily awareness (BA). The present study is aimed at exploring the association between bodily awareness (BA), attentional focus on the body (AFB), affect intensity (AI) of hunger (Hs) and satiety sensations (Ss) and BMI and EDs symptoms. By means of a cross-sectional study a sample from general population (n=402), which consisted of 250 females (62%) and 152 males (37%), with a mean age of 23.9 (SD=7.77) was assessed by the Scale of Body Connection (SBC), the Emotional Bodily Experience Questionnaire (EBEQ), and the Eating Disorders Examination Questionnaire (EDEQ). Results show AFB of Hs significant and negatively associated to AI of Hs, and AFB to Ss to be significant and positively associated to AI of Ss. BMI scores show to be significant and negatively correlated with BA (r=−.152, p<0.05), significant and negatively correlated with AFB to Hs (r=−.140, p<0.05), significant and positively correlated with AFB to Ss (r=−.166, p=0.01). ED symptoms show to be significant and positively correlated with Body Disconnection subscale of SBC (r=−.220, p<0.01), significant and positively correlated with AFB to Hs (r=−.133, p<0.05), significant and negatively correlated with AI of Ss (r=−.165, p<0.01), significant and positively correlated with AFB to Ss (r=−.225, p<0.01). Overall results show that the more attention to the body when feeling hunger the more unpleasant Hs is felt, and that the more attention to the body when feeling satiety the more pleasant Ss is felt. Higher BMI shows to be associated with avoidance of unpleasant Hs and with focusing on Ss. Higher levels of EDs symptoms shows to be associated with focusing both on unpleasant Hs and on Ss that is felt as unpleasant.
T030: Measuring the Beliefs that Maintain Binge Eating: Psychometric Properties of a Brief Metacognitive Questionnaire in both a Clinical and Non-Clinical Sample

Amy Burton, BSc, University of Sydney, Sydney, NSW
Maree Abbott, MPsych; PhD, University of Sydney, Sydney, NSW

Binge eating is a distressing behaviour that occurs in individuals with Bulimia Nervosa, Binge Eating Disorder and atypical eating disorders. It is also a difficult symptom to treat. It has been suggested that specific metacognitive beliefs about food, eating and bingeing may play a key role in the maintenance of binge eating behaviour. The Eating Beliefs Questionnaire (EBQ-18) provides a brief self-report assessment tool measuring three types of metacognitive beliefs: positive, negative and permissive beliefs about food and eating. This study aimed to build on past research by validating the factor structure and psychometric properties of the EBQ-18 using both a clinical and non-clinical sample. This study also aimed to establish diagnostic cut-offs and normative data for groups of patients diagnosed with eating disorders. A sample of 420 participants (380 non-clinical, 50 with a diagnosed eating disorder) completed a battery of questionnaires including the EBQ-18 and other measures of eating disorder symptoms and relevant constructs. A subset of clinical participants with a diagnosed eating disorder completed the test-battery before and after receiving a psychological treatment (N=27), and a subset of 95 non-clinical participants completed the test battery again after an interval of two-weeks. Results of a Confirmatory Factor Analysis provided support for a three-factor solution. EBQ-18 scores were found to correlate with binge eating episode frequency and measures of eating disorder symptoms and related psychopathology. The EBQ-18 was found to be a valid and reliable measure, with excellent internal consistency, good test-retest reliability and sensitivity to treatment in both clinical and non-clinical samples. This study provides valuable information about the utility of the EBQ-18 as a measure for use in both clinical and research settings.

T031: Netherlands Eating Disorder Registry First Wave of Data Collection: Receiving Treatment for Eating Problems, Just a Matter of Time?

Rita Slof-Op ’t Landt, PhD, Rivierduinen Eating Disorders Ursula, Leiden, Zuid-Holland
Jésus de la Torre y Rivas, MSc, W.EET Patient and Family Organization for Eating Disorders, IJsselstein, Utrecht
Eric van Furth, PhD, Rivierduinen Eating Disorders Ursula, Leiden, Zuid-Holland

Little is known about people with eating disorders who do not receive treatment. Do these people differ in severity of eating disorder psychopathology, comorbid symptoms and/or quality of life? Through the Netherlands Eating Disorder Registry 765 persons (age 13-64 years, 99% women) who currently or in the past have (had) eating problems or an eating disorder, were recruited. They were divided into four groups: current eating problems and ever treatment (n=500), current eating problems and never treatment (n=98), past eating problems and ever treatment (n=146), past eating problems and never treatment (n=21). Non-parametric tests were used to examine if there were differences between these groups in age, duration of eating problems, eating disorder psychopathology (EDEQ total score, BMI, eating binges, self-induced vomiting, laxative use, excessive exercise), symptoms of anxiety, symptoms of depression and quality of life. People with current eating problems who never received treatment were on average younger, had a shorter duration of eating problems and a higher lowest BMI ever. This group reported more eating binges and laxative use in the past month than people with current or past eating problems who did receive treatment. No differences were found between the groups for self-induced vomiting and laxative use ever. For the EDEQ total score, symptoms of anxiety, symptoms of depression and quality of life, people with current eating problems (with or without treatment) scored worse than people with past eating problems. In conclusion, people who did not receive treatment for their eating disorder have a similar severity in eating disorder psychopathology, comorbid symptoms and quality of life compared to the people who did receive treatment. The chance of a person receiving treatment seems higher if the duration of eating problems is longer and/or the person is becoming older.

T032: Feasibility, Acceptability and Preliminary Efficacy of a Smartphone-Based Aftercare Intervention Following Inpatient Treatment of Patients with Eating Disorders - a Pilot Randomized Controlled Trial

Sandra Schlegl, DiplPsych; MSc, PhD, Department of Psychiatry and Psychotherapy, Munich, Bayern
Christina Neumayr, MSc, Schön Klinik Rosenneck, Prien, Bayern
Tabea Bauman, MD, Schön Klinik Rosenbeck, Prien, Bayern
Bernhard Backes, DiplPsych, Schön Klinik Rosenbeck, Prien, Bayern
Nicolas Stoetter, MSc, Schön Klinik Rosenbeck, Prien, Bayern
Jenna Tregarthen, MA, Recovery Record Inc., San Francisco, California
Ulrich Voderholzer, MD, Schön Klinik Rosenbeck, Prien, Bayern

The aims of the pilot study are to evaluate the feasibility, acceptability and preliminary efficacy of a smartphone-based aftercare intervention following inpatient treatment of patients with eating disorders. 40 female patients (DSM-V anorexia nervosa or bulimia nervosa) (aged: 13-60 years) are randomized either to receive an 8-week smartphone-based aftercare intervention (German version of “Recovery Record”) with therapist feedback as an adjunct to treatment as usual (TAU) or to TAU alone. Therapist feedback will be provided in-app twice per week in the first 4 weeks and once per week in the last 4 weeks. Eating disorder
symptoms will be assessed at baseline (discharge of inpatient treatment) and after 8 weeks. Secondary outcome measures include patient satisfaction, adherence to the smartphone-based intervention, and post-discharge health care utilization. The recruitment and intervention period will be between October 2016 and February 2017. Results on feasibility, acceptability and preliminary efficacy will be presented at the conference. This study will be the first to examine a smartphone-based aftercare intervention following inpatient treatment of patients with eating disorders. Results may elucidate the extent to which a guided smartphone-based aftercare intervention is accepted by eating disorder patients and whether this novel intervention can support symptom stabilization or continued improvement after inpatient treatment.

T033: A Better Perfect? Associations between Adaptive and Maladaptive Perfectionism Subtypes and Eating Disorder and Affective Symptoms in Anorexia Nervosa

Ann Haynos, PhD, University of Minnesota, Minneapolis, Minnesota
Linsey Utzinger, PsyD, Stanford University School of Medicine, Stanford, California
Jason Lavender, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Ross Crosby, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Li Cao, MS, Neuropsychiatric Research Institute, Fargo, North Dakota
Carol Peterson, PhD, University of Minnesota, Minneapolis, Minnesota
Scott Crow, MD, University of Minnesota, Minneapolis, Minnesota
Stephen Wonderlich, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Scott Engel, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
James Mitchell, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Daniel Le Grange, PhD, University of California, San Francisco, San Francisco, California
Andrea Goldschmidt, PhD, Warren Alpert Medical School of Brown University Providence, Rhode Island

Perfectionism is hypothesized to play a critical role in the etiology and maintenance of anorexia nervosa (AN). Emerging evidence suggests that perfectionism can be differentiated into discrete dimensions constituting maladaptive facets (i.e., excessive evaluative concerns and parental pressures) and adaptive facets (i.e., high personal standards and organization). However, there has been little investigation into whether maladaptive and adaptive facets of perfectionism predict distinct outcomes in this group. In this study, a latent profile analysis was conducted using data from adults with AN (N = 118). Subscales of the Frost Multidimensional Perfectionism Scale were used to categorize participants in terms of adaptive and maladaptive perfectionism. Generalized linear models compared groups on eating disorder attitudes and behaviors, and on state affect-related dimensions, measured at baseline and through ecological momentary assessment. Four perfectionism subgroups were identified: (a) Low Perfectionism group; (b) High Adaptive group; (c) Moderate Maladaptive group; and (c) High Maladaptive group. Perfectionism subgroup predicted overall eating disorder symptoms (p < .001), purging frequency (p = .005), restrictive eating frequency (p < .001), body checking frequency (p < .001), depressive symptoms (p < .001), anxiety symptoms (p < .001), mean negative affect (p = .001), and mean positive affect (p < .001). The Low Perfectionism group exhibited the lowest severity on all measures; the High Adaptive group demonstrated low affective disturbances (i.e., low anxiety and negative affect; high positive affect) but elevated eating disorder symptoms (i.e., high global eating disorder symptoms, restrictive eating, body checking). These results support the validity of the differentiation between adaptive and maladaptive forms of perfectionism and the link between both dimensions of perfectionism and specific clinical symptoms in AN.

T034: Cognitive Biases in Anorexia Nervosa: How Hard is it to Call into Question Our Own Ideas? A Case-Control Study

Elena Tenconi, PhD, Psyd, Department of Neuroscience, University of Padova, Padova, Italy
Elisa Bonello, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Daniela Degortes, PhD, Psyd, Department of Neuroscience, University of Padova, Padova, Italy
Alberto Poloniato, MD, Department of Neuroscience, University of Padova, Padova, Italy
Paolo Santonastaso, MD, Department of Neuroscience, University of Padova, Padova, Italy
Angela Favaro, MD, PhD, Department of Neuroscience, University of Padova, Padova, Italy

The purpose of the study is to investigate a specific type of cognitive bias in anorexia nervosa (AN) patients using the Bias Against Disconfirmatory Evidence Task (BADE). Biased reasoning processes may contribute to psychopathology and functional disabilities inducing perceptual distortion, inaccurate judgment and illogical interpretation. To date, most of the studies have specifically addressed schizophrenia and other psychotic disorders but also anorexia nervosa shows some form of delusion-like beliefs, especially concerning body image and nutrition. The study sample consisted of fifty patients diagnosed with lifetime anorexia nervosa, according to DSM-5 criteria, recruited from the Eating Disorders Unit of the Hospital of Padova, Italy, and thirty-seven healthy controls recruited from the general population. All participants were measured in weight and height, and the weight history was investigated by means of a semi-structured interview. A broad neuropsychological and clinical test battery was employed to assess executive functions, visuospatial abilities, emotional
processing and psychopathology. The BADE test and its different indices (Bias Against Confirmatory Evidence, BACE and Liberal Acceptance, LA) were employed to assess cognitive bias and the ability to rethink our own position and ideas. The samples differed significantly on BADE score (AN mean score 2.3±2.1 vs. HC mean score 3.2±1.7; t=2.2; p=.03) but they did not differ on both BACE (respectively 5.2±2.5 vs. 4.8±1.7; t=0.8; p=.4) and LA scores (respectively 0.8±0.8 vs. 1.0±0.8; t=1.0; p=.3). A sub-group of patients (N=22) followed up after 12 months showed a positive correlation between BADE score and clinical outcome (body mass index). BADE, BACE and LA scores did not correlate with any clinical and neuropsychological outcomes. This is the first study specifically addressing cognitive bias and thinking process characteristics in anorexia nervosa: our findings have many interesting scientific and clinical implications to be discussed.

T035: Clinical Characteristics in an Italian Sample of Eating Disorder Outpatients with and Without a History of Overweight and Obesity in Childhood and Adolescence

Romana Schumann, CPsychol, Centro Gruber, Bologna, Italy
Romana Schumann, CPsychol, Centro Gruber, Bologna, Italy
Donatella Ballardini, MD, Centro Gruber, Bologna, Italy, Valentina Fasoli, CPsychol, Centro Gruber, Bologna, Italy
Chiara Mazzoni, CPsychol, Centro Gruber, Bologna, Italy
Elena Dapporto, RD, Centro Gruber, Bologna, Italy
Livia Pozzi, RD, Centro Gruber, Bologna, Italy

Obesity has been recognized as an antecedent factor in the development of eating disorders. The aim of this retrospective study was to evaluate the presence of pre-existing overweight/obesity and its effects on the clinical issues in 691 outpatients with eating disorder (EDO) of a Specialized Multidisciplinary Treatment Center and in 63 healthy controls (HC). The assessment includes an interdisciplinary semi structured interview and psychometric questionnaires of which were considered: Eating Attitudes Test (EAT), Eating Disorder Inventory-3(EDI-3), Three Factor Eating Questionnaire (TFEQ). Non-parametric statistics (Mann-Whitney test) and chi square test were conducted, using SPSS program. There was a significant difference between EDO and the HC in relation to the presence of history of overweight/obesity (EDO: 44.4% (n=307); HC: 20.6% (n=13); p = 0.000); previous eating disorder onset (EDO: 56.7% (n=382); HC: 63.3% (n=4)); p = 0.000). The comparison between EDO with and without overweight/obesity (EDO-PrevOb Vs EDO-NoPrevOb) highlights: higher duration of illness (p = 0.000) and higher number of previous treatments (p = 0.028). In EDO-PrevOb we found higher psychometric scores: EDI-3 Bulimia p = 0.029; EDI-3 Body dissatisfaction p = 0.003; EDI-3 Eating Disorder Risk p = 0.007; TFEQ Cognitive Restriction p = 0.006; TFEQ Hunger p = 0.000; TFEQ Disinhibition p = 0.000). In EDO-NoPrevOb EAT Oral Control score is higher (p = 0.000). EDO-PrevOb and EDO-NoPrevOb do not differ in age of illness onset and psychiatric comorbidity. In conclusion overweight/obesity are widespread in EDs, as shown in international literature. The evaluation of our results shows that EDO-PrevOb seem to have more severe symptomatology in eating behavior and in food, body and shape concerns which need to be considered for the treatment project to obtain a personalized and specialized therapeutic program.

T036: Remission Rates in a Partial Hospitalization Family-Based Treatment Program for Anorexia Nervosa

Renee Rienecke, PhD, Medical University of South Carolina, Charleston, South Carolina
Rebekah Richmond, BA, Medical University of South Carolina, Charleston, South Carolina

The purpose of this study was to investigate whether family-based treatment (FBT) adapted for a partial hospitalization program (PHP) is effective in helping patients reach remission status for adolescents and young adults with AN and OSFED AN-type. Parents were involved in treatment in several ways, including choosing patients’ food while in the program and attending daily meals in the program with their child. Forty-two patients (M = 16.10 years old, SD = 3.18) with AN (n = 34) and OSFED AN-type (n = 8) completed the Eating Disorder Examination (EDE) as well as questionnaires assessing eating disorder and other symptomatology at baseline and end of treatment. Remission status was classified as reaching 92% of expected body weight (EBW) and having an EDE global score within one standard deviation of population norms. Partial remission was defined as reaching either one of these criteria. The average length of stay in the program was approximately five weeks (M = 26.90 treatment days, SD = 10.13). At end of treatment in the PHP, 35.7% (n = 15) met full remission criteria, 50% (n = 21) met partial remission criteria, and 14.3% (n = 6) met criteria for neither. Significant differences were found between remission status groups in end of treatment depression, self-esteem, and eating disorder rituals and preoccupations (p’s < 003). There were no significant differences in age, duration of illness, length of stay in treatment, or baseline eating disorder symptomatology between groups (p’s > .09) with the exception of baseline EBW (F(2, 39) = 3.69, p = .03) and adolescent depression (F(2, 26) = 3.98, p = .03). Post hoc analyses demonstrated both remission groups had significantly higher baseline EBW and less severe depression symptoms than those who did not meet any remission criteria. Results suggest FBT adapted for a PHP is effective in bringing about full and partial remission, with remission rates similar to some outpatient studies of manualized FBT.
T037: Comparison of the Effects of Blind versus Open Weighing Practices upon Rates of Weight Gain and Patient Satisfaction among Individuals with Anorexia Nervosa

Matthew Shear, MPH, MD, Weill Cornell Medicine, White Plains, New York
Sean Kerrigan, MD, Weill Cornell Medicine, White Plains, NY, New York
Evelyn Attia, MD, Weill Cornell Medicine, White Plains, New York

Anorexia nervosa is a serious psychiatric illness associated with significant morbidity and mortality. Despite the seriousness of this condition, few data are available regarding the optimal components of care, and weight restoration protocols vary at different treatment programs. The purpose of this study is to compare the effects of blind versus open weighing practices upon rates of weight gain and patient satisfaction among individuals with acute anorexia nervosa treated on a specialized inpatient unit. We examined patients meeting DSM-5 criteria for anorexia nervosa admitted to the inpatient eating disorders unit at New York-Presbyterian Hospital (New York/USA). Data were collected during two 90-day periods with no overlap of clinical sample. During the first period, patients (n=45) were not informed of their daily weights (i.e., weighed blind); while during the second period, patients (n=51) were informed of their daily weights (i.e. weighed open). Study participants included both males and females, ranging in age from 12 to 63 years. The average rates of weight change were not significantly different between the two groups. Patients weighed blind gained weight at an average rate of 0.25kg/day (SD=1.0), while patients weighed open gained weight at an average rate of 0.24kg/day (SD=1.4). However, patient satisfaction, measured using the Press Caney patient satisfaction survey, was significantly higher among patients who were weighed blind (mean score=85.7, SD=1.16) compared with those who were weighed open (mean score=77.7, SD=9.53).

T038: Body Checking in Patients with Anorexia Nervosa: A Longitudinal Outcome Study

Simona Calugi, PhD, Department of Eating and Weight Disorders, Villa Garda Hospital, Garda, Verona
Marwan El Choch, MD, Department of Eating and Weight Disorders, Villa Garda Hospital, Garda, Verona
Riccardo Dalle Grave, MD, Department of Eating and Weight Disorders, Villa Garda Hospital, Garda, Verona

The aims of this study were i) to evaluate the trajectories of change over time of body checking in patients with anorexia nervosa (AN) treated with inpatient enhanced cognitive behaviour therapy (CBT-E) including specific procedures to address body checking and ii) to examine body checking and its change as a potential predictor of change of eating disorder and general psychopathology. Sixty-six adult patients with AN received inpatient CBT-E in a community-based eating disorder clinic. Body mass index (BMI), Eating Disorder Examination (EDE). Brief Symptom Inventory (BSI) and Body Checking Questionnaire (BCQ) scores were recorded at admission, end of treatment, 6- and 12-month follow-up. Using non-linear trajectories we found that inpatient CBT-E produced significant increase of BMI, improvement of eating disorder and general psychopathology, and reduction of body checking behaviours, with similar trajectories of change characterized by initial improvement during treatment, weak deterioration after discharge, and subsequent stabilization. Predictor analysis indicated that the change of BCQ score from baseline to end of treatment predicted EDE weight concern and global scores at the end of treatment, and EDE shape concern and BSI at 12-month follow-up these findings suggest that inpatient CBT-E produced a significant and lasting decrease of body checking that affected eating disorder and general psychopathology.


Jayanthi Raman, PhD, University of Technology Sydney UTS, Ultimo, NSW 2007
Sarah Glastras, MBBS, Department of Endocrinology, Diabetes & Metabolism, Royal North Shore Hospital, St Leonards, NSW 2065
Lawrence Lam, PhD, University of Technology Sydney UTS, Ultimo, NSW 2007
Caleb Ferguson, PhD, University of Technology Sydney UTS, Ultimo, NSW 2007
Hui Chen, MBBS; PhD, University of Technology Sydney UTS, Ultimo, NSW 2007
Elizabeth Denney-Wilson, PhD, University of Technology Sydney UTS, Ultimo, NSW 2007

Obesity, a significant risk factor for cardio-metabolic diseases, develops when an individual’s energy intake exceeds energy expenditure over a period of time. Increased exposure to cues of highly palatable food in our current obesogenic environment contributes to dietary lapses through unhelpful habits or yielding to temptation. Recent evidence has shown an association between obesity and neurocognitive deficits, especially in executive function. Although many habit and temptation-resistance/prevention strategies heavily rely on neurocognitive processes, available treatments assume that our thinking skills that allow us to process information (i.e. attend to details, plan, organize, make decisions and act appropriately upon information) are available as ready resources during and after treatment. A recent randomized controlled trial (RCT) led by the author on the cognitive remediation in individuals with obesity (CRT-O) showed 68% of those in the CRT-O group achieved a weight loss of 5% or more compared to only 15% of the controls (Cohen’s d = 1.2) at the 3 month follow-up. Binge eating also reduced in the CRT-O group (Cohen’s d = 0.83). Given
the results of our previous trial, we have designed a novel 3 arm RCT (n=140), that pioneers a CRT enabled cognitive behavioural group therapy (CR-CBT) to address the two hallmark features of obesity: habit and temptation. Measurement points are at baseline, end of treatment and at 6 months post treatment. Expected primary outcomes are clinically significant weight loss (≥5%) and weight loss maintenance at the 6 month follow-up. Secondary outcomes are key features associated with cardio-metabolic diseases, i.e., blood pressure, blood cholesterol, BNP biomarkers and insulin resistance. Other secondary outcomes are neurocognitive function, unhealthy eating habits, temptation self-report, health related quality of life (HRQoL), mood and stress. Results of the previous CRT-O and preliminary data of the current study testing the CR-CBT intervention model will be presented. The success of this project could bring significant health benefits to individuals with obesity and facilitate community-wide cheap, convenient and scalable treatment options.

**T040: Symptoms of Attention Deficit Hyperactivity Disorder (ADHD) and Disordered eating: A Moderated-Mediation Model Assessing the Role of Mood, Eating in Response to Internal Hunger and Satiety Signals and Perceived Self-Efficacy to Cope Effectively with Life**

**Panagiota Kaisari,** PhD Student, School of Psychology, University of Birmingham, UK, Birmingham, West Midlands

**Colin Dourish,** DSc; PhD, P1vital, Manor House, Howbery Park, Wallingford, Oxfordshire, OX10 8BA, UK, Oxfordshire, Oxfordshire

**Suzanne Higgs,** PhD, School of Psychology, University of Birmingham, Birmingham, B15 2TT, UK, Birmingham, West Midlands

This study investigated the potential relationships between core symptoms of ADHD and disordered eating (DE) and assessed for first time, whether mood and/or reliance on internal hunger and satiety signals mediate any of the observed relationships. The potential influence of the perceived self-efficacy (SE) to cope effectively with life challenges on the direction and/or strength of any relationship between ADHD, mood and DE was also investigated. 237 individuals (27.4% male) participated in an online study. Symptoms of ADHD were assessed using the CAARS–S: SV. A number of validated questionnaires were used to assess DE (e.g., EAT-26, the BES). A composite measure based on the sum score of the Hospital Anxiety and Depression scale and the Perceived Stress Scale was created to evaluate the mediating role of mood. The Reliance on Hunger/Satiety cues sub-scale of the Intuitive Eating Scale assessed eating in response to internal signals. SE was assessed via the General Self-Efficacy Scale. Principal component analysis reduced the DE measures to two components: “binge/disinhibited eating” and “restrictive eating”. Mediation analyses, controlling for important confounds (age, gender, BMI, socio-economic status, comorbidities, alcohol use and ADHD medication) revealed that both inattentive and hyperactive/impulsive symptoms of ADHD related to both two components of DE. However, only the inattentive symptoms were found to be directly related to binge/disinhibited eating b=0.36, BCa CI [0.02, 0.70]. Eating in response to internal hunger and satiety signals was a significant mediator of the relationship between inattentive symptoms of ADHD and DE (p<0.05). Mood was a significant mediator of the relationship between ADHD symptomatology and DE (p<0.05). SE moderated the pathways between mood and binge/disinhibited eating (p<0.05), suggesting that individuals with ADHD may use binge eating as a coping mechanism.

**T041: Using Network Analysis to Elucidate the Relationships among Binge-Eating Disorder Symptoms and Associated Psychopathology**

**Christine Peat,** PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

**Laura Thornton,** PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

**Tosha Smith,** PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

**Cheri Levinson,** PhD, University of Louisville, Louisville, Kentucky

**Henrik Larsson,** PhD, Karolinska Institutet, Stockholm, Stockholm

**Andreas Birgegard,** PhD, Karolinska Institutet, Stockholm, Stockholm

**Cynthia Bulik,** PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina

Debate remains regarding the interrelationships between the core symptoms of binge-eating disorder (BED) and associated psychopathological symptoms (e.g., depression, anxiety). Network analyses allow for a nuanced exploration of these symptom interrelationships. The current study conducts a network analysis of BED symptoms and related psychopathology in an effort to elucidate which symptoms are central to BED and which might be considered more peripheral. We also aim to identify symptoms that might bridge BED and anxiety and depression symptoms given their significant comorbidity. The analysis population includes men and women who met BED criteria in the Swedish quality assurance database, Stepwise, between 2005 and 2013 (N > 300). Three separate network analyses will be conducted: one in the entire selected sample (N > 300), one in those diagnosed with comorbid mood disorders (~37%), and one in those diagnosed with comorbid anxiety disorders (~56%). Analyses will include all items from the Eating Disorders Examination Questionnaire and the Comprehensive Pathological Rating Scale, a self-report scale designed to assess a range of psychopathological symptoms including anxiety and depression. Network models will be conducted in R using the qgraph package and parcor package. We will include statistical indices, called measures of centrality (e.g., betweenness, closeness, and strength), to identify which items are at the core of the networks.
We will also calculate stability analyses to test the stability of our networks. Results obtained from these analyses go beyond what is currently achievable with more standard analyses such as structural equation modeling because we can identify specific central symptoms and associated psychopathology interact. Such information would be highly valuable in determining treatment foci and developing tailored interventions.

**T042: Grazing Prevalence and Associations with Psychopathology, Quality of Life and Treatment Outcomes in Eating Disorders and Obesity**

Andreea Heriseanu, BSc, University of Sydney, Sydney, NSW

Phillipa Hay, MBBS, PhD, FAED, Western Sydney University, Sydney, NSW

Stephen Touyz, PhD, FAED, University of Sydney, Sydney, NSW

Both eating disorders and obesity present with a variety of eating behaviours. To date, research into atypical eating patterns in these populations has focused primarily on binge eating, however, other overeating processes are also involved. Grazing is an atypical eating behaviour of recent interest, which has been associated with negative outcomes following weight loss treatments in obese samples. To better understand this pattern of eating, a systematic review was conducted. This review aimed to critically examine the existing research informing the prevalence of grazing, its treatment outcomes, and psychopathological correlates in adults with eating disorders and/or obesity in both treatment and community settings. A systematic electronic database search (Medline, PsycInfo, Embase, CINAHL and Web of Science) of published studies was undertaken. A total of 40 studies were included, of which 28 provided grazing prevalence estimates in obesity (which ranged from 8.33% to 59.84% at pre-treatment, 1.12% to 59.18% post-treatment, and 14.06% to 38.60% in community samples), while seven provided grazing prevalence estimates in eating disorders (bulimia nervosa: 58.68% to 62.00% pre-treatment and 32% at post-treatment follow-up; binge eating disorder pre-treatment: 44.02% to 89.86%; anorexia nervosa pre-treatment: 34.3%). There is mixed evidence to suggest that grazing (especially a “compulsive” subtype including a sense of loss of control) is associated with worse weight loss treatment outcomes in obesity studies, with the presence of other eating psychopathology, as well as with lower mental health-related quality of life, and more depression and anxiety symptoms. The results of this review highlight the need for further investigation of the impact of grazing, especially considering “compulsive” vs. “non-compulsive” subtypes, in clinical and non-clinical samples, using validated instruments.

**T043: Body Composition and Menstrual Status in Patients with a History of Anorexia Nervosa**

Laura Winkler, MD, Centre for Eating Disorders, Odense University Hospital, Odense, Denmark

Jacob Stampe Frølich, MD, Centre for Eating Disorders, Odense University Hospital, Denmark, Odense, Denmark

René Klinkby Stoving, MD, PhD, professor, Centre for Eating Disorders, Odense University Hospital, Denmark, Odense, Denmark

Objective: To study the association between body composition measures and menstrual status in a large sample of adult patients with a history of anorexia nervosa and to calculate the predicted probability of resumption of menstrual function. Furthermore, to establish whether fat percentage is superior to body mass index in predicting the resumption of menses. Method: 113 adult women with a history of anorexia nervosa underwent a dual energy x-ray absorptiometry (DXA) scan and completed questionnaires regarding medication prescription and menstrual function. Results: Fifty percent of patients were expected to resume their menstrual function at a body mass index of 19 kg/m2 or a fat percentage of 23%. Twenty-five percent of patients were expected to resume their menstrual function at body mass index 14 kg/m2 or fat percentage 11%. Fat percentage and body mass index were equally capable of predicting the resumption of menses. Body composition measures only account for a few of numerous factors involved in the resumption of menses. Our regression model had a R2 value of 0.14, indicating that only 14% of the variation in menstrual recovery could be explained by the variables included. Discussion: Fat percentage and body mass index were positive predictors of the resumption of menses, however, body composition measured by DXA was not superior to body mass index in predicting menstrual recovery, which is of great clinical relevance as body mass index is easier and cheaper to obtain.

**T044: Body Image, BMI and Eating Behavior in a Sample of Adolescent Males**

Emilia Manzato, MD, Psychiatrist, University of Ferrara, Ferrara, APO AE, Ferrara

Gianna Di Loreto, Psychologist, Associazione “la Vita Oltre Io Specchio”, Pisa, APO AE, Ferrara

Carla Piccione, Psychologist, Casa di cura S. Rossore, Pisa, APO AE, Pisa

Valentina Giust, Student, University of Ferrara, fFerrara, APO AE, Ferrara

Giovanni Gravina, MD, Casa di cura S. Rossore, SISDCA, Ferrara, APO AE, Pisa

The aim of the multicentric study is to investigate some possible correlations between body image, BMI, eating behavior and psychological functions such as alexithymia and self-esteem. The study analyzed a sample of 250 male students, recruited in some high schools in Ferrara and Pisa (Italy), 14-20 years old, (mean age 16, 83-SD 1.107). A structured interview
Body image dissatisfaction is a risk factor for eating disorders, low mood and subsequent weight gain. In order to fully understand and develop new treatments for it, we need new methods of measuring both its perceptual and cognitive components. We developed new methods of measuring the perceptual component (using reality-based avatars), quick measures of explicit dissatisfaction using Visual Analogue Scales, behavioural measures, and measures of implicit beliefs using Implicit Association Tests (IAT) and a Lexical Decision Task (LDT). We compared them with existing measures of body dissatisfaction, the Body Shape Satisfaction Scale and the Eating Disorders Examination Questionnaire, using both regression and factor analysis. We recruited 93 healthy 18-30 year old women with a BMI of 18-25. We found women were accurate at representing their size using reality-based avatars (regression with measured BMI: 1.21 (95% Confidence Intervals 0.94, 1.48), p<0.0001; test-retest correlation: 0.88); and the discrepancy between real and ideal own size correlated with other measures of body satisfaction (e.g. regression with EDE-Q -0.48 (95% Confidence Intervals -0.66, -0.29), p<0.0001). Brief VAS measures of size and satisfaction with size correlated highly with existing questionnaire measures of satisfaction, as did a behavioural measure of how women would feel wearing different outfits, and the word IAT. The LDT did not correlate with existing measures of satisfaction or size. Factor analyses of the different measures supported these results.

**T046: New Ways of Measuring Perception of and Satisfaction with Own Body Size in Women**

**Helen Bould**, MRCPsych, BA BM BCh; MA University of Oxford, Oxford, Oxfordshire
**Katherine Noonan**, MA, MBBS, University of Oxford, Oxford, Oxfordshire
**Ian Penton-Voak**, PhD, University of Bristol, Bristol, Bristol
**Andy Skinner**, PhD, University of Bristol, Bristol, Bristol
**Marcus Munafo**, PhD, University of Bristol, Bristol, Bristol
**Rebecca Park**, MRCPsych, PhD, University of Oxford, Oxford, Oxfordshire
**Matthew Broome**, MBBS, MRCPsych, University of Oxford, Oxford, Oxfordshire
**Catherine Harmer**, PhD, University of Oxford, Oxford, Oxfordshire

Body dissatisfaction is a risk factor for eating disorders, low mood and subsequent weight gain. In order to fully understand and develop new treatments for it, we need new methods of measuring both its perceptual and cognitive components. We developed new methods of measuring the perceptual component (using reality-based avatars), quick measures of explicit dissatisfaction using Visual Analogue Scales, behavioural measures, and measures of implicit beliefs using Implicit Association Tests (IAT) and a Lexical Decision Task (LDT). We compared them with existing measures of body dissatisfaction, the Body Shape Satisfaction Scale and the Eating Disorders Examination Questionnaire, using both regression and factor analysis. We recruited 93 healthy 18-30 year old women with a BMI of 18-25. We found women were accurate at representing their size using reality-based avatars (regression with measured BMI: 1.21 (95% Confidence Intervals 0.94, 1.48), p<0.0001; test-retest correlation: 0.88); and the discrepancy between real and ideal own size correlated with other measures of body satisfaction (e.g. regression with EDE-Q -0.48 (95% Confidence Intervals -0.66, -0.29), p<0.0001). Brief VAS measures of size and satisfaction with size correlated highly with existing questionnaire measures of satisfaction, as did a behavioural measure of how women would feel wearing different outfits, and the word IAT. The LDT did not correlate with existing measures of satisfaction or size. Factor analyses of the different measures supported these results.

**T045: “What I Think I Look Like”: A Photographic Study of Perceived Body Image in Patients with Eating Disorders**

**Michael Nakhla**, BA, Penn State College of Medicine, Hershey, Pennsylvania
**Martha Peaslee Levine**, MD, Penn State College of Medicine, Hershey, Pennsylvania

Eating disorders, anorexia nervosa and bulimia nervosa, and Body Dysmorphic Disorder are conditions defined by body image distortion. This study aimed to visualize the degree of perceived body image disturbance and dysmorphia in patients struggling with eating disorders and correlate this with measures of body dissatisfaction, body preoccupation, and self-esteem. 20 participants with previously diagnosed eating disorders were photographed. Their full-body images were digitally altered using Adobe Photoshop, as directed by the patients, to render photo representations of their perceived body image (what they think they look like) and their idealized body image (what they want to look like). The differences between the two representations were measured in pixels. This measurement was compared to scales that the patients completed, which examined self-esteem, body shame, and dysmorphia. 11 healthy controls completed the same tasks to provide comparison data. The patient group exhibited a statistically significant percent pixel change between perceived and idealized body image in all measured body areas: width at face, shoulder, neck, hip, and thigh. The patient group exhibited significantly more body shame, worse self-esteem, and a higher degree of body dysmorphia. 13 of the 20 patients exhibited a severe degree and 5 of the 20 exhibited a moderate degree of body dysmorphia, as measured by the Body Dysmorphic Disorder Modification of the Yale-Brown Obsessive Compulsive Scale. These 18 patients demonstrated significant differences between perceived and ideal body image in all body areas as compared to the other two patients who displayed a mild degree of body dysmorphia. Patients who exhibited more severe dysmorphia demonstrated a greater difference between their perceived and idealized body image and proportionally lower self-esteem and greater body shame. The overlap of symptomatology between BDD and ED suggests comorbidity or dual diagnosis in eating disorder patients.
These novel measures have potential to be used as quicker, more scalable measures of perceived size and satisfaction with own size. The implicit tasks may also capture beliefs which patients may not be aware of, or may wish to conceal, and may have potential as early markers of response to treatment.

**T047: Introducing the New Male Body Scale and Male Fit Body Scale as Measures of the Ideal Body Related to Eating Disorder Tendencies**

Christina Ralph-Nearman. BS, MSc, Student, PhD Candidate, University of Nottingham, Nottingham, Nottingham

Ruth Filik. BSc, PhD. University of Nottingham, Nottingham, Nottingham

The aim of the current study was to develop, test, and re-test two new male body satisfaction scales; The Male Body Scale (consisting of emaciated to obese figures) and the Male Fit Body Scale (consisting of emaciated to very muscular figures). 103 male participants were given the two newly-developed scales along with the existing Stunkard Figure Rating Scale (SFRS), for comparison. Firstly, they were asked which of the nine body figures on each scale most represented their current body figure. They were then asked to use the scales to indicate their ideal body figure. They then indicated which of the scales overall; SFRS, our new Male Body Scale (MBS), or our new Male Fit Body Scale (MFBS) represented their current body figure, and finally which represented their ideal body figure overall. They then completed the Eating Disorder Examination Questionnaire (EDE-Q 6.0), and their Body Mass Index (BMI), fat, and muscularity percentage were calculated. This was followed by a re-test and manipulation check two to six weeks later. Participants’ scores on the EDE-Q 6.0, BMI, fat- and muscularity-percentage were all highly related to their current body figure choice for all three scales. However, only the new MFBS Ideal figure choice was significantly related to eating disorder tendencies and body measures, whilst the new MBS was highly related to body measures. Importantly, the SFRS ideal choice was not significantly related to any of the measures. Participants also indicated that the new Body Scales most accurately represented their current and ideal body figure, rather than the SFRS, and the MFBS results revealed that 85.5% showed body dissatisfaction, desiring a larger, more muscular body. Results validate the new gender-related scales, reveal muscularity-ideal body choice, and inform male-focused eating disorder research.

**T048: Impact on Readmissions: Implementing Family Based Treatment in a Specialist Eating Disorder Service**

Kim Hurst. PhD. Griffith University, Gold Coast, Qld

Hayley Thompson. BSc. Griffith University, Gold Coast, Qld

Heather Green. DPsych. Griffith University, Gold Coast, Qld

Anorexia Nervosa (AN) treatment is frequently associated with high costs often due to the use of hospitalisation. The Gold Coast Eating Disorder Program (EDP) Australia has delivered outpatient Family Based Treatment (FBT) since 2009. This study compared retrospective data of 20 female adolescent patients diagnosed with AN, 10 who received treatment as usual (TAU) prior to the implementation of FBT with 10 treated by the EDP with FBT. A series of independent samples t-test was undertaken to compare readmission rates to both the medical ward and psychiatric ward from pre to post implementation of FBT. Results indicate that since the implementation of FBT there has been a significant reduction of readmission rates to the medical ward  t(18) = 1.29, p = .01 from pre (M = 0.90, SD = 1.66) to post (M = 0.20, SD = 0.42) and a significant reduction in the number of psychiatric admissions t(18) = 4.33, p < .001, [pre (M = 13, SD = 0.95), post (M = 0, SD = 0)]. Comparative analyses of an additional 40 female adolescents AN patients treated with FBT are also described. This comparative clinical data supports the current literature regarding the efficacy of FBT for the treatment of adolescents with AN, specifically that adolescents who receive guided assistance from their parents recover more quickly from AN and require less hospital admissions when FBT is provided.

**T049: Psychopathology and Expressed Emotion in Parents of Patients with Eating Disorders: Relation to Patient Symptom Severity**

Rebekah Richmond. BA. Medical University of South Carolina, Charleston, South Carolina

Renee Rienecke. PhD. Medical University of South Carolina, Charleston, South Carolina

The purpose of the current study was to examine the relation between parental psychopathology, expressed emotion and patient symptom severity. One hundred twenty-six parents of 79 patients receiving treatment for an eating disorder completed measures of expressed emotion (Family Questionnaire) and general psychopathology (SCL-90-R), and patients competed a measure of eating disorder psychopathology (EDE-Q). Mothers reported higher scores on the critical comments (M = 22.25, SD = 5.54) and emotional overinvolvement (M = 29.10, SD = 3.70) subscales of expressed emotion than fathers (M = 19.73, SD = 5.44; M = 25.88, SD = 4.73, respectively). Both mothers and fathers scored higher on general psychopathology compared to nonpatient population means. Maternal psychopathology, particularly maternal obsessive-compulsive symptoms and global symptom severity, was found to be associated with patient symptom severity. Mothers high on emotional overinvolvement had higher parental psychopathology than mothers low on emotional overinvolvement; maternal critical comments and paternal expressed emotion were not related to parental psychopathology. Although it may
be expected that parents suffering from their own psychopathology may be under more stress and could show higher levels of expressed emotion toward an ill child, findings suggest that parental psychopathology and parental expressed emotion may be different constructs that need to be addressed separately in treatment. Maternal obsessive-compulsive symptoms are associated with patient symptomatology and may be a useful clinical target in treatment.

**T050: Symptoms of Attention Deficit Hyperactivity Disorder (ADHD) among Adult Eating Disorder Patients**

Nils Erik Svedlund, MD, Department of Clinical Neuroscience, Karolinska Institute, Stockholm, Stockholm County

Claes Norring, PhD, Department of Clinical Neuroscience, Karolinska Institute, Stockholm, Stockholm County

Ylva Ginsberg, MD, PhD, Department of Clinical and Med. Epid. and Biostatistics, Karolinska Institute, Stockholm, Stockholm County

Yvonne von Hausswolff-Juhlin, MD, PhD, Department of Clinical Neuroscience, Karolinska Institute, Stockholm, Stockholm County

The objective of this study was to explore the prevalence and types of self-reported ADHD symptoms in an unselected group of eating disorder patients assessed in a specialized eating disorder clinic. In total 1165 adults with an eating disorder were assessed with a battery of standardized instruments, for measuring inter alia ADHD screening, demographic variables, eating disorder symptoms and psychiatric comorbidity. Almost one third of the patients scored above the screening cut off indicating a possible ADHD, with up to two-fold differences between bingeing/purging and restricting eating disorder diagnoses. Presence of binge eating, purging, loss of control over eating and non-anorectic Body Mass Index were related to results indicating a possible ADHD. Psychiatric comorbidity correlated to ADHD symptoms without explaining the differences between eating disorder diagnoses.

**T051: Eating Patterns in Adolescents with Type 1 Diabetes - Associations with Metabolic Control, Insulin Omission, and Eating Disorder Psychopathology**

Line Wisting, PhD, Oslo University Hospital, Regional Department for Eating Disorders, Oslo, Oslo

Deborah Lynn Reas, PhD, Oslo University Hospital, Regional Department for Eating Disorders, Oslo, Oslo

Lasse Bang, MA, Oslo University Hospital, Regional Department for Eating Disorders, Oslo, Oslo

Torild Skrivarhaug, MD, PhD, Oslo University Hospital, Department of Pediatric Medicine, Oslo, Oslo

Knut Dahl-Jørgensen, MD, PhD, Oslo University Hospital, Department of Pediatric Medicine, Oslo, Oslo

Øyvind Ro, MD, PhD, Oslo University Hospital, Regional Department for Eating Disorders, Oslo, Oslo

The purpose of this study was to investigate eating patterns among adolescents with type 1 diabetes (T1D), and associations with eating disorder psychopathology, insulin omission due to weight and shape concerns, and metabolic control (blood glucose – as measured by HbA1c). The sample consisted of 104 adolescents (62 females) with T1D, with an average age of 15.7 years (SD 1.8). Mean age at T1D onset was 9.6 years (SD 3.5), mean zBMI was 4.0 (SD 0.8), and mean HbA1c was 8.6 (SD 1.3). The Child Eating Disorder Examination (CHEDE) assessed the frequency of breakfast, lunch, and dinner consumption in addition to core eating disorder (ED) pathology. T1D clinical data was obtained from the Norwegian Childhood Diabetes Registry. Significant gender differences were found, with a lower proportion of females than males consuming breakfast on a daily basis over the past week (73.8% vs 97.7%, respectively, $\chi^2 = 8.86$ (1), $p = .003$). A similar proportion of males and females (approximately 48%) consumed lunch on a daily basis. Likewise, approximately 90% of both genders consumed dinner on a daily basis over the past 7 days. Among females, less frequent breakfast consumption was significantly associated with higher global CHEDE scores, shape concerns, self-induced vomiting, binge eating, intentional insulin omission, and HbA1c. Less frequent lunch consumption was also significantly associated with higher HbA1c (Spearman rho = -.44, $p < .001$). Additionally, skipping dinner was significantly associated with increased dietary restraint. Eating concerns, age, self-induced vomiting, and insulin omission, with small-to-medium sized effect sizes ranging from rhos= -.27 to -.32. Among males, no significant bivariate associations were found. These findings suggest that the pattern and frequency of meal consumption may be addressed clinically to improve metabolic control and subsequent risk of somatic complications among adolescent females with T1D.

**T052: Mental Capacity to Consent to Treatment and the Association with Outcome – a Longitudinal Study in Anorexia Nervosa Patients**

Isis Elzakkers, MSc, MD Altrecht Eating Disorders Rinvteld, Zeist, Utrecht

Unna Danner, PhD, Altrecht Eating Disorders Rinvteld Utrecht University, Zeist, Utrecht

Lot Sternheim, PhD, Utrecht University, Department of Psychology, Utrecht, Utrecht

Daniel MacNeish, PhD, Utrecht University, Department of Methodology and Statistics, Utrecht, Utrecht

Hans Hoek, MD, PhD, Parnassia Psychiatric Institute, The Hague, The Hague, Zuid, Holland

Annemarie van Elburg, MD, PhD, Altrecht Eating Disorders Rinvteld Utrecht University, Zeist, Utrecht

Mental capacity to consent to treatment can be reduced in patients with anorexia nervosa (AN). However, relevance of diminished mental capacity to course of the disorder is unknown. In this study we aim to examine the prognostic relevance of diminished mental capacity in AN. A longitudinal study was conducted in 70 adult female severe AN
patients. At baseline mental capacity was assessed by psychiatrists and clinical and neuropsychological data (decision making) were collected. One third of patients was found to display diminished mental capacity to consent to treatment. The total group was divided into two groups: one with full mental capacity (n=46) and one with diminished mental capacity (n=24). After one and two year clinical and neuropsychological assessments were repeated and remission and admission rates were calculated. Patients with diminished mental capacity had a less favourable outcome with regard to remission and were admitted more frequently. Their appreciation of illness remained hampered. Decision making did not improve in comparison to patients with full mental capacity. We conclude that patients with diminished mental capacity do less well in treatment and display decision-making deficiencies that do not ameliorate with weight improvement. Further research is needed to look into the role of emotion dysregulation in the hampered decision making and diminished mental capacity.

**T053: One Size Fits All: Dieting is a Unitary Construct**

Kelsey Hagan, MA, University of Kansas, Lawrence
Kansas, Kelsie Forbush, PhD, University of Kansas, Lawrence, Kansas

Dieting is associated with the future development of eating disorders (EDs). Nevertheless, greater understanding of the structure of dieting behavior is important because certain types of dieting may be differentially associated with ED risk. One theory of dieting is Lowe’s Three-Factor Model of Dieting, which posits that dieting consists of three dimensions: (1) history of dieting; (2) current dieting; and (3) weight suppression (the difference between a person’s highest and current body weight in pounds). Although each proposed dimension represents a clinically relevant aspect of dieting behavior, few previous studies have tested the underlying structure of dieting. This study is significant as the first to test Lowe’s Three-Factor Model. We hypothesized that the Three Dimensional Model would be empirically supported. Exploratory factor analysis (EFA) was used to test whether dieting formed distinct factors (dimensions) in a representative community sample of adults (N=407; 47.4% female). Structural equation modeling (SEM) was used to validate the best-fitting factor structure and to test associations among dieting dimensions, ED risk, and body mass index. A one-factor model demonstrated the best fit to the data. Notably, ED risk significantly increased with dieting, whereas body mass index was not significantly associated with dieting. Our results suggested that dieting could be conceptualized as a unitary construct that confers risk for the future development of EDs. Findings also indicated that dieting was not associated with body weight, which supports results of other studies showing poor efficacy of self-led dieting for producing meaningful weight loss. Healthcare professionals should consider inquiring about dieting status (both current and past) and weight suppression as a part of routine medical care to help identify those at risk for EDs and to promote a greater focus on engagement in healthful eating, regardless of weight-loss goals or outcomes.

**T054: Transitioning from DSM-IV to DSM-5: A Systematic Review of Eating Disorder Prevalence Assessment**

Camilla Lindvall Dahigren, MA, PhD, Oslo University Hospital, Oslo, Oslo
Line Wisting, MA, PhD, Oslo University Hospital, Oslo, Oslo

The purpose of this study was to systematically review the literature on eating disorder prevalence during the DSM-IV era (1994-2013). A PubMed search was conducted targeting articles on prevalence, incidence and epidemiology of eating disorders. The review was performed in accordance with PRISMA guidelines, and was limited to DSM-IV based eating disorder diagnoses published between 1994 and 2015. A total of 74 studies fulfilled inclusion criteria and were included in the study. Results yielded evidence of over 40 different assessment instruments used to assess eating disorder prevalence, with the EAT-40 being the most commonly used screening instrument, and the SCID being the most frequently used interview. The vast majority of studies employed two-stage designs, closely followed by clinical interviews. Observations of higher prevalence rates were found in studies employing self-reports compared to two-stage designs and interviews. Eating disorder prevalence rates have varied significantly during the DSM-IV era, and are dependent on assessment methods used and samples investigated. Following the transition to the DSM-5, eating disorder prevalence will change, warranting novel approaches to assessment and treatment planning. Examples of such approaches will be discussed during the presentation.

**T055: Eating Pathology and Misuse of Erectile Dysfunction Drugs Among Sexual Minority Men**

Amanda Bruening, BA, MA, Arizona State University, Tempe, Arizona
Marisol Perez, BA, PhD, Arizona State University, Tempe, Arizona

Body-image disturbance is a well-established psychosocial issue among men who have sex with other men (MSM). Nearly a third of MSM report being dissatisfied with their appearance, often wishing to be more muscular. Self-objectification theory suggests that the focus on body monitoring, self-comparison, and body shame carry into the areas of sexual functioning. Given that sexual dysfunction is commonly reported across eating disorder subtypes and that MSM may objectify themselves to a greater degree than their heterosexual peers, MSM may be at greater risk for seeking unhealthy solutions to cope with heightened body dissatisfaction and sexual dysfunction. As sexual prowess is closely associated with heightened body dissatisfaction and sexual dysfunction, the impact of sexual dysfunction on MSM is particularly significant.
with a masculine identity among MSM, misuse of erectile dysfunction medication (EDM) may be one way to cope with negative body image during moments of physical intimacy. The current study aimed to analyze the association between eating pathology and recreational use of EDMs among sexual minority undergraduate men. A preliminary, epidemiological analysis was performed using the American College Health Association’s National College Assessment (ACHA-NCHA), which surveyed 523 colleges between Fall 2008 and Spring 2011. Out of 20,721 sexual minority men sampled, 354 (1.7%) reported misuse of EDMs within the past year. Results showed that the odds of EDM misuse nearly tripled among those who also used diet pills (B = 1.08, Standard Error [SE] = 0.19, Odds Ratio [OR] = 2.94, p > 0.001) and doubled among those who also induced vomiting or used laxatives (B = 0.71, SE = 0.21, OR = 2.03, p = 0.001). These findings provide a basis for exploring important secondary ramifications of body-image disturbance among sexual minority men.

**T056: Sociocultural Pressures for Thinness and Disordered Eating Among Lesbian and Straight Women: The Impact of Sexual Orientation and Female Identity Centrality**

Sarah Horvath, BS, Ohio University, Athens, Ohio  
Sarah Racine, PhD, Ohio University, Athens, Ohio  
Rebecca Totton, MA, Ohio University, Athens, Ohio  
Kimberly Rios, PhD, Ohio University, Athens, Ohio

It is often assumed that sociocultural pressures for thinness are less salient in lesbian subculture and, as such, lesbian women may be protected from disordered eating. However, research examining this hypothesis has been inconsistent. One gap in the current literature relates to the influence of identity centrality, or how central one’s sexual orientation identity or female identity is to her overall self-concept. It is possible that identifying strongly as lesbian protects women from sociocultural pressures for thinness and disordered eating, whereas identifying strongly as heterosexual and/or female has the opposite effect. The current study examined 1) differences between lesbian (n = 160) and straight (n = 158) women on sociocultural appearance ideals and disordered eating, and 2) relationships between both sexual orientation identity centrality and female identity centrality with these variables. After accounting for group differences on age and education, scores on the Sociocultural Attitudes towards Appearance Questionnaire and Eating Pathology Symptoms Inventory subscales were not significantly different between lesbian and straight women. For straight women, sexual orientation identity centrality was significantly correlated with media pressures, excessive exercise, binge eating, and purging, and female identity centrality was significantly correlated with body dissatisfaction. In contrast, the only significant correlation for lesbian women was between sexual orientation centrality and excessive exercise. Although a lack of group differences may suggest that lesbian women are still subject to the same hetero-normative pressures for appearance, lesbian women who identify strongly as lesbian and/or female may not be as vulnerable to disordered eating as straight women with strong identities. Future research should investigate how identity centrality and sociocultural pressures for thinness might interact to impact disordered eating in lesbian and straight women.

**T057: Gender Dysphoria and Eating Disorders: The Effects of Treating Female to Male Transgender Adolescents**

Danielle Gonzales, PsyD, University of California, San Diego, San Diego, California  
Ana Ramirez, PhD, University of California, San Diego, San Diego, California  
Michelle Jones, PhD, University of California, San Diego, San Diego, California  
Jessie Menzel, PhD, University of California, San Diego, San Diego, California  
Roxie Rockwell, PhD, University of California, San Diego, San Diego, California

Body dissatisfaction is considered to be the primary distress experienced by those struggling with an eating disorder (Fairburn, 2008). Similarly, the negative evaluation and distress of one’s physical appearance and incongruence between the assigned biological sex and gender identity is now classified as Gender Dysphoria (DSM-5, 2013). Current literature suggests that body dissatisfaction plays a crucial role in gender dysphoria and ultimately leaves individuals at greater risk for developing an eating disorder (Jones, Haycraft, Murjan, Arcelus, 2016). Several studies have observed the occurrence of these two conditions, however, these studies have typically focused on adults who desire to transition from male to female (MtF). This case study, in contrast, describes four cases of female to male (FtM) transgender adolescents who met the DSM-5 criteria for Anorexia Nervosa in regards to emotion regulation (DERs), symptoms of depression (BDI), and Multidimensional Assessment of Interoceptive Awareness (MAIA). The findings of this pilot study suggest that FtM adolescents with Anorexia Nervosa score statistically significantly lower on MAIA when compared to non-clinical adolescent population. The data also yielded FtM adolescents with Anorexia Nervosa score statistically significantly lower on MAIA when compared to non-clinical adolescent population. This pilot study will suggest specialized treatment considerations for transgender youth seeking treatment for Anorexia Nervosa.

**T058: Decision Making Impairment: A Shared Vulnerability in Obesity, Gambling Disorder and Substance use Disorders?**

Nuria Mallorqui-Bague, MS, MSc, CPsychol, PhD, Hospital Universitari Bellvitge-Idibell-CiberObn, Hospitalet de Llobregat, Barcelona  
Susana Jimenez-Murcia, DClinPsy, PhD, Hospital Universitari Bellvitge-Idibell-CiberObn, Hospitalet del Llobregat, Barcelona  
Ana B. Fagundo, PhD, Hospital Universitari Bellvitge, Hospitalet del Llobregat, Barcelona
We examined associations between two dark personality traits (i.e., narcissism and callousness) and psychopathology among women with BN. This study was guided by several research questions. First, are dark personalities associated with degree of eating disorder psychopathology and treatment history? Second, are dark personality traits in BN associated with co-occurring forms of psychopathology? Third, are dark personality traits associated with interpersonal, affective, and behavioral functioning in daily life? Fourth, are dark personality traits associated with adverse childhood experiences? Women with BN completed measures of ED and co-occurring psychopathology, personality, trauma, and treatment history. Then, women participated in a 2-week ecological momentary assessment (EMA) protocol where participants reported on interpersonal stressors, affect, and maladaptive behaviors. Neither callousness nor narcissism were associated with interview assessed severity of ED psychopathology or treatment history. Regarding co-occurring psychopathology, both callousness and narcissism were associated with past month DSM-IV substance dependence. EMA data revealed an association between callousness and increased anger/hostility, cognitive dissociation, laxative use, driven exercise, breaking things, and shoplifting in daily life. EMA data also revealed that narcissism was related to more negative affect, anger/hostility, cognitive dissociation, interpersonal stress, drunkenness, and risky sexual behavior in daily life. Neither callousness nor narcissism were associated with childhood trauma, but callousness was associated with less minimization/denial of childhood maltreatment experiences. Overall, results showed that dark personality traits were not associated with severity of BN. However, these traits were associated with co-occurring psychopathology and various momentary and daily behaviors as well as negative affective and interpersonal experiences in everyday life.

**T059: Psychopathology Profiles of Dark Personality Traits among Women with Bulimia Nervosa**

**Tyler Mason**, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota  
**Kathryn Smith**, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota  
**Ross Crosby**, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota  
**Scott Engel**, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota  
**James Mitchell**, MD, Neuropsychiatric Research Institute, Fargo, North Dakota  
**Stephen Wonderlich**, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota

Addictions are associated with decision making impairments. The present study explores decision making in Substance use disorder (SUD), Gambling disorder (GD) and Obesity (OB) when assessed by Iowa Gambling Task (IGT) and compares them with healthy controls (HC). For the aims of this study, 591 participants (194 HC, 178 GD, 113 OB, 106 SUD) were assessed according to DSM criteria, completed a sociodemographic interview and conducted the IGT. SUD, GD and OB present impaired decision making when compared to the HC in the overall task and task learning, however no differences are found for the overall performance in the IGT among the clinical groups. Results also reveal some specific learning across the task patterns within the clinical groups: OB maintains negative scores until the third set where learning starts but with a less extend to HC, SUD presents an early learning followed by a progressive although slow improvement and GD presents more random choices with no learning. Decision making impairments are present in the studied clinical samples and they display individual differences in the task learning. Results can help understanding the underlying mechanisms of OB and addiction behaviors as well as improve current clinical treatments.

**T060: The Role of DAT1 and COMT in Moderating Risks for Disordered Eating in Adolescence Associated with Peer Relationships.**

**Vanja Rozenblat**, BA, MPsych, PhD Candidate, The University of Melbourne, Parkville, VIC  
**Laura Gorrie**, BA, with Honours in Psychology, The University of Melbourne, Parkville, VIC  
**Isabel Krug**, PhD, The University of Melbourne, Parkville, VIC, The ATP Consortium, PhD, The Australian Temperament Project, The Royal Children’s Hospital, Parkville, VIC

The present study investigated the extent to which genes involved in dopaminergic signalling moderate the relationship between peer involvement and disordered eating. Participants were 542 individuals (48.5% female) from the Australian Temperament Project (ATP) who provided self-report assessments of peer relationships (Berndt’s Interaction Frequency Scale and Positive Friendship Qualities Scale) at age 11-12 years, and eating disorder symptomatology...
(Eating Disorder Inventory-2 Bulimia and Drive for Thinness scales) at age 15-16 years. DNA was collected by buccal swabs at 15-16 years and genotyped for common variants in dopamine transporter (DAT1) and catechol-o-methyltransferase (COMT). Contrary to expectations however, greater contact frequency with peers increased risk for bulimic behaviour, and friendship quality increased risk for bulimic and drive for thinness behaviours. No significant gene x environment interactions were detected, although there was evidence of a COMT x DAT1 interaction to predict drive for thinness scores (p = 0.012). Results remained significant when controlling for ethnicity and socio-economic status, however did not withstand adjustment for multiple testing. Results from this study suggest an unusual risk relationship in which positive peer involvement, including quality and frequent contact, may play a role in disordered eating behaviours and attitudes. However, results do not suggest that genes involved in dopaminergic signalling moderate these relationships.

**T061: Listen, I am Afraid of Gaining Weight! Testing a New Anxiety-Based Etiological Model for Anorexia Nervosa**

Anne Kathrin Schwenzeifer, BSc, MSc, Ruhr-University Bochum, Bochum, North Rhine-Westphalia

Mike Rinck, DSc, Professor, Radboud University Nijmegen, Nijmegen, Nijmegen

Eni Sabine Becker, DSc, Professor, Radboud University Nijmegen, Nijmegen, Nijmegen

Tanja Legenbauer, DSc, Professor, Ruhr-University Bochum, Bochum, North Rhine-Westphalia

Although anorexia nervosa (AN) and anxiety disorders share great comorbidity, little interest has been raised for the predictive power of anxiety. We argue that anxiety represents a crucial factor in the etiology of AN by biasing the focus of attention. Hence, we strive to (i) assess the predictive value of trait and specific anxieties on eating disordered behavior (ED) and aim to (ii) test whether (induced) anxiety influences the course of AN through biased attention. First, a questionnaire-based study was conducted in a non-clinical (NCC) sample (14-25 years old) and adolescent ED patients of the LWL-university hospital for child and adolescent psychiatry (Hamm, Germany). 354 participants (301 NCC, 53 with ED) took part in the present study. ED symptoms were assessed by means of the Eating Disorder Examination Questionnaire (EDEQ), anxiety with the State Trait Anxiety Inventory. Fear of Negative Evaluation Scale, Fear of Positive Evaluation Scale and the Social Appearance and Anxiety Scale. Trait anxiety, specific anxieties and BMI regressed hierarchically on each of the EDEQ subscales revealed that trait anxiety, social appearance anxiety and fear of negative evaluation are key predictors for all EDEQ subscales (range from $R^2 = .273$ - .494). In particular, social appearance anxieties had the greatest impact on EDEQ subscales (range $\beta = .318$ - .482). In contrast, BMI was only predictive for weight and shape concerns and added only 1% in explained variance.

In a second step, the causal role of anxiety for AN is studied experimentally in a group of AN patients, depressed patients and healthy controls. We induce anxiety to test whether anxiety biases the focus of attention and whether biased attentional processes represent a mediating factor between trait anxiety and AN symptomatology. Following this talk, participants will be introduced to a new etiological model that highlights the specific role and potential significance of considering anxiety in the course of AN.

**T062: Differences in Psychological Profile and Eating Behavior of Mothers of Women With and Without Eating Disorders**

Verónica Vázquez-Velázquez, PhD, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City

Ingrid Rocha-Velís, MPsysch, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico City

Lucy Reidl-Martínez, PhD, Universidad Nacional Autónoma de México, Mexico City, Mexico City

Eduardo García-García, MD, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico City

The aim of this study was to identify differences in the psychological profile and eating behavior of mothers of women with anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED) or without an eating disorder (Non-ED). One hundred and thirty three mothers were classified on the basis of their daughters eating disorder: 30 mothers of daughters with AN (45.2±5.5 years, Body Mass Index [BMI] 26.3±4.1), 30 with BN (Mothers 47.6±5.1 years, BMI 26.0±6.5), 19 with BED (50.3±4.5 years, BMI 29.3±4.1), and 54 without ED (Mothers 47.4±5.4 years, BMI 23.9±3.3). They completed the following questionnaires: Beck’s Anxiety and Depression Inventories, Toronto Alexithymia Scale, Eating Disorder Inventory-2, Three Factor Eating Questionnaire, and a Corporal Figures Scale to evaluate body figure satisfaction. Discriminant analyses were performed to compare the profiles among the four groups. Mothers of daughters with AN reported more dissatisfaction with their daughter’s body than those of daughters with BN, BED and without ED; they also reported higher anxiety symptoms than the other groups. Mothers of daughters with BN had higher drive for thinness and more social insecurity than mothers of daughters with BED; they also had higher BMI, body dissatisfaction and inefficacy than mothers of healthy daughters. Mothers of girls with BED had greater BMI, depressive symptoms, body dissatisfaction and inefficacy than mothers of healthy daughters. Mothers of girls with BED had greater BMI, depressive symptoms, body dissatisfaction and inefficacy than mothers of healthy daughters without an ED. Mothers of daughters without ED had normal BMI and higher education level than the other three groups of mothers. We conclude that the different psychological profiles and eating behaviors of mothers are associated with the absence or presence of a specific ED.
**T063: Mechanisms Underlying the Compulsive Behaviour of Anorexia Nervosa**

**Caitlin Lloyd**, BSc, University of Bristol, Bristol, Somerset

**Maria Øverås**, DClinPsy, Regional Unit for Eating Disorders, Oslo University Hospital, Oslo, Østlandet

**Øyvind Ro**, MD, PhD, Regional Unit for Eating Disorders, Oslo University Hospital, Oslo, Østlandet

**Bas Verplanken**, PhD, University of Bath, Bath, Somerset

**Anne Haase**, PhD, University of Bristol, Bristol, Somerset

To understand whether the goal-directed system deficits and heightened negative reinforcement processes implicated in compulsive behaviour are relevant to Anorexia nervosa (AN), this study aimed to determine whether trait anxiety (TA) and compulsive behaviour typical of Obsessive Compulsive Disorder (OCD; OCD-type compulsions) predict AN pathology and eating, exercise and body-related compulsions of AN (AN compulsions). Female AN sufferers (n = 30) and healthy women (n = 32) completed measures of TA, OCD-type compulsions and AN compulsions. Bootstrapped mediated logistic regression analyses tested whether TA predicted the present of AN compulsions via AN diagnosis, and whether OCD-type compulsions predicted AN diagnosis through AN compulsions. TA predicted AN compulsions being present (Odds Ratio (OR) = 1.09, 95% Confidence Interval (CI) [1.04-1.14]) and AN diagnosis (OR = 1.44, 95% CI [1.18-1.77]) but AN diagnosis did not mediate the TA-AN compulsions relationship. OCD-type compulsions predicted AN diagnosis (OR = 1.34, 95% CI [1.15-1.55]) and presence of AN compulsions (OR = 1.17, 95% CI [1.05-1.31]) but AN compulsions did not mediate the effects of OCD-type compulsions on AN diagnosis. Upon reflection AN diagnosis and AN compulsion measures were concluded to share underlying constructs, which invalidated mediation analyses. This supports AN being a compulsive disorder but prevented discerning whether compulsive AN behaviour arises from, or contributes to, other symptoms of the disorder. This in turn prevented endorsing or rejecting deficient goal-directed system, and heightened negative reinforcement, explanations of AN aetiology, with further studies required for this purpose.

**T064: Orthostatic Changes and Electrolyte Imbalances in Adolescent Inpatients with Eating Disorders: Comparison between Acute and Chronic Malnutrition in a Refeeding Protocol**

**Yung-Chieh Chang**, MSC, MD, Medical College of Wisconsin, Milwaukee, Wisconsin

**Margaret Thew**, MSN, Medical College of Wisconsin, Milwaukee, Wisconsin

**Kydal Hettich**, RD, Children's Hospital of Wisconsin, Milwaukee, Wisconsin

**M. Susan Jay**, MD, Medical College of Wisconsin, Milwaukee, Wisconsin

**Melodee Nugent**, MA, Medical College of Wisconsin, Milwaukee, Wisconsin

**Pippa Simpson**, PhD, Medical College of Wisconsin, Milwaukee, Wisconsin

The purpose was to compare acute and chronic malnutrition outcomes in acute medical stabilization of eating disorder inpatients. A retrospective chart review of inpatient consultations to Adolescent Medicine for disordered eating from March 2013 to December 2015 was conducted. Patients 10-19 years of age using DSM-IV diagnostic criteria for eating disorders with complete inpatient diet history were included. A standardized inpatient refeeding protocol was utilized, and data obtained included demographics, chronicity of malnutrition (acute weight loss ≤ 3 months vs. chronic > 3 months), vitals, body mass index (BMI), orthostatic changes, and comprehensive metabolic panel. Outcomes were primarily electrolyte imbalances (hypokalemia, hypophosphatemia, hypomagnesemia) and orthostatic changes, secondarily daily caloric intake (kcal/day and kcal/kg/day) and weight changes. Of the total 79 consults, 38 study subjects met study criteria: 87% female, median age 15.4 years (range 10.1-17.9), 68% diagnosed using DSM-IV criteria with Anorexia Nervosa, restrictive type,. Median BMI was 15.8 kg/m2 (range 13.1-22.1), percent median BMI was 80.4% (range 68.9-115.8%), and median weight loss was 3 months (range 0.3-24). At admission, patients with chronic malnutrition had longer duration of eating disorder behavior (p = 0.033), longer duration of weight loss (p ≤ 0.001) and lower monthly weight loss percent (p ≤ 0.001). During refeeding, patients with chronic vs. acute malnutrition had higher incidence of electrolyte imbalance (44.4% vs. 5.9%, p = 0.007), with a lower incidence of orthostatic changes (6.7% vs. 38.9%, p < 0.046). No difference with daily calorie intake, body temperature, body weight and lowest heart rate were noted within the two groups. We conclude that those with chronic malnutrition resulted in more refeeding-electrolyte imbalance, whereas those with acute malnutrition demonstrated more orthostatic changes during the refeeding process.

**T065: The Introduction of a Multi Family Group in Singapore: A Pilot Study**

**Siobhan Kelly**, DClinPsy, KK Women's & Children's Hospital, Singapore, Singapore

**Elaine Chew**, MBBS, KK Women's & Children's Hospital, Singapore, Singapore

**Kumu Rajasegaran**, MBBS, KKH, Singapore, Singapore

**Jean Yin Oh**, MBBS, KKH, Singapore, Singapore

FBT continues to be the most promising treatment for Child & Adolescent Anorexia Nervosa. However, research indicates there is still a proportion of family's who do not respond to treatment and may require adjunctive or more intensive forms of treatments. Furthermore, health systems can often face challenges in meeting the resource intensity of FBT. One form of adjunctive treatment that has been explored in the literature is Multi-family-therapy (MFT). Emerging research in the use of MFT in the treatment of AN has shown promising results (Le Grange & Eisler, 2008), however there has been limited research on the effectiveness of this form of treatment in non-western populations. Our current study therefore aimed to explore the feasibility and effectiveness of MFT in our Singaporean health care system. We conducted a
pilot study delivering MFT across four weekly sessions to six families. Patients were referred to the MFT group for the following reasons 1) long wait-list to commence individual FBT, 2) poor insight into the illness, 3) difficulties with high expressed emotion and 4) difficulties progressing to stage 2 of FBT treatment. Self-report questionnaires were administered pre and post the commencement of the group, and weight was taken at each of the four sessions. Qualitative feedback on the family’s experience of the group was also obtained. Results: The pilot study showed promising preliminary evidence for the usefulness of MFT in our local health care system. The qualitative feedback from families were positive, reporting improvements in understanding of the illness and particularly their child’s experience or the seriousness of the condition. For most families, the weight also showed an upward trend across the four sessions. Conclusion: MFT may be a useful treatment within the Singaporean context. However, there were many challenges faced when implementing the group structure and activities. Challenges and the possible need for adaptations will also be discussed.

**T066: What's Cookin'? - Culinary Art Therapy for Adult ED Inpatients**

**Adi Stern**, PhD, Hadassah Medical Center, Jerusalem, APO AE

**Noa Lavi**, MPH; RD, Hadassah Medical Center, Jerusalem, APO AE

Food and its significance is a core issue faced by individuals with ED. Some regard food as taboo and avoid any relationship with it. Others have an unhealthy over-involvement with food. Culinary art therapy is a novel approach derived from expressive and occupational therapies. This approach broadly perceives food and cooking as enabling participants to explore patterns, needs and relationships. Culinary therapy has great therapeutic potential for individuals with ED as the cooking process provokes strong and contradictory experiences and feelings. There is a small body of research supporting the efficacy of culinary therapy but a study with EDs has not yet been undertaken. This presentation will describe a culinary group therapy for EDs, and discuss findings from a qualitative study. Thirty-eight adults participated in five consecutive culinary groups. The main therapeutic objectives were to use food and cooking to explore attitudes and feelings towards food and eating; to recognize the use of food as a means of communication; to facilitate group process; to provide psycho-education and to improve participants’ relationship with food. Data was collected via group feedback sessions, an evaluation questionnaire and semi-structured interviews. All were transcribed and analyzed. Results highlighted two significant themes that were categorized as: interpersonal processes and intrapersonal interactions, e.g. by sharing peculiar eating habits and working in collaboration. Participants described these processes as empowering and liberating in dealing with food anxieties and enabling the re-examination of food-related cognitions. Analyzed data also revealed significant behavioral improvement, e.g. several patients were able to touch and prepare food they had avoided handling before. Others reported eating outside their safety zone and trying new dishes as a result of the intervention. Further applications and evaluations of this promising approach should be undertaken.

**T067: No Interference of Reported Sexual Abuse in the Outcome of Intensive Enhanced Cognitive Behavioral Therapy for Anorexia Nervosa: A Longitudinal Study**

**Simona Calugi**, PhD, Department of Eating and Weight Disorders, Villa Garda Hospital, Garda, Verona

**Marwan El Choch**, MD, Department of Eating and Weight Disorders, Villa Garda Hospital, Garda, Verona

**Riccardo Dalle Grave**, MD, Department of Eating and Weight Disorders, Villa Garda Hospital, Garda, Verona

The aim of this study was to evaluate short- and long-term outcomes in patients with anorexia nervosa who reported a sexual abuse history, treated with inpatient enhanced cognitive behaviour therapy (CBT-E), a treatment who not directly address sexual abuse experiences. Sixty-six adult patients with anorexia nervosa were recruited from consecutive referrals to a community-based eating disorder clinic. Reported sexual abuse was assessed by a detailed face-to-face interview at admission, while body mass index (BMI), Eating Disorder Examination (EDE) interview, and Brief Symptom Inventory (BSI) questionnaire were recorded at admission, at the end of treatment, and at 6- and 12-month follow-up. Overall, 34.8% of the patients reported at least one incidence of sexual abuse. Demographic and clinical characteristics of patients who reported sexual abuse, compared to those who did not were similar. Both groups showed a substantial and similar improvement on BMI, eating-disorder and general psychopathology from baseline to 12-month follow-up. The trajectories of change of BMI from baseline to end of treatment indicated a faster improvement in the group who reported abuse than in those who did not report it, but the difference disappeared at 6- and 12-month follow-up. Overall, 34.8% of the patients reported sexual abuse. Demographic and clinical characteristics of patients who reported sexual abuse, compared to those who did not were similar. Both groups showed a substantial and similar improvement on BMI, eating-disorder and general psychopathology from baseline to 12-month follow-up. The trajectories of change of BMI from baseline to end of treatment indicated a faster improvement in the group who reported abuse than in those who did not report it, but the difference disappeared at 6- and 12-month follow-up. These findings suggest that the presence of reported sexual abuse in patients with anorexia nervosa does not interfere with the response to inpatient CBT-E.

**T068: Mentoring - A Novel Approach to Support Hope for Recovery in People with Eating Disorders: Findings from Two Pilot Participatory Action Research Studies**

**Lucie Ramjan**, PhD, RN, Western Sydney University, Penrith, New South Wales

**Sarah Fogarty**, PhD, Western Sydney University, Penrith, New South Wales

Two pilot studies have been conducted in Australia to investigate the feasibility of mentoring support programs for individuals with eating disorders. The first pilot consisted of eleven women with anorexia nervosa (AN) (5 recovered and 6 recovering). The second pilot involved a mixed group of women with...
eating disorders (10 recovered and 10 recovering). Both pilot studies utilised the principles of participatory action research, in that participants were active, key stakeholders involved in the design, development and evaluation of each of the 13 week mentoring programs. A face-to-face workshop preceded the commencement of both programs. Quantitative and qualitative measures were employed to monitor well-being of participants throughout the 13 weeks (baseline, mid-point and post- program) and to evaluate benefits. Hope was measured using the validated Domain Specific Hope Scale. Other validated questionnaires included: SF-12, the Eating Disorder Quality of Life Scale (EDQoL), Kessler Psychological Distress Scale (K10), short version eating disorder examination (EDE-Q) and the Global Mentoring Relationship Questionnaire Scale (GMeRQS). Fortnightly log books and post program interviews provided general feedback on the programs. The first pilot revealed encouraging and positive qualitative findings for mentorship in recovery from anorexia nervosa (AN); with participants identifying feeling connected, understood and hopeful for recovery post program. The second pilot identified significant results between pre and post program scores for the mentees (mixed eating disorders) in increasing their overall hope and more specifically in the following hope domains: Social Relationships, Romantic Relationships, Family Life and Work. Mentoring programs are a novel approach that could be employed as an adjunct to treatment, in supporting hope for recovery from an eating disorder.


**Rebecca Park, BSc, MBBS, MRCPsych, PhD, FRCPsych, University of Oxford, Oxford, Oxfordshire**

**Jacinta Tan, DPhil, MBBS, MRCPsych, Swansea University, Swansea, Wales**

**Purpose:** To describe a gold standard neuroethical framework to guide research ethics committees, researchers and institutional sponsors in conducting novel neurotechnological research in SE-ED to a high ethical standard. Methods: Neurosurgical interventions for psychiatric disorders have become much more refined in the last few decades due to the rapid development of neuromodulation, neuroimaging and robotic technologies. These advances have enabled less invasive, more focused techniques such as TMS, TDCS and Deep Brain Stimulation (DBS). DBS involves electrode insertion into specific neural targets implicated in pathological behaviour, which are then repeatedly stimulated at adjustable frequencies. DBS has been used for Parkinson’s disease and movement disorders since the 1960s, and over the last decade has been applied to treatment refractory psychiatric disorders, with some evidence of benefit in OCD, major depressive disorder and addictions. Recent consensus guidelines on best practice in psychiatric neurosurgery stress, however, that DBS for psychiatric disorders remains at an experimental and exploratory stage. The ethics of DBS - in particular for psychiatric conditions - is hotly debated and when applied to severe eating disorders particular issues and risks emerge. Much of this discourse surrounds the philosophical implications of competence, authenticity, personality or identity change following neurosurgical interventions but there is a paucity of applied guidance on neuroethical best practice in psychiatric DBS, and healthcare professionals have expressed that they require more. This paper is based on our current research protocol for DBS in Severe and Enduring Anorexia Nervosa (SE-AN). The protocol aims to redress this balance by providing a clear framework to guide optimal ethical practice in a clinical research setting. Summary Data and Results: We describe our neuroethical gold standard framework derived from and applied to our research trial of DBS in SE-AN. This framework provides a working guide for clinicians, researchers and ethics committees on the application of novel neurotechnological research to severe enduring eating disorders and other psychiatric conditions.

**T070: Practitioners’ Perspectives on Ethical Issues within the Treatment of Eating Disorders: Concept Mapping Results from a Q-sort Study**

**D. Catherine Walker, PhD, Union College, Schenectady, New York**

**Julia M. Brooks, Student, Union College, Schenectady, New York**

Most eating disorder (ED) practitioners anecdotally speak to the marked and multifaceted ethical challenges associated with working with this complex patient population. Given this pervasive issue in clinical practice, comparatively little research has examined ethical issues faced in ED treatment, with even less research available to support development of “best practices” to guide practitioners facing such ethical dilemmas. Among the few published studies on the topic, disagreement exists as to best practices, with some supporting coercing resistant patients into treatment (e.g., Tan, Stewart, Fitzpatrick, & Hope, 2010) and others warning of its harm (e.g., Ayton, Keen, & Lask, 2008; MacDonald, 2002). The current study sought to elucidate the ethical issues in treating EDs using Q-sort methodology. Q-sort allows for quantitative analysis of qualitative data and provides “concept maps” depicting themes that are present across participants’ qualitative responses. Practitioners first brainstormed ethical issues they encountered or were aware of in the treatment of EDs. Practitioners then sorted the ethical issues into related self-labeled “piles” and rated each brainstormed statement as to how significant the impact of the specific ethical issue is to the profession and then rated how frequently each ethical issue was personally encountered. Data collection is ongoing. The current sample of 45 practitioners recruited from professional listservs brainstormed 28 statements, broadly falling into themes of: 1. Autonomy vs. Beneficence; 2. Access
to appropriate care; 3. Evidence-based treatment provision; 4. Insurance issues; and 5. Level of care. Each theme will be described in depth and the clinical significance and frequency ratings of the ethical issues are discussed, along with future directions toward developing and refining ethical guidelines for ED practitioners.

**T071: Sex Differences in Quality of Life Impairment Associated with Body Dissatisfaction in Adolescents: A Population-Based Study.**

*Scott Griffiths*, PhD, Australian National University, Canberra, Australian Capital Territory  
*Stuart Murray*, PhD, University of California San Francisco, San Francisco, California  
*Caroline Bentley*, PhD, Australian National University, Canberra, Australian Capital Territory  
*Kassandra Gratwick-Sarli*, DPsych, Australian National University, Canberra, Australian Capital Territory  
*Carmel Harrison*, PhD, Australian National University, Canberra, Australian Capital Territory  
*Jonathan Mond*, PhD, Macquarie University, Sydney, New South Wales

Body dissatisfaction in male and female adults is strongly associated with quality of life impairment. Whether this is the case in adolescents, however, is unclear. This study aimed to examine the relationships of body dissatisfaction with quality of life among adolescents and to examine sex differences therein. Adolescent girls (n = 1135) and boys (n = 531) aged 12 to 18 years were recruited from secondary schools located in Australia. Students completed a survey that included measures of body dissatisfaction, eating disorder symptoms, and psychosocial- and physical-health-related quality of life. Results revealed that girls had higher levels of dissatisfaction than boys for each of the 12 body features assessed, including two features thought to be particularly relevant to boys, namely, height and body-build. No significant interactions between gender and body dissatisfaction were observed: The strength of the relationships between body dissatisfaction and quality of life impairment did not differ by gender, and this was the case for both physical-health related and psycho-social quality of life domains. For both girls and boys, the associations of body dissatisfaction with quality of life impairment persisted after controlling for eating disorder symptoms, BMI, and other covariates. Implications included that, while levels of body dissatisfaction remain higher in girls than in boys, the adverse impact of body dissatisfaction on adolescents’ quality of life is equally strong for boys as for girls. This impact entails impairment in both physical and psychosocial quality of life domains and does not appear to be accounted for by an association between body dissatisfaction and eating disorder pathology. The findings support the need to conceive of body dissatisfaction as a public health concern in its own right – mirroring concerns previously established in studies of adults.

**T072: Not Just a Girl’s Problem: the Relationship between Disordered Eating Pathology, Sense of Coherence and Body Image among Adolescent Boys in Israel**

*Yael Latzer*, DSc, Faculty of Social Welfare, Haifa University Rambam Medical Center, Haifa, Haifa, Israel  
*Zohar Spivak-Lavi*, PhD, Faculty of Social Welfare and Health Sciences, Haifa university, Haifa, Israel, Haifa, Israel  
*Irit Chen-Tsafay*, MA, Emek Ysreel Colege, Emek Ysreel, Israel  
*Orna Tzischinsky*, DSc, Emek Yzreel Colege, Emek Yzreel, Israel

Disordered eating pathology (DEP) is well documented mainly among adolescent girls. Recently, it has become more prevalent among adolescent boys. The aims of the study were: to describe the levels of DEP among a non-clinical sample of Jewish adolescent boys in Israel and to assess the role that body image and sense of coherence play in DEP in males. The sample consisted of 256 boys, grades 7-12, mean age 15.08 ± 1.35, mean BMI 21.05±3.43. They completed questionnaires measuring: Sense of Coherence (SOC), Body Shape (BSQ), and DEP. Findings revealed relatively lower overall levels of DEP among this sample (9.8%) compared to similar sample of girls (22.7%) in Israel and (17%) in US. Additionally, higher level of scene of coherence was associated with lower levels of DEP (EAT-26 r=-.203, p<0.001; EDI-DT r=-.291, p<0.001), and high levels of BSQ were associated with higher levels of DEP (EAT-26 r=0.541, p<0.001; EDI-DT: r=0.736, p<0.001). Regression analysis suggested that BSQ is an intermediate factor between SOC and DEP (β=.546, p<0.001). That is, higher SOC is associated with higher levels of BSQ and lower levels of DEP. These results demonstrate a relatively high prevalence of DEP among adolescent boys and emphasize that they are less at risk than girls for the development of EDs but at risk nevertheless. Results emphasize the role of body image and a SOC to DEP.

**T073: Disordered Eating Pathology among Adolescent Girls in Israel: the Role of Sense of Coherence and Body Image**

*Yael Latzer*, DSc, Faculty of Social Welfare, Haifa University, Rambam Medical Center, Haifa, Haifa, Israel  
*Orna Tzischinsky*, DSc, Emek Yzreel Colege, Emek Yzreel, Israel  
*Zohar Spivak-Lavi*, PhD, Acuity of Social Welfare and Health Sciences, Haifa University, Israel, Haifa, Israel

Over 50% of adolescent girls exhibit Disordered Eating Pathology (DEP) and body image disturbances, which are considered risk factors for Eating Disorders (EDs). Empirical studies have demonstrated that empowerment variables are important psychological contributors to the understanding of EDs and DEP. The aims of the study were: to describe the current levels of DEP among non-clinical sample of Jewish adolescent girls in Israel, and to assess the role that body image and a sense of coherence plays in
DEP. The sample consisted of 248 adolescents girls, grades 7-12, mean age 14.8 ± 1.48, who completed questionnaires measuring: Sense of Coherence (SOC), Body Shape (BSQ), and DEP. Finding revealed relatively higher overall levels of DEP in this sample (22.7%) compared to a similar population 10 years ago (16.9%) and as compared to other western countries (17%). Additionally, higher levels of a sense of coherence were associated with lower levels of DEP (r=-0.29, p<0.01 for EDI-DT and r=-0.19, p<0.01 for EAT-26). Regression analysis suggested that higher levels of coherence significantly predict lower levels of DEP (R=0.213, p<0.001), and that Body Shape is a partial mediator (R=0.417, p<0.000), according to the Sobel test. These results demonstrate a raise in the prevalence of DEP in adolescent girls in Israel in the last 10 years, and emphasize the role of body image and a sense of coherence in mitigating ED symptoms.

**T074: Percentile 5th, 10th, or 10th+ in Children and Adolescents with Anorexia Nervosa - Clinical Diagnostic Practice vs. Numerical Guidelines**

Loa Clausen, CPsychol, MPsyCh, PhD. Centre for Child and Adolescent Psychiatry, Aarhus University Hospital Risskov, Risskov, Central Denmark Region

Susanne Bergmann Andersen, MSc, Centre for Child and Adolescent Psychiatry, Aarhus University Hospital Risskov, Risskov, Central Denmark Region

Pil Lindgreen, MSc, RN; Student, PhD Student, Centre for Child and Adolescent Psychiatry, Aarhus University Hospital Risskov, Risskov, Central Denmark Region

Kristian Rokkedal, MD, Centre for Child and Adolescent Psychiatry, Aarhus University Hospital Risskov, Risskov, Central Denmark Region

The cut off for underweight in Anorexia Nervosa among children and adolescents is not easily determined. DSM-5 refers to Center for Disease Control (CDC) suggesting BMI-for-age below BMI 5th percentile as the numerical cut off guideline corresponding to BMI 18.5 for adults. The 5th percentile has also been suggested as cut off in the upcoming ICD-11 criteria for Anorexia Nervosa. Knowing the use of and need for a clear cut off and fixed numerical guidelines: we expect the 5th percentile to be used as the cut off for underweight in research on children and adolescents as BMI 18.5 is now used as the pathological cut off in research including adults. The evidence for this cut off is, however, sparse and in contrast to a) the relaxing of the weight criteria for adults done between DSM-IV and DSM-5 (from BMI 17.5 to 18.5), b) the recommendation of early intervention among children and adolescents, and c) the clinical practice which in some countries is to use the 10th percentile. In our study, a sub-sample of girls with a clinical diagnosis of Anorexia Nervosa (F50.0 and F50.1) was extracted from a sample of all 480 girls below 18 years treated in a specialized eating disorder center from 1997-2013. A cross sectional study comparing patients with a BMI-for-age below the 5th percentile with patients between the 5th and 10th percentile and patients above percentile 10 was conducted including data from initial assessment. Analyses are still in progress. Differences on eating disorder symptoms and scores on the Eating Disorder

**Examination will be presented and results discussed in relation to the researchers’ need for more fixed and numerical guidelines as well as the clinicians’ need for and use of more individualized clinical judgment.**

**T075: The Relationship between Excessive Dietary Restriction and Compulsive Exercise: An Examination of Specific Compulsions as Mediating Mechanisms**

Shelby Martin, BS: Student, Doctoral Student, Ohio University, Athens, Ohio

Sarah Racine, PhD, Ohio University, Athens, Ohio

Excessive dietary restriction and rigid, rule-driven exercise are two symptoms of anorexia nervosa (AN) that can be characterized as compulsive in nature. Indeed, obsessive-compulsive disorder (OCD) is often comorbid with AN, and AN symptom progression has been found to exacerbate OCD tendencies. OCD is also positively associated with compulsive exercise, independent of restriction. However, OCD is a multidimensional disorder composed of various symptom presentations. Currently, it is unclear what specific compulsions may account for the association between dietary restriction and compulsive exercise often seen in AN. The current study examined whether specific OCD compulsions (i.e., checking, ordering, cleaning) mediated the association between dietary restriction (measured by the Eating Pathology Symptoms Inventory Restricting subscale) and compulsive exercise (measured by the Commitment to Exercise Scale). Participants were female (n = 310) and male (n = 220) undergraduates. After controlling for sex and body mass index, both checking and ordering significantly mediated the association between dietary restriction and compulsive exercise, while cleaning did not. Since mean levels of OCD compulsions and compulsive exercise were higher in males than females, we examined sex differences in mediation results. Moderated mediation analyses revealed that the indirect effect of dietary restriction on compulsive exercise through compulsions was only significant for females. Thus, among females, dietary restriction may exacerbate OCD compulsions, which may then be manifested as compulsive exercise in individuals at risk for an eating disorder. Given our focus on compulsions, future research should explore specific obsessions that may link various disordered eating symptoms. Examining the efficacy of OCD interventions for eating disorder symptoms may also help advance current treatment options.

**T076: Self-Image and Risk of Suicide in Eating Disorders**

Andreas Birgegård, PhD, Karolinska Institute, Stockholm, Stockholm

Mikael Andersén, MSc. Uppsala University, Uppsala, Uppsala

Eating disorders (ED) are associated with increased suicide risk, detecting which is key to prevention. An important domain in ED, shown to be associated with symptoms, treatment dropout, and outcome, is self-image, as operationalized in the Structural Analysis of
Social Behavior (SASB) model. SASB is a circumplex organizing self-directed behaviors along an Affiliation (love vs. hate) and an orthogonal Autonomy (set free vs. control) dimension. In a recent study, SASB related to health care registry-based suicide attempts in different ED diagnoses. Methodology in that study ensured high specificity but risked lower sensitivity in suicide variables, and with such a high-threat outcome, research is needed on additional variables related to suicide risk. Using clinical patient assessments, we aimed to study associations between SASB self-image and clinician-rated as well as self-rated suicidality at presentation and as predicted over 12 months. Adult patients (N=551) from a Swedish clinical database included 19% anorexia, 32% bulimia, 7% binge ED, and 42% other specified feeding and ED, and 3% males. We ran separate regression models for these diagnostic groups using SASB questionnaire data, also controlling for general psychiatric and ED symptoms, and in longitudinal models including baseline of each outcome. Results showed that SASB alone was associated with suicidality at presentation (9-67% variance explained) and predictively over 12 months (7-29% variance), and in the majority of models explained additional variance beyond baseline and clinical variables. Both Affiliation and Autonomy related to dependent variables in diagnosis-specific patterns. The findings have implications for both theory and detection tools for suicide risk, as well as suggesting intervention targets to mitigate risk in treatment based on the well-validated SASB theory.

**T077: Abnormal Immune Functions and Eating Disorders: An Observational Study**

Agnes Ayton, MSc, FRCpsych, Oxford Health NHS Foundation Trust, Oxford, Oxfordshire
Alessandro Bruno, MD, Oxford Health, Oxford, Oxfordshire
Oana Ciobanu, MD, Oxford Health NHS Foundation Trust, Oxford, Oxfordshire
Nadia Hitchen, MBChB, Oxford Health NHS Foundation Trust, Oxford, Oxfordshire
Radhika Sholapurkar, Student, Oxford University, Oxford, Oxfordshire

There has been an increasing interest in the role of immune processes in the origin of mental disorders, including mood disorders and schizophrenia. A recent study also found an increased risk for autoimmune diseases in patients with eating disorders, but the link is not well established. The purpose of the present study was to evaluate the frequency of diseases associated with immune abnormalities in routine clinical practice. This was an observational study investigating the frequency of ICD-10 lifetime diagnoses in patients open to a specialist eating disorder service in Oxford. We included consecutive patients with a diagnosis of an eating disorder within an 18 months period. Information was collected from both the electronic health records and the GP records. Data were analysed by using SPSS. One hundred and sixty patient records were analysed: 93% were female. One hundred and one patients had anorexia nervosa/ataypical anorexia nervosa (mean age: 27.9±10.7 ys), 45 bulimia/ataypical bulimia nervosa (mean age: 29.1±11.3 ys) and 14 had binge eating disorder (mean age: 37.8±14.1 ys). The overall rate of comorbid diseases involving abnormal immune reaction was 31.6% affecting multiple organ systems. Twelve percent involved the respiratory system, 8.3% was dermatological, and 4.6% was endocrine. There was no significant difference between the main eating disorder categories. This study confirms that there is an association between eating disorders and immune abnormalities affecting multiple organ systems, which may have implications for understanding pathomechanisms and for potential new treatments. Larger studies are warranted to explore the nature of this association.

**T078: Examining the Validity of Exercise Measures for Adult Patients with Anorexia Nervosa.**

Sarah Young, DClinPsy/PhD Candidate, University of Sydney, Sydney, New South Wales
Stephen Touyz, MPsych, PhD, FAED, University of Sydney, Sydney, New South Wales
Caroline Meyer, PhD, The University of Warwick, Coventry, CV4 7AL
Jon Arcelus, MD, PhD, University of Nottingham, Nottingham, NG1 5BH
Paul Rhodes, PhD, University of Sydney, Sydney, New South Wales
Sloane Madden, MBBS, PhD, FAED, Sydney Children’s Hospital Network, Sydney, New South Wales
Kathleen Pike, MS, PhD, FAED, Columbia University, New York, New York
Evelyn Attia, MD, FAED, Columbia University, New York, New York
Ross Crosby, PhD, FAED, Neuropsychiatric Research Institute, Fargo, North Dakota
Jackie Wales, BA, Leicestershire Adult Eating Disorders Service, Glenfield Hospital, Leicester, Leicestershire
Phillipa Hay, MBBS, PhD, FAED, Western Sydney University, Sydney, New South Wales

Compulsive exercise is a key feature of anorexia nervosa (AN), but limited research has evaluated the various exercise assessment instruments commonly used in the field. The current study assessed the concurrent validity of the exercise section of the Eating Disorder Examination (EDE) and Eating Disorder Examination-Questionnaire (EDE-Q), with the Compulsive Exercise Test (CET) and other exercise self-report measures in outpatients with AN. The study also aimed to validate the CET in an adult clinical sample. 78 adults with AN (4 males) participated in the current study, all of whom were recruited for the randomized controlled trial ‘Taking a LEAP forward in the treatment of anorexia nervosa’. Prior to treatment, participants completed the EDE interview and a set of self-report questionnaires: the EDE-Q, CET, Commitment to Exercise Scale (CES), Exercise Beliefs Questionnaire.
(EBQ) and Reasons for Exercise Inventory (REI). We performed a series of correlational and regression analyses. On the EDE, exercise days and exercise time per day were positively associated with each other and with all CET subscales (except Lack of exercise enjoyment), CES mean, EBQ total and REI total. Exercise time per day positively correlated with the EDE global score. The CET demonstrated good to excellent reliability in this sample, and good concurrent validity with the EDE, EDE-Q, CES, EBQ and REI. The CET also accounted for the greatest variance in eating disorder psychopathology when compared with other self-report measures. Although further research is needed to evaluate the CET’s factor structure in a large clinical sample, the CET has demonstrated strong clinical utility in adults with AN.

**T079: Do Emotional Responses to Food Images Differ between People with Diverse Eating Disorders?**

Nasim Foroughi, PhD, Western Sydney University, Sydney, NSW
Phillippa Hay, PhD, FAED, Western Sydney University, Sydney, NSW
Sloane Madden, PhD, FAED, Eating Disorder Unit, Children’s Hospital at Westmead, Sydney, NSW
Simon Clarke, frACP, FAED, Adolescent Medical Unit, Westmead Hospital, Sydney, NSW, Australia, Sydney, NSW
Stephen Touyz, PhD, FAED, University of Sydney, Sydney, NSW
Michael Kohn, PhD, FAED, University of Sydney, Sydney, NSW

The purpose of this study was to investigate the negative and positive emotional responses to images of food in women suffering from different types of eating disorders (EDs). We compared the emotional responses to food images in women with Anorexia Nervosa (AN), Atypical AN, Bulimia Nervosa (BN), Binge Eating Disorder (BED), and an aged-matched healthy Control group. Adolescents and adult women aged ≥ 14 years old (n=139) and without (n=41) a history of an ED were recruited. The participants were asked to rate 16 images of different foods evoking fear, disgust, and happiness. The images were shown to participants at half-minute intervals and were rated using three separate visual analogue scales (one per image). The Control group was significantly happier, less fearful, and less anxious prior to viewing the food images compared to women with an ED. The negative emotive responses of fear and disgust were significantly greater (p<0.001) in the ED participants compared to the Control group controlling for age and BMI; however, groups did not differ in terms of happiness. The emotional responses towards food images were not significantly different within the ED groups. These findings highlight the importance of considering basic emotive responses when discussing food consumption and diet in people with EDs of all body weights. As people recover from anorexia nervosa they may continue to have strong negative emotive responses to food requiring ongoing psychological therapy.

**T080: Level of Impairment in Anorexia Nervosa-Restricting Type versus Binge-Eating/Purging Type**

Oyvind Ro, MD, PhD, Regional Department for Eating Disorders, Oslo University Hospital, Norway, Oslo, Norway
Deborah L. Reas, PhD, Regional Department for Eating Disorders, Oslo University Hospital, Norway, Oslo, Norway

This study investigated AN subtype differences in ED-specific impairment (global, personal, social, cognitive) and ED pathology in a treatment-seeking sample of 128 patients (BMI < 18.5) with restricting (AN-R) or binge-eating/purging (AN-BP) subtype. Based on average weekly (1 x per week) occurrence of either binge eating (> 4 OBEs during past 28 days) or purging behavior (> 4 episodes of self-induced vomiting or laxative use during past 28 days), 74 (59%) patients were categorized as AN-R and 54 (42.2%) AN-BP. After controlling for a significantly higher BMI among AN-BP vs AN-R (15.7 vs. 15.2, p = .049), preliminary findings showed significantly greater ED pathology across EDE-Q subscales and the global EDE-Q score (all p’s < .001). In line with the subtyping scheme, AN-BP also demonstrated significantly more self-induced vomiting, laxative use, and binge eating (p’s < .001) than AN-R, but groups did not differ in terms of excessive exercise (p = .520). There were no significant AN subtype differences on eating disorder-specific impairment (global, personal, social, or cognitive) assessed by the Clinical Impairment Assessment (CIA) (all p’s > .100). We found significant differences between AN-R and AN-BP in terms of ED pathology, yet similar levels of eating disorder-related impairment.

**T081: ‘Holy Anorexia’ - Relevant or Relic?**

Pyry Sipilä, MD, Department of Public Health, University of Helsinki, Helsinki, NA
Culnara Harrasova, MD, Department of Public Health, University of Helsinki, Helsinki, NA
Linda Mustelin, MPH, MD, PhD, Department of Public Health, University of Helsinki, Helsinki, NA
Jaakko Kaprio, MD, PhD, Institute for Molecular Medicine Finland FIMM, Helsinki, NA
Anna Keski-Rahkonen, MPH, MD, PhD, Department of Public Health, University of Helsinki, Helsinki, NA

Since medieval times, an association between religiosity and anorexia nervosa has been suggested, but few systematic studies have addressed this question. We conducted a nationwide study by screening women (N=2,825) from the 1975-79 birth cohorts of Finnish twins for lifetime DSM-5 anorexia nervosa (N=92). Parental religiosity was assessed by self-report when the women were aged 16 years. The women self-reported their religiosity at ages 16 and 22-27 years. Parental religiosity did not increase...
Establishing adherence to a nutritional program was observing a positive trend in weight recovery and their recovery. The primary recommendation was to patient's health prior to reincorporating exercise into multidisciplinary team assess five main aspects of a treatment. The panel recommended that a regarding the protocols for reincorporating exercise supported by NVivo11.2.2. Results suggested that there transcripts were analyzed using thematic analysis explorative semi-structured interviews. Verbatim ED treatment. An interview guide based upon the work and interest in the roles of exercise within EDs, and/or by current clinical expertise was international health professionals with expertise in ED recovery, such there are no formal protocols to guide the management and reincorporation of exercise during treatment. As a result, there continues to be controversy about the role of exercise during treatment. This study explored the perceptions and beliefs of ED health professionals regarding the aspects of a patient's health that should be considered prior to reincorporating exercise during treatment. Purposeful sampling was used to identify a panel of international health professionals with expertise in ED treatment and management (n=13). Expertise was determined through published scholarly research on exercise and EDs, and/or by current clinical work and interest in the roles of exercise within ED treatment. An interview guide based upon the research literature and project objectives guided explorative semi-structured interviews. Verbatim transcripts were analyzed using thematic analysis supported by NVivo11.2.2. Results suggested that there continues to be a lack of information and consensus regarding the protocols for reincorporating exercise during treatment. The panel recommended that a multidisciplinary team assess five main aspects of a patient's health prior to reincorporating exercise into their recovery. The primary recommendation was to medically clear a patient prior to exercise. Secondly, observing a positive trend in weight recovery and establishing adherence to a nutritional program was advised. The experts also recommended revising a patient's exercise history, and their activity goals. Lastly, the evaluation and review of a patient's mental state regarding exercise, their general mental health and their ability to engage in therapy was suggested. This foundational work may help address the existing gap in knowledge surrounding the role of exercise in treatment, particularly the appropriate time to reincorporate it into the ED care continuum and lends itself to promoting healthy relationships with exercise in the long term.

**T082: Reincorporating Healthy Exercise into the Treatment Plan: What to Evaluate and When?**

**Danika Quensel.** MSc, BHK, University of British Columbia, Kelowna, British Columbia

**Cristinan M. Caperchione.** PhD, University of British Columbia, Kelowna, British Columbia

Concern around compulsive exercise encourages therapists to instruct patients with eating disorders (ED) to abstain from exercise during treatment. New research has shown that healthy, prescribed exercise can benefit patient's physical, and mental health and prognosis. However, there is currently no consensus on what role exercise should play during ED recovery, a such there are no formal protocols to guide the management and reincorporation of exercise during treatment. As a result, there continues to be controversy about the role of exercise during treatment. This study explored the perceptions and beliefs of ED health professionals regarding the aspects of a patient's health that should be considered prior to reincorporating exercise during treatment. Purposeful sampling was used to identify a panel of international health professionals with expertise in ED treatment and management (n=13). Expertise was determined through published scholarly research on exercise and EDs, and/or by current clinical work and interest in the roles of exercise within ED treatment. An interview guide based upon the research literature and project objectives guided explorative semi-structured interviews. Verbatim transcripts were analyzed using thematic analysis supported by NVivo11.2.2. Results suggested that there continues to be a lack of information and consensus regarding the protocols for reincorporating exercise during treatment. The panel recommended that a multidisciplinary team assess five main aspects of a patient's health prior to reincorporating exercise into their recovery. The primary recommendation was to medically clear a patient prior to exercise. Secondly, observing a positive trend in weight recovery and establishing adherence to a nutritional program was advised. The experts also recommended revising a patient's exercise history, and their activity goals. Lastly, the evaluation and review of a patient's mental state regarding exercise, their general mental health and their ability to engage in therapy was suggested. This foundational work may help address the existing gap in knowledge surrounding the role of exercise in treatment, particularly the appropriate time to reincorporate it into the ED care continuum and lends itself to promoting healthy relationships with exercise in the long term.

**T083: Is Self-Treatment a Mechanism Between Emotion Dysregulation and Eating Disorder Symptoms?**

**Elin Monell.** MSc, Karolinska Institute, Stockholm, Stockholm

**Andreas Birgefård.** PhD, Karolinska Institute, Stockholm, Stockholm

Difficulties in emotion regulation demand attention as a central factor in eating disorder (ED). In a previous study using a non-clinical sample, we found significant intercorrelations between emotion dysregulation, self-image and ED symptoms, which resolved into clear statistical mediation: self-image was an intervening mechanism (mediator) between emotion dysregulation and ED symptoms. In the present study, we replicated this in a large clinical sample and expected similar mediation. Participants were Swedish ED patients from specialized ED-treatment units (N=854). Data was extracted from the Stepwise clinical database. All participants completed the Difficulties in Emotion Regulation Scale (DERS), the Structural Analysis of Social Behavior (SASB) self-image measure and the Eating Disorder Examination Questionnaire (EDE-Q). Correlations between scales were followed by simple mediation analysis with ED symptoms as outcome. The mediation model posited emotion dysregulation as the independent variable and self-image as the mediator. The model was tested in all cases and thereafter in groups divided by diagnosis. There were in general significant moderate to strong correlations between all main measures in all groups. As for the mediation analysis, the effect of emotion dysregulation on ED symptoms was mainly mediated by self-image. This indirect (mediation) effect was significant in all groups. There was no significant direct effect of emotion dysregulation on ED symptoms in any diagnostic group except in BN. The results replicated those previously found in the non-clinical sample. Results suggest that even if closely related, emotion dysregulation and self-image both contribute unique knowledge in relation to ED symptoms. Self-image as an intervening mechanism between emotion dysregulation and ED symptoms is relevant for models of the development, maintenance and treatment of ED, as well as treatment focus.
**T084: Cognitive Dissonance and Imagery Rescripting: A Randomised Controlled Trial of Two Brief Interventions for Disordered Eating in a High-Risk Sample**

**Jamie-Lee Pennesi**, BA, Flinders University, Adelaide, South Australia  
**Tracey, D. Wade**, PhD, Flinders University, Adelaide, South Australia

The main aim of the present research is to examine the efficacy of two brief interventions with respect to the reduction of risk factors for disordered eating, namely cognitive dissonance and imagery rescripting, to a control condition in a high-risk sample of body dissatisfied young women. Specifically, the study will investigate the extent to which each intervention decreases body dissatisfaction and negative affect, and increases self-compassion. Females aged 17-25 years will be recruited from an undergraduate student population and the wider community to participate in two phases of data collection over a period of one week, including a body dissatisfaction induction, brief intervention exercise, daily home practice, and one-week follow-up. Participants will be screened for high-risk status on the Weight Concerns Scale (WCS) and only those participants meeting criteria for high-risk will be invited to complete the second phase of the research including daily home practice and follow-up. Eligible participants will be randomly allocated to one of the three conditions (cognitive dissonance, imagery rescripting, or control). State measures will be collected at baseline, pre-induction, pre- and post-intervention, and at follow-up, and trait measures will be collected at baseline and at follow-up. Moderation analyses will also examine if any baseline variables moderate the impact of the intervention conditions. The information gained from this study will help to inform the development of future prevention approaches for disordered eating.

**T085: Quality of Life as a Vulnerability and Recovery Factor in Eating Disorders: A Community-Based Study**

**Deborah Mitchison**, MPsych, MSc, PhD, Macquarie University, Sydney, NSW  
**Lisa Dawson**, DPsych, PhD, University of Sydney, Sydney, NSW  
**Lucy Hand**, Student, Western Sydney University, Sydney, NSW  
**Jonathan Mond**, MPH, PhD, Western Sydney University, Sydney, NSW  
**Phillipa Hay**, DPhil, FAED, Western Sydney University, Sydney, NSW

Emerging evidence suggests that changes in quality of life (QoL) predicts later changes in eating disorder (ED) symptoms. The objective of this study was to explore individual sufferers’ perspectives on the influence of QoL on the onset, maintenance, and/or remission of ED symptoms. Nineteen women from the community with a history of an eating disorder (n = 13 currently symptomatic; n = 6 recovered) were interviewed about their observations on the relationship between QoL and ED symptoms over time in their own lives. Interviews were audio-taped and transcribed, and then thematically analysed. Thematic analysis uncovered two major themes: 1. QoL as a Vulnerability Factor, and 2. QoL as a Recovery Factor. In relation to the first theme, the onset of ED symptoms was discussed by women in this study as having been triggered by impairment in QoL, including a general sense of lacking control in life, stress, abusive intimate relationships, poor role modelling from family, physical impairment related to obesity, peer pressure, and weight-related teasing. On the other hand, and in relation to the second theme, subsequent improvement in QoL was nominated as central to symptom improvement and recovery. QoL improvement was described by participants differently, but included increased general satisfaction in life, emotional maturation, prioritising and improving physical health, the development of a supportive intimate relationship and social relationships, and having children. Impairment in QoL may act as a trigger for the onset and maintenance of ED symptoms, whereas improvement in QoL may be central to eating disorder improvement and eventual recovery. Treatment should involve consideration of a core focus on QoL improvement as a potential ‘backdoor’ approach to improving ED symptoms.

**T086: Exploring the Relationship between Emotion Regulation Strategies and Eating Psychopathology in Competitive Athletes and Non-Athletes: The Mediating Role of Compulsive Exercise**

**Carolyn Plateau**, MA, MResl, PhD, Loughborough University, Loughborough, Leicestershire  
**Jon Arcelus**, MRCPsych, MSc, MD, PhD, FAED, Nottingham University, Nottingham, Nottinghamshire  
**Caroline Meyer**, PhD, University of Warwick, Coventry, Warwickshire

Compulsive exercise has been conceptualised as one maladaptive strategy of emotion regulation that has been linked with increased eating psychopathology. This study explored the links between emotion regulatory strategies and eating psychopathology among athletes and non-athletes, and investigated a potential mediating role of compulsive exercise. A sample of 465 participants (241 athletes and 224 non-athletes) aged between 18-46 years completed the Eating Disorder Examination Questionnaire (EDE-Q), the athlete version of the Compulsive Exercise Test (CET-A) and Difficulties in Emotion Regulation Scale (DERS). The findings indicated significant associations between DERS scores and CET-A scores among both non-athletes and athletes. CET-A scores were found to partially mediate the relationships between DERS subscales and EDE-Q scores among athletes and, to a lesser extent, non-athletes. Compulsive exercise is a maladaptive emotion regulation strategy that may be particularly pertinent among athletes, and may...
engender an increased risk for eating psychopathology in this group. The findings point towards a need to educate and support athletes in engaging with more functional emotion regulation strategies, as a means of preventing compulsive exercise and potentially eating psychopathology in this group.

T087: Modifying Automatic Processes to Influence Risk for Disordered Eating

Emily Matheson, BPsych(Hons), Flinders University, Adelaide, South Australia
Tracey Wade, BSc, MPsych, PhD, Flinders University, Adelaide, South Australia

The current study investigated two experimental paradigms that target mechanisms at the automatic processing level: specifically attentional bias and evaluative associations. The main aim was to examine the modification of attentional bias and evaluative associations, and the subsequent impact on body dissatisfaction and negative affect. Participants were female university students (N=21) who were randomised into one of three groups: Attentional bias, evaluative conditioning, or an active control (Tetris). Initially, participants underwent an induction designed to induce body dissatisfaction and negative affect. Immediately following, participants completed a computerised experimental task, where they were trained to attend to positive appearance-related information or associate their physical appearance with positive social stimuli; meanwhile the control condition completed Tetris. Preliminary findings showed that Tetris significantly improved body dissatisfaction and negative affect, relative to the two experimental tasks. More specifically, participants’ body dissatisfaction and negative affect were unaffected by the attentional training condition, and participants’ symptomatology was exacerbated when trained to associate their physical appearance with positively valenced social cues. As data collection is continuing, results will also be reported on a larger sample. The current findings, although preliminary, suggest that the use of Tetris is worth exploring with respect to improving body image as part of the baseline assessment of a larger intervention study.

T088: Body Image and Self-Compassion: Gender Differences in Adolescents

Debra L. Franko, PhD, Northeastern University, Boston, Massachusetts
Rachel Rodgers, PhD, Northeastern University, Boston, Massachusetts
Elizabeth Donovan, PhD, Northeastern University, Boston, Massachusetts
Tara Cousineau, PhD, Northeastern University, Boston, Massachusetts
Elizabeth Cook, MS, Northeastern University, Boston, Massachusetts
Alice Lowy, MA, Northeastern University, Boston, Massachusetts
Kayla Yates, BS, Northeastern University, Boston, Massachusetts
Kayla McGowan, BA, Northeastern University, Boston, Massachusetts

Background: A growing body of literature has highlighted the association between self-compassion and positive body image among young women; however, little is known about these relationships among males. As sociocultural pressures on appearance and body ideals are gendered, it is important to understand how these associations may differ among males and females. Thus, our aim was to examine gender differences in the relationships between dimensions of self-compassion and body image.

Methods: A sample of 73 male and 204 female mid to late adolescents (13 to 19 years old) completed self-report measures of self-compassion and body image as part of the baseline assessment of a larger intervention study. Results: Male adolescents reported higher levels of positive self-compassion dimensions (self-kindness, common humanity, and mindfulness) and lower levels of negative dimensions (self-judgment, over-identification, and isolation) compared to females (p = .037 to p < .001). Among females, all dimensions of self-compassion were correlated with body image acceptance and appearance esteem (r = .22 to .57). However, among males, while the negative dimensions of self-compassion were associated with body image acceptance and appearance esteem (r = .30 to .56), of the positive dimensions, only self-kindness was associated with appearance esteem (r = .36). Discussion: These findings suggest that, contrary to females, among males positive self-compassion may not help foster positive body image. These findings may reflect gender differences in the centrality of appearance to identity and suggest that interventions aiming to improve body image through fostering positive self-compassion may be most effective among females.

T089: Descriptive Analysis of 6 Year Data of Patients with Eating Disorders in Children and Adolescents, National University Hospital, Singapore

Dr. Rajeev Ramachandran, MBBS, MD, National University Hospital, Singapore

Aim: To understand the demographics, clinical features and outcomes of paediatric and adolescent patients attending the multi-disciplinary Eating Disorder (ED) management program at the National University Hospital, Singapore. There are no previous studies in paediatric/adolescent patients from this region in this subject. Methods: The case notes of all patients (n=82) followed up by the ED Program under the adolescent medical service at the National University Hospital (NUH) Singapore between January 2011 and June 2016 were reviewed. Patient characteristics and outcomes data were abstracted and summarized. Results: The
average age at onset of symptoms was 14.6 years (8.8 - 18.8 yrs). Most of our patients were female (93%). The patients were predominantly Chinese (84 %). While Malays make up 13% of the Singaporean population, they only represented 2% of our ED population. Majority (87%) of our patients had a diagnosis of Anorexia Nervosa (AN) with 9% and 5% diagnosed with eating disorder not otherwise specified (ED NOS) and Avoidant/Restrictive Food Intake Disorder (ARFID), respectively. There were no patients with Bulimia Nervosa (BN). A large proportion (57%) of patients required inpatient management, for an average length of stay of 64 days. 9% of our patients developed re-feeding syndrome during the nutritional rehabilitation, which is 15% of the admitted patients. Major depressive disorder was the most common psychiatric co-morbidity (38%). Self-harm was noted in 13%, with active suicidal ideation in 6%. 13% of our patients were discharged after full remission. We did not have any mortality in our cohort. Conclusions: Further evaluation of the lower prevalence of BN, lower representation of boys and patients of Malay background is required.

Co-morbid psychiatric conditions were common, the proportion of patients requiring inpatient care was large and hospital stay was long. This could be addressed by the addition of an integrated ambulatory day therapy program and introducing family based therapy as the recommended treatment.

**T090: Family Involvement in Inpatient Treatment of Anorectic Children**

Maiken Fjelkegård, DClinPsy, Stockholm Center of Eating Disorders, Stockholm, Stockholm

Maiken Fjelkegård, DClinPsy, The Stockholm Center of Eating Disorders, Stockholm, Stockholm

Else Marie Olsen, MD, PhD, Associated Professor, Department of Public Health, Vection for Social Medicine, University of Copenhagen, Copenhagen, Copenhagen

Yvonne von Hausswolff-Juhlin, DClinPsy, Associated Professor, Stockholm Center of Eating Disorders, Stockholm, Stockholm

The question addressed in this study is whether parents actively participating in inpatient treatment affect the duration of admission time, the number of readmissions, weight gain and the need of outpatient treatment after discharge. This study is retrospective and compares two specialized inpatient units for treatment of severe anorectic young patients, one in Stockholm and one in Copenhagen. In Stockholm the parents participate in treatment in the unit, being responsible for making their child gain weight. In Copenhagen the unit’s staff is responsible for changing the patients’ behavior. All inpatients during the period 2012 07 01 till 2013 12 31 are included in the study and data are drawn at four points of time: date of admission, 10 weeks, 6 months and 12 months after. Patients from the two units are compared concerning baseline data and outcome. In order to evaluate if the two groups are comparable, data on structural differences between the two units and the severity of the disease are registered. 53 patients were included in Stockholm and 34 patients in Copenhagen. At start there was no difference in age or weight between the two groups. The results show that the average admission time in Stockholm was 7.6 weeks, in Copenhagen 16.6. The number of readmissions was somewhat higher in Copenhagen. There was no difference in weight gain after 1 year. The results could indicate that parental involvement in inpatient treatment of anorectic children shortens the admission time without affecting weight gain. This also implies that the children can return to school earlier as the parents can deal with food and feelings.

**T091: Emotion Dysregulation across the Spectrum of Pathological Eating: Comparisons among Women with Binge Eating, Overeating, and Loss of Control**

Sarah Racine, PhD, Ohio University, Athens, Ohio

Sarah Horvath, BS, Ohio University, Athens, Ohio

Etiologic and maintenance models of binge eating and eating disorders specify a role for emotion regulation difficulties. Individuals with bulimia nervosa and binge eating disorder have poorer emotion regulation than controls, and negative affect increases prior to, and decreases following, binge episodes. However, differential associations between emotion dysregulation and the two components of binge eating – overeating and loss of control (LOC) – have not been examined. This research may point to mechanisms that link emotion dysregulation to binge eating and other pathological eating behavior. The current study compared emotion dysregulation dimensions in women with objective binge eating (OBES: n = 27), overeating only (n = 25), LOC only (n = 32), or no pathological eating (n = 137). To overcome limitations of self-report measures, we required endorsement/denial of pathological eating behaviors on both the Questionnaire on Eating and Weight Patterns-5 and the Eating Disorders Diagnostic Scale. The Difficulties in Emotion Regulation Scale (DERS) and the Emotion Regulation Questionnaire (ERQ) were used to assess emotion dysregulation. Groups differed as expected on binge eating severity, global eating disorder severity, and clinical impairment. Women with OBES had significantly higher DERS Total, Strategies, and Impulse scores than all other groups. Women with OBES and women with overeating had similar levels of lack of emotional clarity, whereas women with OBES and women with LOC had similar levels of non-acceptance of emotions. Groups did not differ on ERQ Reappraisal and Suppression. Findings indicate that the combination of overeating and LOC eating is associated with greater emotion regulation difficulties, but certain facets of emotion dysregulation differentially relate to overeating and LOC. Future research should move beyond self-report to examine relations between behavioral and physiological indices of emotion regulation and binge eating components.
T092: APOLO-Teens, an Internet-based Program for Overweight/Obese Adolescents under Treatment

Sofia Ramalho, MSc, University of Minho, School of Psychology, Braga, Braga
Cátia Silva, MSc, University of Minho, School of Psychology, Braga, Braga
Diana Silva, PhD, Centro Hospitalar de São João, Porto, Porto
Helena Mansilh, MD, Centro Hospitalar do Porto, Porto, Porto
Henedina Antunes, MD, PhD, Hospital de Braga, Braga, Braga
Pedro Saint-Maurice, PhD, University of Minho, School of Psychology, Braga, Braga
Paulo Machado, PhD, FAED, University of Minho, School of Psychology, Braga, Braga
Eva Conceição, PhD, University of Minho, School of Psychology, Braga, Braga

We aim to present the study protocol and the baseline sample characterization of a Randomized Controlled Trial (RCT) to examine the effectiveness of APOLO-Teens, an internet-based program intervention to support weight loss in overweight and obese adolescents, as a supplementary tool for weight loss treatment. The intervention program protocol will be presented in detail as well as preliminary data characterizing the baseline assessment (first medical appointment). This is a RCT with two groups of overweight and obese adolescents: a control group undergoing treatment as usual (TAU) provided at public Portuguese hospitals in the north of Portugal and an intervention group (IB-CBT) with access to the internet-based program for 6 months besides TAU. In this study, a total of 120 participants, aged between 13-18 years with BMI ≥ 25 Kg2, are being recruited. The internet-based program includes: (a) weekly cognitive-behavioral-based tasks, (b) a weekly feedback messaging system that sends a feedback statement related to information reported by the participant, and (c) interactive chat sessions with a trained psychologist. Preliminary data describes a sample where the mean age of the participants (N=30) was 15 years (SD=1.53). Most participants were male (56.3%). Higher food preoccupation was associated with lower quality of life (rs = -0.45, p < 0.05), higher levels of stress (rs = 0.49, p < 0.05) and anxiety (rs = 0.63, p < 0.01). Female participants presented higher levels of depression when compared with male participants (U = 59.50, p < 0.05). APOLO-Teens is an intervention protocol to support weight loss interventions conducted in clinical medical centers, bridging the gap between patients and professionals. Further research is needed to investigate if baseline characteristics predict different patterns of change on weight, eating-related variables and levels of physical activity across the several assessment times.

T093: The Role of Weight Suppression and Weight Loss Rate as Factors in Psychopathology and Response to Treatment of Eating Disorders

Enrico Collantoni, MD, University of Padua, Padua, Veneto
Davide Gallicchio, MD, University of Padua, Padua, Veneto
Lucia Pedrina, MD, University of Padua, Padua, Veneto
Elsa Bonello, PsyD, University of Padua, Padua, Veneto
Tatiana Zanetti, PsyD, University of Padua, Padua, Veneto
Manuela Soave, PsyD, University of Padua, Padua, Veneto
Elena Tenconi, PhD, PsyD, University of Padua, Padua, Veneto
Paolo Santonastaso, MD, University of Padua, Padua, Veneto
Angela Favaro, MD, PhD, University of Padua, Padua, Veneto

In this study we aim to assess the role of Weight Suppression (WS) in Eating Disorders, considering it not only from a quantitative point of view (calculated as the difference between the maximum weight ever achieved in life and the actual weight) but also assessing the speed of the weight loss by using a new parameter: the Weight Loss Rate (WLR). We analysed the role of these two indexes in different eating and general psychopathological domains, considering both eating behaviours and outcome profiles. The sample consisted of 414 patients, including 62 with AN Binge Purge subtype (ANBP), 146 with AN Restrictive Subtype (ANR) and 206 with Bulimia Nervosa (BN). DSM-5 criteria have been used to code diagnosis. Data about response to treatment were available for a subsample of 201 patients (33 ANBP, 84 ANR and 84 BN). A cross-sectional design was used for the clinical symptoms detected during the initial assessment and a longitudinal design was adopted for the response to treatment analysis. No significant relationship emerged between both WS and WLR and variables collected at baseline assessment. We observed, on the contrary, a significant association between WS and weight gain at the end of treatment. Moreover, high WLR predicted remission of binge eating and compensatory behavior at the end of treatment in BN patients. Finally, we further analyzed our data in order to identify threshold values of both WS and WLR of clinical utility. The role of WS and WLR as predictive factors in the outcome of eating disorders is of great interest and these initial results remark the usefulness of collecting these data during the initial assessment in order to plan a tailored therapeutic intervention.
Body comparison is a common phenomenon in eating disorders, but our understanding of it is limited. This study reports on the development of a measure that addresses the full range of body comparison phenomena, and in a way that is more clinically useful than existing measures. 412 participants completed a new measure of body comparison – the Comparison of Self Scale (CoSS). They also completed existing measures of body comparison, eating disordered cognitions and behaviours, anxiety, depression, and body dissatisfaction. Test-retest reliability was tested two weeks later. Factor analysis showed that 22 of the 37 CoSS items loaded onto two factors, which resulted in two scales – Appearance comparison and Personality comparison. These scales had strong internal consistency and test-retest correlations. The CoSS correlated with another measure of body comparison and both were related to levels of eating pathology, but the CoSS was superior in accounting for depression and anxiety, and is substantially shorter. The CoSS has been shown to have strong psychometric properties, and to have superior clinical utility to existing body comparison measures. Given that it is a relatively brief measure, it can be recommended for the routine assessment of body comparison as a maintaining feature of eating disorders. Such assessment might allow clinicians to formulate cases and plan treatment for the individual with body image concerns. However, the measure awaits full clinical validation. Key words: Body image; safety behaviours; body comparison; eating disorders.

Body dissatisfaction is associated with impairment in women’s quality of life (QoL). To date, however, research has not examined the relationship of body dissatisfaction with men’s QoL, nor have sex differences in this relationship been examined. The purpose of the study was to examine these relationships among a nationally representative sample of Australian adults. A community sample of 966 male and 1,031 female adults living in Australia were recruited and completed a pen-and-paper survey that asked questions about their body dissatisfaction, mental health- and physical health-related QoL, and eating disorder symptoms. Data were analysed using three hierarchical multiple regressions and interactions between body dissatisfaction and sex were examined. Results showed that 60.4% of males and 80.0% of females reported at least some level of body dissatisfaction, and that 15.2% of males and 33.0% of females reported moderate-to-marked levels of body dissatisfaction. For both sexes, increasing levels of body dissatisfaction were associated with poorer mental and physical health-related QoL and greater psychological distress. Significant interactions between gender and body dissatisfaction were observed. Specifically, the adverse associations between body dissatisfaction and mental health-related QoL, and between body dissatisfaction and psychological distress, were more pronounced for males relative to females. These relationships were independent of the well-studied relationship between eating disorder symptoms and QoL. Stigmatisation of males who experience body dissatisfaction likely compounds males’ suffering and may partially explain why highly body dissatisfied males reported greater quality of life impairment compared with women. In conclusion, body dissatisfaction is a public health problem – distinct from the eating disorders and other adverse psychological phenomena for which body dissatisfaction is commonly discussed as a risk factor. Males, historically understudied and underrepresented in body image research, warrant increased empirical attention.

Social media is saturated with appearance ideal images. Engagement with such content has been shown to be associated with low body satisfaction. However, media literacy (critical thinking) has not been examined as a protective factor and experimental study design has been limited by issues of ecological validity. This study aimed to confirm that viewing Instagram images has a negative impact on body image using an ecologically valid design, in both males and females, and importantly to examine whether social media literacy moderated outcomes. The study was presented as an investigation of the effects of alcohol promotion on social media. Participants were 87 males (Mage = 23.3, SD = 5.4) and 154 females (Mage = 23.6, SD = 5.5).
concern about ED and beliefs that their child had with perceptions of greater consequences and caregivers, guilt about their child’s ED was associated less perceived personal control over ED symptoms. In scores were associated with perceptions of greater treatment could help their child with an ED (t=-4.17, p<.001). Parents expressed greater hope about ED (t=-5.89, p<.001), and emotional impact of negative beliefs regarding illness consequences (t=-4.72, p<.001). Illness Perceptions Questionnaire at treatment outset. and their primary caregivers completed the Brief youth and parent perceptions, ED symptom severity, comorbid symptoms, and caregiver variables. Forty-three adolescents (ages 12-18) with newly diagnosed AN (65.1%), atypical AN (30.2%), and ARFID (4.7%), and their primary caregivers completed the Brief Illness Perceptions Questionnaire at treatment outset. Compared to youth, caregivers expressed more negative beliefs regarding illness consequences (t=3.36, p<.01), length of illness (t=2.61, p<.01), concern about ED (t=-5.89, p<.001), and emotional impact of ED (t=-4.17, p<.001). Parents expressed greater hope that treatment could help their child with an ED (t=4.72, p<.001). In youth, greater EDEQ, MASC, and CDI scores were associated with perceptions of greater consequences of ED, illness chronicity, and emotional impact of ED. less hope that treatment could help, and less perceived personal control over ED symptoms. In caregivers, guilt about their child’s ED was associated with perceptions of greater consequences and concern about ED and beliefs that their child had more personal control over symptoms. Interestingly, caregiver perceptions were not associated with EDEQ, MASC, or CDI scores. Given the role of illness beliefs in important treatment variables, findings from this study have important treatment implications, in both FBT and individual therapy approaches.

T097: Illness Beliefs in Youth with Eating Disorders and Their Caregivers: Concordance Rates and Implications for Treatment

Abigail Matthews, PhD, Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio
Claire Peterson, PhD, Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio

Beliefs about one’s illness are associated with treatment engagement, outcomes, and illness coping across an array of medical and mental problems. Research examining illness perceptions in pediatric eating disorders (ED) is lacking, particularly in caregivers who assume the primary treatment role in family-based therapy (FBT). As such, the aims of this study included: 1) an examination of concordance rates of illness perceptions in youth with newly diagnosed ED and their caregivers; and 2) the relation between youth and parent perceptions, ED symptom severity, comorbid symptoms, and caregiver variables. Forty-three adolescents (ages 12-18) with newly diagnosed AN (65.1%), atypical AN (30.2%), and ARFID (4.7%), and their primary caregivers completed the Brief Illness Perceptions Questionnaire at treatment outset. Compared to youth, caregivers expressed more negative beliefs regarding illness consequences (t=3.36, p<.01), length of illness (t=2.61, p<.01), concern about ED (t=-5.89, p<.001), and emotional impact of ED (t=-4.17, p<.001). Parents expressed greater hope that treatment could help their child with an ED (t=4.72, p<.001). In youth, greater EDEQ, MASC, and CDI scores were associated with perceptions of greater consequences of ED, illness chronicity, and emotional impact of ED. less hope that treatment could help, and less perceived personal control over ED symptoms. In caregivers, guilt about their child’s ED was associated with perceptions of greater consequences and concern about ED and beliefs that their child had more personal control over symptoms. Interestingly, caregiver perceptions were not associated with EDEQ, MASC, or CDI scores. Given the role of illness beliefs in important treatment variables, findings from this study have important treatment implications, in both FBT and individual therapy approaches.

T098: Adolescent Eating Disorder Patients in Spain: An Examination of Psychiatric Comorbidity and Caregiver Distress as Compared to Substance Use Disorder Patients

Dimitra Anastasiadou, MSc, PhD, University Oberta de Catalunya, Barcelona, Catalunya
Melissa Parks, BA, MSc, Autonomous University of Madrid, Madrid, Madrid
Agostino Brugnera, MSc, University of Bergamo, Bergamo, Lombardy
Ana Rosa Sepulveda, PhD, Autonomous University of Madrid, Madrid, Madrid
Montserrat Graell, MD, PhD, Niño Jesus University Hospital, Madrid, Madrid

Alarmingly high rates of comorbidity have been reported among eating disorder (ED) patients. Psychiatric comorbidity has been shown to affect prognosis and treatment outcome, and may influence the type of treatment selected. To date there are a shortage of studies using clinician administered interviews to assess rates of comorbidity in ED patients in Spain, particularly among adolescents. Thus, the primary aim of this study was to use a semi-structured diagnostic interview to assess rates of Axis I disorders among adolescent ED patients, comparing them to a patient group with another chronic psychiatric disorder with adolescent onset: substance use disorder (SUD). A secondary aim was to examine the relationship between psychological variables of the patients (presence of a comorbid disorder, anxiety, depression and symptom severity) and the distress (anxiety and depression) of their mothers. The cross-sectional study included 60 ED patients, 48 SUD patients, and their mothers. More than half of the patients received a diagnosis of a comorbid disorder. Internalizing problems were more common among EDs and externalizing disorders were the most common comorbidities among SUDs, which is similar to findings from other countries. Mother’s distress was associated with worse depression and symptom severity among patients. No differences were found between the level of distress experienced by mothers of a child with a comorbid disorder and those without. Furthermore, elevated anxiety or depression in mothers did not increase the likelihood that patients presented a particular primary diagnosis. Despite the fact that both disorders share certain underlying features, results show that the type of psychiatric comorbidity was specific to each illness and that the presence of a comorbid disorder was not related to differences in parental distress. Finally, results provide further support for targeting parent’s anxiety and depression in therapeutic interventions for both groups.
T099: A Systematic Review of Social Functioning in Anorexia Nervosa

Candace Jones, BS, MD Candidate Class of 2018, University of Miami Miller School of Medicine, Miami, Florida
Rishi Rikhi, BS, MD Candidate Class of 2018, University of Miami Miller School of Medicine, Miami, Florida
Edgar Alegre, BA, MD, Universidad San Martin de Porres, Lima, Lima
Ingrid Barrera, BA, PhD, University of Miami Department of Psychiatry and Behavioral Sciences, Miami, Florida

Limited studies regarding anorexia nervosa and its relation to social functioning have been conducted. Nevertheless, current literature identifies specific personality traits in patients with anorexia nervosa in relation to impaired social cognitive processing and interpersonal difficulties. This systematic review aims to evaluate clinical trials over the past 15 years regarding impaired social functioning in patients diagnosed with anorexia nervosa. The authors conducted an extensive literature search, using four databases: PsycINFO, Pubmed, MEDLINE, and EBSCO. We used the key words, “anorexia social anxiety”, “anorexia social cognition”, “anorexia interpersonal traits”, “anorexia social avoidance”, and “anorexia social emotional responses”. Thirty-two papers were included in this review, all suggesting poor social functioning divided into social inhibition/avoidance (n=16) and interpersonal impairment (n=16), with 2047 anorexia nervosa patients and a total of 6007 participants including controls and other diagnoses. Social inhibition/avoidance clinical trial measures included social anxiety, preference of socially isolating activities, and social features of autism spectrum disorder. Interpersonal impairment clinical trial measures included alexithymia, misreading of social cues, and hypersensitivity in social relationships. These social impairment comorbidities appear independent of body image and should be recognized as separate undiagnosed conditions contributing to anorexia development and maintenance. The authors urge further clinical studies to increase clinician awareness of underlying social impairment disorders in anorexia nervosa patients, as well as to create guidelines of underlying social impairment disorders in anorexia to increase clinician awareness of disordered attitudes and behaviors. The authors urge undiagnosed conditions contributing to anorexia development and maintenance. The authors urge further clinical studies to increase clinician awareness of disordered attitudes and behaviors.

T100: Using Fat Talk Measures with Ethnically Diverse Female and Male College Students: Measurement Equivalence and Contributions to Eating Disordered Attitudes and Behaviors

Michael R Sladek, BA, MA, Student, Arizona State University, Tempe, Arizona
Rachel H Salk, PhD, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania
Renee Engeln, PhD, Northwestern University, Evanston, Illinois

Examining whether “fat talk” (engaging in negative body-related conversations) varies across ethnic groups requires establishing measurement invariance (equivalence) of available measures. This psychometric process tests whether observed group differences are attributable to true latent differences or to measurement properties (e.g., item wording) that can produce different item responses across different ethnic groups. The purpose of this study was to 1) test measurement equivalence of two brief survey assessments of fat talk for ethnically diverse female and male undergraduate students in the U.S., and 2) test whether fat talk predicts eating disordered attitudes and behaviors in a sample of ethnically diverse students. Female participants (N = 1501, Mage = 18.86, range: 18-33) completed the 13-item Negative Body Talk (NBT) Scale. Male participants (N = 1436, Mage = 19.39, range: 18-35) completed the 16-item Male Body Talk (MBT) Scale. For both measures, participants responded to example body-related comments with how often they say similar things aloud (1=never to 7=always). The NBT’s 13 items comprise two factors, Body Concerns and Body Comparison; the MBT’s 16 items comprise two factors, Muscle Talk and Fat Talk. A series of nested multiple group confirmatory factor analysis (CFA) models were used to test configural invariance (equivalence of 2-factor structures across ethnic groups), metric invariance (equivalence of factor loadings), and scalar invariance (equivalence of loadings and item intercepts). Model fit indices provided support for scalar (strong) invariance of these two measures across White, Latina/o, and Asian undergraduate students. In a follow-up study with a representative subsample of 231 women, NBT scores for Body Concerns significantly predicted eating disordered attitudes and behaviors, $\beta = 0.22$, $p < .01$, after adjusting for body mass index (BMI) and body dissatisfaction, $\Delta R^2 = .03$. In a similar follow-up study with 149 men, MBT scores for Muscle Talk, $\beta = 0.29$, $p < .001$, and Fat Talk, $\beta = 0.45$, $p < .001$, significantly predicted eating disordered attitudes and behaviors, after adjusting for BMI and upper body dissatisfaction, $\Delta R^2 = .15$ and .08, respectively. Women and men who more frequently engage in fat talk may be at heightened risk for disordered eating.

T101: What are Clinicians’ Experiences of the Feasibility of Using the Smartphone Application Recovery Record in Interdisciplinary Eating Disorder Treatment?

Pil Lindgreen, MSc, RN, Student, PhD Student, Centre for Child and Adolescent Psychiatry, Aarhus University Hospital, Risskov, Central Denmark Region
Kirsten Lomborg, MSc, PhD, RN, Professor, Research Programme in Patient Involvement, Aarhus University Hospital, Aarhus C, Central Denmark Region
Loa Clausen, CPsychol, MPsysch, PhD, Associated Professor, Centre for Child and Adolescent Psychiatry, Aarhus University Hospital, Risskov, Central Denmark Region
In Denmark, more than 60,000 people have eating disorders, which can be severe, even lethal illnesses. The prospects of recovering increase when patients are engaged in treatment by performing meal self-monitoring. However, this is often difficult to maintain. As a digital, interactive alternative to pen-and-paper meal diaries, the smartphone application Recovery Record may facilitate patient self-monitoring thus improving treatment outcome. Recovery Record holds the option for patients in treatment to link with their clinician using the clinician interface of the app. When linked, the clinician is able to review patient data in-between treatment sessions and provide feedback. As the use of smartphone applications in treatment programs, psychiatry especially, is fairly new; only few studies have been conducted exploring the feasibility, user acceptance, effect on outcome as well as patient and clinician usage over time of health-related smartphone applications. Thus, our study purpose was to gain knowledge on the clinician experiences with using the smartphone application Recovery Record for self-monitoring in interdisciplinary eating disorder outpatient treatment. Clinician experiences were explored through individual interviews, focus group interviews and participant observations. 23 clinicians of different professions participated. Data was collected and analysed concurrently according to the applied approach of Interpretive Description. Thus, initial findings informed the subsequent data collection and vice versa, thus ensuring the validity and relevance of the study. Data is still being analysed, but preliminary findings include the themes; setting expectations; when support becomes control; turning setbacks into progress; when patients’ vulnerability becomes commitment; when data overload turns into guilt. Our findings may affect treatment programs by illuminating advantages and disadvantages of using Recovery Record. Furthermore, they may influence future development of and research on similar applications. The study at hand is part of a PhD project also exploring a) patient experiences with using Recovery Record, b) patient application use over time and c) correlations between application use and eating disorder symptom development.

**T102: Do Bulimic Patients hear a Bulimic Voice? Comparing Critical Thoughts and Voices in Anorectic and Bulimic Patients**

Greta Noordenbos, PhD, Leiden University, Leiden, Holland

Objectives: Having critical thoughts and hearing a critical inner voice is often found in anorectic patients, but what about bulimic patients? Do they also have inner critical thoughts and hear a Bulimic Voice? In this study anorectic and bulimic patients are compared concerning self-criticism and hearing a critical inner voice. Method: In a cross-sectional case-control design 92 anorectic and 38 bulimic patients participated. A survey was used with the following instruments: the Forms of Self-criticizing/Attacking and Self-reassuring Scale, the Psychotic Symptom Rating Scales and The Beliefs About Voices Questionnaire. Mann Whitney U tests and Kendall’s Tau-b correlations and a logistic regression analysis were made in SPSS. Results: Anorectic and bulimic patients did not differ in frequency and duration of hearing a critical inner voice, except for the content of the voice whereby bulimic patients reported more criticism about having binges and compensating behavior. Self-criticism was significantly related to hearing a critical inner voice in both groups. Conclusion: Not only anorectic but also bulimic patients may hear an inner voice which is very critical about their binges and compensating behaviour, body and weight. More research is necessary to study how treatment can reduce self-criticism and hearing an inner voices. Keywords: Anorexia nervosa; bulimia nervosa; inner criticism; Anorectic Voice, Bulimic Voice

**T103: Cognitive Confidence in Obsessive-Compulsive Disorder and Eating Disorders: A Systematic Review**

Catherine Ouellet-Courtois, BA, MSc, Université de Montréal, Montreal, Quebec
Samantha Wilson, BA, Université de Montréal, Montreal, Quebec
Kieron O’Connor, BA, MA, PhD, Université de Montréal, Institut universitaire en Santé Mentale de Montréal, Montreal, Quebec

Cognitive confidence refers to the extent to which individuals trust their attention, perception, and memory. Research suggests that individuals with obsessive compulsive disorder (OCD) have poor cognitive confidence. For instance, individuals with OCD may not trust their ability to remember whether they locked the door or whether they turned off the stove. Given the high rate of comorbidity and symptom similarities that exist between OCD and eating disorders (EDs), it is possible that cognitive confidence is relevant to EDs as well. In fact, it has been suggested that individuals with EDs might not be confident in their ability to correctly perceive their body shape when looking in the mirror, thus contributing to body image disturbance in this population. The objectives of this systematic review will be to (1) review the evidence regarding the extent to which individuals with OCD and EDs display poor cognitive confidence and (2) to evaluate the impact of poor cognitive confidence on these two clinical populations. To these ends, a literature search will be performed using the PsycINFO and PubMed electronic databases. The search strategy will include the following keywords: “anorexia nervosa” or “bulimia nervosa” or “eating disorders” or “obsessive-compulsive disorder” AND “cognitive confidence” or “metacognition”. This review will be reported according to the Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines, and is registered in the PROSPERO database (registration number: CRD42016045906). The results of this systematic review will be synthesized to provide insight into the role and causes of poor cognitive confidence in both OCD and EDs. Clinical implications will be discussed.
Recently, pressures to control weight and maintain a ‘healthy’ weight have increased in the context of large-scale obesity prevention efforts. The aim of this study was to examine the relationships between pressure to achieve healthy weight perceived from the media, and weight controllability beliefs and disordered eating. College students completed an online survey including a subscale from the new Sociocultural Influences Towards Healthy Weight Scale (SITHS) evaluating perceived pressure from the media to maintain a ‘healthy weight,’ as well as well-validated measures of pressure from the media to attain the thin-ideal, weight controllability beliefs, and eating disorder symptoms. Data collection is ongoing, and preliminary data are available for N = 122 female college students, mean (SD) age = 20.00 (2.21), mean (SD) BMI = 23.96 (4.18). The anticipated sample size by May 2017 is N= 500. Findings revealed that perceived pressure from the media to maintain a ‘healthy weight’ was associated with weight controllability (r = .25, p = .008) and disordered eating behaviors (r = .29, p = .002). Mediation analyses using 1000 bootstrapped samples showed a significant indirect effect of perceived pressure from the media to maintain a ‘healthy weight’ on eating disorder symptoms, via weight controllability beliefs, estimate = -.07, 95% CI [.02-.18]. In addition, multivariate regression analyses revealed that perceived media pressure to maintain a ‘healthy weight’ and media pressure to attain the thin-ideal made independent contributions to the explained variance in eating disorder symptoms (β = .21, p = .03 and β = .20, p = .04). These findings provide initial evidence that sociocultural pressures to maintain a ‘healthy weight’ may be associated with increased eating disorder risk, independently from pressure to attain the thin-ideal. This further supports the usefulness of examining the role of ‘healthy weight’ pressures and weight controllability beliefs in eating disorders.

**T105: Out of the Box: Supporting Families who have a Child with Anorexia Nervosa and Autism Spectrum Disorder**

**Colleen Alford**, B Social Work (Hons), The Children’s Hospital at Westmead, Sydney, New South Wales

**Andrew Wallis**, MFT, B Social Work, The Children’s Hospital at Westmead, Sydney, New South Wales

There is an increasing prevalence of Autism Spectrum Disorder (ASD) being reported internationally as well as a subgroup of Anorexia Nervosa (AN) sufferers that are identified as having the socio-communicative problems that correspond to ASD as part of their AN diagnosis. Therefore an understanding of how to work with this dual diagnosis has become more critical. The complexities of working with these patients as adolescents include: balancing the pursuit of food-related flexibility with preferences for structure and routine, managing distress related to re-feeding when communication around emotions is difficult, and helping patients to re-engage successfully in adolescent tasks. An adjunct to Family Based Treatment has been developed at The Children’s Hospital at Westmead, Sydney, Australia, to specifically address the needs of families who have an adolescent with ASD and AN. This has been piloted in two different forms - a parent group for parents of patients with ASD/AN, as well as a module that can be completed as part of Family Based Treatment. The adjunct covers themes such as understanding the interface of ASD and AN, balancing the need for structure and routine with flexibility, increasing communication around distress, and understanding the young person’s attachment needs. This pilot study looked at parental confidence in managing ASD and AN as well as collecting qualitative data about their experience. Parents reported that the group was very useful, particularly in the exchange of ideas with other parents around communication and flexibility.

**T106: What can we learn from the Treatment History of Eating Disorder Patients Seeking Specialized Treatment in the Netherlands?**

**Jan Alexander de Vos**, MSc, Human Concern Foundation, Center for Eating Disorders, Amsterdam, Noord Holland

**Charlotte Ariane Bijkerk**, MSc, Human Concern Foundation, Center for Eating Disorders, Amsterdam, Noord Holland

**Greta Noordenbos**, PhD, Leiden University, Leiden, Noord Holland

Eating disorders (ED’s) are serious mental disorders and effective treatments remain limited. To better understand ED treatments in naturalistic settings, and how these treatments are perceived by patients, we examined the treatment history of patients with an ED, who were seeking treatment in a specialized ED center in the Netherlands. Patients filled in several questionnaires as part of an intake procedure. Seventy-
T107: Disordered Eating and Fear of Negative Evaluation Among Emerging Adults in Recovery from Substance Use Disorders

McKenzie Wilkes, PhD, Texas Tech University Center for Collegiate Recovery Communities, Lubbock, Texas
Elizabeth Trejos-Castillo, PhD, Texas Tech University, Lubbock, Texas
Nancy Bell, PhD, Texas Tech University, Lubbock, Texas
Alan Reifman, PhD, Texas Tech University, Lubbock, Texas
Cynthia D’Sauza, PhD, Texas Tech University, Lubbock, Texas

College campuses are often hostile environments for those in recovery from drugs and alcohol. Along with substance use disorders (SUDs), eating disorders (EDs) and disordered eating (DE) on college campuses are also common. People in recovery from drugs and/or alcohol are more likely to struggle with co-occurring EDs than the general population. Furthermore, treatment centers focusing on SUDs often neglect assessing and/or treating EDs all together. It is common for people in recovery from a SUD to see their DE and/or ED thoughts, patterns and behaviors as ‘normal’. In the 1980’s Rutgers University and Texas Tech University realized a need to support students in recovery on college campuses and develop the first collegiate recovery programs (CRPs). For this study, a total of 131 students in recovery from SUDs were sampled from five colleges and universities across the United States of America. The sample included 70 males and 60 females. A survey was administered including demographic information, addiction history, general health, Change in Eating Disorder Symptoms Scale (CHEDS) and the Brief Fear of Negative Evaluation. The results showed that although most of the CRP students in recovery from an SUD do not have a diagnosable ED, 31.67% of CRP women and 14.50% of CRP men scored above the ChEDS cutoff of 60 for eating disorder symptoms in the past 6 months. For CRP students in recovery from SUDs 59.32% of women reported a lifetime prevalence of eating disorder symptoms while 23.19% of men reported a lifetime history of ED symptoms. Results also indicated a significant association exists between fear of negative evaluation and DE patterns and disordered body image. Overall, the study provided evidence on the prevalence of DE within CRPs as well as the significant association between fear of negative evaluation and DE patterns and disordered body image.

T108: An Analysis of Patient Feedback about Their Treatment in An Adult Eating Disorder Day Program

Caitlin McMaster, BSc(Nutrition) (Hons), Royal Prince Alfred Hospital, Sydney, New South Wales
Jessica Aradas, BSc, Royal Prince Alfred Hospital, Sydney, New South Wales
Sarah Horsfield, BSc, MPsych, Centre for Eating and Dieting Disorders, Sydney, New South Wales
Sarah Maguire, DCinPsy, PhD, Centre for Eating and Dieting Disorders, Sydney, New South Wales
Janice Russell, MBBS, Royal Prince Alfred Hospital, Sydney, New South Wales
Susan Hart, BSc, MSc, PhD, Royal Prince Alfred Hospital, Sydney, New South Wales

Client feedback can extract valuable information regarding positive and negative client experiences, however it remains an underused tool in the evaluation and development of eating disorder services. This study involved a thematic analysis of qualitative feedback on the experience of day program treatment. Data was collected from 52 admissions at an eating disorders day program, where open-ended evaluation questions were included as part of online discharge measures. Data was coded by two researchers identifying themes and associated subthemes. The analysis resulted in the exploration of five themes including: (1) group therapy dynamics, (2) food, eating, and nutrition, (3) psychotherapy, recovery, and change, (4) client-staff interactions, and (5) specific suggestions for program improvement. The themes noted provide insight into experiences of day program treatment, highlighting that several aspects of day program treatment are dually experienced by clients as painful or difficult, as well as necessary. Specific suggestions were also noted. These findings have implications for the effective provision of eating disorder services, education of consumers and practitioners within the field, and the promotion of person-centred and collaborative care.
Values-guided and Emotion-focused Behavioral Therapy for Bulimia Nervosa

Adrienne Juarascio, PhD, Drexel University, Philadelphia, Pennsylvania
Arielle Wolinsky, BA, Drexel University, Philadelphia, Pennsylvania
Helen Murray, BA, Drexel University, Philadelphia, Pennsylvania
Evan Forman, PhD, Drexel University, Philadelphia, Pennsylvania

Cognitive behavioral therapy (CBT) is the current gold-standard treatment for bulimia nervosa (BN), yet despite impressive empirical support for its effectiveness, over 50% of patients fail to achieve abstinence from binge eating and purging by the end of treatment. To improve rates of remission in BN, our team developed an innovative treatment, Values-guided and Emotion-focused Behavioral Therapy (VEBT) for BN. VEBT provides dietary and exercise-based behavioral strategies designed to replace the maladaptive dietary restraint that is a hallmark of BN in combination with many of the behavioral aspects of CBT. VEBT also emphasizes third-wave cognitive and emotional strategies utilized in treatments such as Acceptance and Commitment Therapy (e.g., values clarity and committed action) and Dialectical Behavioral Therapy (e.g., emotion regulation and distress tolerance skill development). Prior to conducting our ongoing NIMH-funded RCT comparing VEBT to CBT for male and female adults with BN, we completed a case series of three patients with full or sub-threshold BN to gather initial feasibility and acceptability data. Pilot participants received 20-sessions of treatment over the course of 18 weeks and completed assessments at pre-treatment, two mid-treatment points (post-sessions 8 and 15), post-treatment, and 6-month follow-up. Preliminary findings showed large reductions in BN symptoms (e.g., objective binge episodes pre-treatment, 10.88 (SD: 10.90); to post-treatment, 2.11 (SD=1.26)) and similarly large changes in hypothesized mechanisms of action for the novel treatment approach (e.g., food reward sensitivity as measured by the Power of Food Scale, pre-treatment, 51.33 (SD=14.18), to post-treatment, 37.00 (SD=13.52). We will provide additional data on the preliminary feasibility and acceptability of VEBT and utilize case examples to highlight novel aspects of this treatment approach.
in each was conducted, and the views expressed by the men were analysed using qualitative methods. There exists significant pressure on men to conform to particular male body image ideals, and to achieve a certain degree of masculinity both for performance and aesthetics. Pressures are perceived as originating both internally and externally, and pursued with different degrees with both positive and negative effects. A link between these pressures to conform and the impact on mental health is discussed, along with possible interventions designed to promote and maintain positive male body image and minimise any adverse effects.


Katherine Howe, BS, MPH, DSc, Student, Harvard T. H. Chan School of Public Health, Boston, Massachusetts

Alessandro Demaio, MBBS, MPH, PhD, World Health Organization, Geneva, République et canton de Genève

Childhood obesity negatively impacts a child’s physical and mental wellbeing, educational attainment and quality-of-life, and predisposes to early-onset noncommunicable diseases and obesity in adulthood. With a high prevalence of childhood overweight and obesity in many communities worldwide, effective measures for weight management are essential to protect the health of children and adolescents during these formative and vulnerable periods of the lifecourse. Following the publication of the Report of the Commission on Ending Childhood Obesity, the World Health Organization seeks to characterise the global health systems structuring for the management of overweight and obesity in children and adolescents and this study compares this health systems response with the management of eating disorders treatment worldwide, a major health challenge. In order to understand the current practice approaches as well as support Member States, this mixed methods study provides an overview of health systems structuring and responses to the management of overweight and obesity in children and adolescents, based on survey and interview data from clinicians and health systems managers. This study supports current guidelines under development, focusing on the management of overweight and obesity in children and adolescents, and includes quantitative and qualitative from head clinicians and program directors of 13 tertiary centres from all six WHO regions of the world. The target audience of this study include national and local policymakers, leaders of nutrition programs, organizations involved in the planning and management of nutrition actions, health managers, and health professionals in all settings. The focus of the discussion section is around the similarities and differences with eating disorders management on the global level, understanding of why health systems respond to the treatment of childhood overweight and obesity and the treatment of eating disorders in the manner of ‘band-aid’ solutions for these critical health issues, and reflection on societal and clinical perceptions of these conditions around the world.

**T113: A Comparison of Adaptive and Maladaptive Emotion Regulation Strategies in Adolescent Anorexia Nervosa Patients versus Matched Controls**

Lien Goossens, PhD, Ghent University, Ghent, Oost-Vlaanderen, Kim Van Durme, MA, Ghent University, Ghent, Oost-Vlaanderen

It was the aim of the present study to examine whether differences exist in the use of adaptive and maladaptive emotion regulation strategies in adolescent Anorexia Nervosa (AN) patients versus non-eating disordered matched controls. A clinical sample was recruited of 54 female adolescents (M age = 14.39 years) who were diagnosed with AN of the restrictive type (AN-R). Also, a control group was recruited of female adolescents who were matched with the clinical sample on age and socio-economic status. Both groups self-reported on the use of several maladaptive and adaptive emotion regulation strategies (FEEL-KJ: Fragebogen zur Erhebung der Emotionsregulation bei Kindern und Jugendlichen). Results showed significant differences between the clinical group and matched controls with regard to the use of maladaptive emotion regulation strategies. More specifically, the AN-R patients reported using the strategies problem oriented action, distraction, humor enhancement, acceptance, trying to forget, and cognitive problem solving less frequently compared with the control group. Moreover, results also showed that within the clinical group, higher use of maladaptive strategies was related to worse eating disorder pathology. With regard to the use of adaptive emotion regulation strategies, significant differences between both groups were found as well. More specifically, the AN-R patients used the strategies problem oriented action, distraction, humor enhancement, acceptance, trying to forget, and cognitive problem solving less frequently compared with the control group. Findings of the present study demonstrate differences in the emotion regulation profile between adolescent girls with AN-R and those without an eating disorder. These results underscore the importance of mapping out the emotion regulation profile in the diagnostic process and focusing on both decreasing maladaptive emotion regulation strategies but also increasing adaptive strategies in the treatment of AN-R.
The purpose of the present study is to explore the association of dieting history and of coffee, alcohol, tobacco, and marihuana (CATM) consumption at the initial consultation of a sample of ED patients. The sample consisted of adolescents (n=73) aged from 13 to 18 years old (5 males and 68 females). By means of a Self-reporting Questionnaire, a descriptive-correlational, cross-sectional, and retrospective design was conducted in which years of dieting and CATM consumption was asked at initial consultation. Results show for the whole sample 73.55% reporting coffee consumption, 40.58% reporting alcohol consumption, 37.68% reporting tobacco consumption, and 15.99% reporting marihuana consumption. The average of time dieting for the whole sample was 2.35 (SD=2.3). It was found significant and positive correlations between coffee and years of dieting, r=0.68 (p<0.05), alcohol and years of dieting, r=0.47 (p<0.05), and marihuana and years of dieting, r=0.77 (p<0.05). And between tobacco and years of dieting, r=0.69 (p<0.05), alcohol and years of dieting, r=0.77 (p<0.05), alcohol and years of dieting, r=0.68 (p<0.05), and marihuana and years of dieting, r=0.77 (p<0.05). And between tobacco and years of dieting, non significant correlation were found. Consumption of coffee, alcohol and marihuana in ED patients. Consumption of tobacco seems to be more permitted and used by the adolescent population.
was gathered by retrospective chart review. We investigated differences in psychosocial characteristics between inmates with low recidivism rate and high recidivism rate. Of the participants, inmates with high recidivism rate of shoplifting had less social support, had higher impulsivity and higher symptom severity of eating disorders compared with those with low recidivism rate. Severity of illness and lack of social support seem to have a serious impact on shoplifting behavior among eating disordered patients. These findings may contribute to clarify risk and protective factors related to shoplifting among eating disordered patients. As vulnerable populations, utmost care, specific ancillary considerations and augmented protections in research including the confidentiality of data and anonymity of the participant was ensured.

**T117: Momentary Changes in Restraint, Affect, Body Satisfaction, and Body-Focused Attention Surrounding Binge Episodes among Women with Bulimia Nervosa**

Kathryn Smith, PhD. Neuropsychiatric Research Institute. Fargo, North Dakota
Janis Crowther, PhD. Kent State University. Kent, Ohio

While findings from momentary, naturalistic investigations have clarified relationships between negative affect (NA), restriction, and binge eating, few studies have addressed cognitive phenomena surrounding binge eating. Such data may lend further insight into maintaining processes and inform future interventions. Additionally, research has implicated restraint and body dissatisfaction in bulimic symptoms, but momentary investigations of these variables among women with Bulimia Nervosa (BN) have been limited. This study examined changes in NA (and guilt, one NA facet), restraint, body-focused attention, and body dissatisfaction prior to and following objective binge eating episodes in BN. Following a baseline assessment, adult women with BN (N=23) completed a 10-day ecological momentary assessment (EMA) protocol, during which they recorded information about eating episodes, momentary affect, dietary restraint, body-focused attention, and body dissatisfaction. Results from Generalized Estimating Equations revealed that the trajectories of NA, guilt, and body-focused attention significantly increased before and decreased after binges. Restraint demonstrated a post-binge curvilinear trajectory, with levels initially increasing and subsequently declining. No significant changes were observed in body dissatisfaction. Taken together, findings support the affect regulation model of binge eating and highlight the specific role of guilt, consistent with prior research. Contrary to restraint theory, restraint appeared to be most salient after binges but diminished over time, potentially suggesting an inability to sustain cognitive control over eating. While body dissatisfaction remained stable, it may be that heightened awareness of appearance among women with BN is related to elevated NA. Overall, results suggest the potential clinical utility of addressing emotion regulation and adaptive responding to negative emotions and body-focused awareness among women with BN.

**T118: Meta-analysis of Experimental Studies of Emotion Regulation and ad Libitum Eating**

Kara Christensen, MA, Student. The Ohio State University. Columbus, Ohio
Ilana Seager, MA, Student. The Ohio State University. Columbus, Ohio
Amelia Aldao, PhD. The Ohio State University. Columbus, Ohio

The present study aims to synthesize the extant experimental literature linking emotion regulation (ER) strategies to ad libitum eating. The question of how ER is linked to consumptive patterns holds particular relevance for eating disorders, which may include features of restrained and unrestrained ad libitum eating. For this meta analysis, we identified experimental studies from dissertations and peer-reviewed journals in the PsychINFO database. Our inclusion criteria included: 1) experimental paradigm in which at least one ER strategy was manipulated; 2) presence of a no regulation control group; and 3) measurable eating behavior outcome. We categorized strategies as putatively adaptive or maladaptive based on previous meta-analytic work evaluating their effectiveness and associations with psychopathology. We predicted that adaptive strategies (i.e., acceptance/ mindfulness, reappraisal) would be associated with decreased ad libitum eating compared to a control condition. We also expected that maladaptive strategies (i.e., suppression, rumination) would be associated with increased ad libitum eating relative to a control condition. We coded 10 studies and calculated effect sizes between the ER and control conditions. We found that the use of adaptive strategies was associated with decreased food consumption compared to a control condition, d = -.45, SE = .20, CI = -.84, -.06, p = .02, k = 10. However, contrary to our prediction, the use of maladaptive strategies was not associated with increased food consumption compared to the control group, d = .03, SE = .24, CI = -.44, .49, p = .91, k = 7. Although preliminary, these results suggest the potential utility of encouraging the use of adaptive strategies to reduce ad libitum eating. Future work may examine how ER strategies are linked to eating patterns in clinical samples.

**T119: Theory of Mind in Unaffected First-Degree Relatives of Patients with Anorexia Nervosa**

Fernanda Tapajoz, DClinPsy, CONICET. Capital Federal, Buenos Aires
Sebastian Soneira, MD. Clinica de Nutricion Dr Cormillot, Capital Federal, Buenos Aires

In recent years there has been much interest in studying some clinical and biological aspects of neuropsychiatric diseases that can be used as specific markers of that disease. This so called endophenotypes would allow a better understanding of the etiology of the disease and the development of new therapeutic
strategies. Patients with anorexia nervosa (AN) often present difficulties in different aspects of social cognition. These alterations are usually present before the clinical onset of the disease and persist after recovery. Previous work has documented alterations in a specific domain of social cognition called Theory of Mind (ToM). The purpose of this work was to evaluate the ToM domain in first degree relatives of patients with AN (ANFDR) in order to evaluate if these alterations (if present) could be consistent with a neuropsychological endophenotypes of the disease. This is a comparative-descriptive, cross-sectional study in which 34 women participated. We included 17 first degree relatives (mothers and sisters) of AN patients and 17 healthy controls (HCs). For the study of ToM they were administered the “Reading the mind in the Eyes” Test (RME) and the “Faux Pas” Test (FPT). Demographic and clinical aspects such as age, education level, body mass index (BMI), anxiety, depression and obsessive compulsive symptoms were also evaluated. The groups did not differ in age and educational level. Compared to the HCs, the ANFDR group showed a lower performance in the RME (p<0.01) and FPT (p<0.05). These results did not correlate with any clinical and demographic variables. The first-degree unaffected relatives of patients with AN showed alterations in the ToM tests similar to those found in AN patients. This neuropsychological profile could be genetically inherited and become a possible candidate for a specific neuropsychological endophenotypes of AN.

**T120: The Impact of Exposure to Cartoons Promoting Healthy Eating on Children’s Food Preferences and Choices**

Sónia Gonçalves, PhD, University of Minho, Braga, Portugal

Eva Conceição, University of Minho, Braga, Portugal

Cátia Silva, PhD, University of Minho, Braga, Portugal

Paulo Machado, PhD, University of Minho, Braga, Portugal

Emma Boyland, PhD, University of Liverpool, Liverpool, UK

Few studies have analyzed the effects of the use of cartoons in promoting healthy eating behavior in children. The present study aimed to explore whether or not a cartoon with healthy eating messages would have a positive effect on children's (1) food preferences and attitudes, and (2) food choices. Participants (n =143, aged 4 to 8 years) were randomized to one of two groups: control (n =73) who were exposed to cartoons without any reference to food or nutritional messages, and experimental (n =70) who were exposed to cartoons with healthy eating messages. Duration of viewing was 20 minutes for each group, after which each child was given the opportunity to eat ad libitum for 10 minutes from a small selection of snack foods (2 healthy and 2 unhealthy items). Measures of hunger, cartoon recognition and liking, attitudes to healthy eating, and food preferences were also taken. Children exposed to the cartoon containing healthy eating messages chose significantly more healthy food items than the children in the control group. These results are promising and could inform the development of health promotion campaigns for children.

**T121: Weigh Concern as a Predictor of Early Change in Guided Self-Help Treatment for Bulimic Disorders**

Ana Vaz, PhD, University of Minho, Braga, Braga

Eva Conceição, PhD, University of Minho, Braga, Braga

Nádia Monfreita, PhD, University of Minho, Braga, Braga

Daniel Sampaio, PhD, University of Lisbon, Lisbon, Lisbon

Paulo Machado, PhD, University of Minho, Braga, Braga

Early change has been consistently found as robust predictor of success in the treatment of bulimia and binge eating disorder. However, research has been sparse in identifying what predicts early change. The aim of this study is to find predictors of early change before treatment. Forty-two participants with a diagnose of Bulimia Nervosa (32) and Binge Eating Disorder (N=10) participate in a clinical trial for guided self-help. Participants were classified as early responders according to have made a reduction of at least 51% in the frequency of binge before session 3 of treatment (N=23). Participants that showed a slower response were classified as non-early responders (N=19). Assessment measure at baseline included Eating Disorder Examination Questionnaire, Outcome Questionnaire – 45 and Beck Depression questionnaire. Also, participants clinical and demographic variables were collected with a structured clinical interview. Frequencies of bulimic and purging episodes were assessed at baseline and at every session. Logistic regression was used to test predictors of early change. Results showed that weigh concern was found to be a significant predictor of early change (B=-1.40; S.E=0.67; p=0.04). Results have clinical implications for practice and highlight the importance of weight concerns as a maintaining mechanism that needs to be addressed early in treatment as a way to promote early change.
**T122: Dose-Dependent Effect of Childhood Trauma Exposure on the Cortisol Awakening Response in Adult Patients with Eating Disorders**

Alessio Maria Monteleone, MD, Department of Psychiatry, Second University of Naples, Naples, Naples
Alessio Maria Monteleone, MD, Department of Psychiatry, Second University of Naples, Naples, Naples
Umberto Volpe, MD, PhD, Department of Psychiatry, Second University of Naples, Naples, Naples
Massimiliano Nigro, MD, PhD, Department of Psychiatry, Second University of Naples, Naples, Naples
Francesca Pellegrino, MD, Department of Psychiatry, Second University of Naples, Naples, Naples
Valeria Ruzzi, MD, Department of Psychiatry, Second University of Naples, Naples, Naples
Palmiero Monteleone, Professor, Department of Medicine, Surgery and Dentistry, University of Salerno, Salerno, Salerno

It is widely accepted that childhood trauma is a non-specific risk factor for the development of adult eating disorders (ED), and the hypothalamic-pituitary-adrenal (HPA) axis seems to be involved in mediating such a risk. Here we explored the impact of different types of childhood trauma and of concomitant exposure to multiple childhood traumas on the cortisol awakening response (CAR) of women with anorexia nervosa (AN) or bulimia nervosa (BN). Saliva samples were collected at awakening and after 15, 30, 60 min to measure cortisol levels by 121 women (44 AN patients, 36 BN patients and 41 healthy women). Participants filled in the Childhood Trauma Questionnaire to assess childhood trauma exposure. AN and BN patients reporting childhood maltreatments exhibited an attenuated CAR compared to non-maltreated ones. In the whole ED patient group, the CAR showed a progressive impairment with the increasing number of reported trauma types. No significant differences emerged in the CAR among patients who reported different types (emotional neglect or abuse, physical neglect or abuse, sexual abuse) of childhood trauma. Although significant negative correlations emerged between the type or the number of traumas and the CAR, only the number of traumas remained significantly associated with the CAR in a stepwise multiple regression analysis. Present findings confirm that childhood trauma is associated to an impaired CAR in adult AN and BN patients and demonstrate for the first time a negative dose-dependent effect of the traumatic load on HPA axis activity. These findings may suggest an intriguing correlation between childhood trauma exposure, HPA axis functioning and adult ED development.

**T123: The Influence of Impulsivity and Personality Disorder Traits on Neural Processing of Reward and Punishment in Patients with Binge Eating and Purging: An fMRI Study**

Ema Toyoda-Murao, MD, Department of Psychiatry, Kyoto University Graduate School of Medicine, Kyoto, Kyoto

Masanori Isobe, MD, PhD, Department of Psychiatry, Kyoto University Graduate School of Medicine, Kyoto, Kyoto
Tomomi Noda, MA, Department of Psychiatry, Kyoto University Graduate School of Medicine, Kyoto, Kyoto
Michiko Kawabata, MS, Department of Psychiatry, Kyoto University Graduate School of Medicine, Kyoto, Kyoto
Cenichi Sugihara, MD, PhD, Department of Psychiatry, Kyoto University Graduate School of Medicine, Kyoto, Kyoto
Hidehiko Takahashi, MD, PhD, Department of Psychiatry, Kyoto University Graduate School of Medicine, Kyoto, Kyoto
Toshiya Murai, MD, PhD, Department of Psychiatry, Kyoto University Graduate School of Medicine, Kyoto, Kyoto
Shun’ichi Noma, MD, PhD, Department of Psychiatry, Kyoto University Graduate School of Medicine, Kyoto, Kyoto

Some patients with binge eating and purging (e.g., anorexia nervosa binge-eating/purging type, bulimia nervosa) show high impulsivity or comorbid borderline personality disorder (BPD). The purpose of this study was to investigate reward and punishment neural processing in patients with binge eating and purging, and how this processing is influenced by impulsivity and BPD. Twenty-three patients with binge eating and purging and 23 healthy females (controls: CTL) performed a monetary incentive delay task during functional magnetic resonance imaging. We compared brain activation between patients with two or more impulsive behaviors (high impulsivity) (e.g., alcohol abuse, drug abuse, suicide attempts, self-harm, compulsive stealing, compulsive spending, sexual disinhibition), other patients (low impulsivity), and CTL. We also compared patients with and without a diagnosis of BPD and CTL. During loss anticipation, patients with low impulsivity had significantly higher caudate and insula activation than those with high impulsivity and CTL. Moreover, patients without BPD showed significantly higher activation in the orbitofrontal cortex than those with BPD and CTL. No differences were found during gain anticipation between any groups. These results suggest that patients with low impulsivity and those without BPD are more sensitive to potentially punishing stimuli. In addition, high impulsivity and BPD are often comorbid in patients with binge eating and purging, and patients with high impulsivity are often diagnosed with BPD. However, neurobiological differences between patients with binge eating and purging with high impulsivity and those diagnosed with BPD may exist. These potential neurobiological differences in patients with binge eating and purging advance our understanding of these disorders, which may inform the development of tailored treatment approaches.
T124: Distinct Attention Bias Patterns in Anorexia Nervosa Restricting and Binge/purge Sub Types

Tal Gilon Mann, MA, The Chaim Sheba Medical Center at Tel Hashomer, Ramat Gan
Daniel Stein, MD, PhD, Professor, The Chaim Sheba Medical Center at Tel Hashomer, Ramat Gan
Adi Enoch, MD, PhD, The Chaim Sheba Medical Center at Tel Hashomer, Ramat Gan
Yair Bar Haim, PhD, Tel Aviv University, Tel Aviv
Sami Hamdan, PhD, Academic College of Tel Aviv – Jaffa, Tel Aviv

Previous research in patients with anorexia nervosa (AN) has shown the existence of attention bias toward threatening stimuli. Attention bias modification treatment (ABMT) targeting anxiety may serve as a potential innovative treatment for reducing general and eating-related anxiety in patients with AN. A previous study has shown an improvement in these symptoms following 5 sessions of ABMT. Our aim was to investigate whether AB would differ in patients with AN-restrictive type (AN-R) and AN binge/purge type (AN-B/P). For this purpose we tested bias for attending to threatening words, either eating disorder (ED) related or general and social anxiety evoking words, in patients with AN-R (n=32), AN-B/P (n=23) and controls (n=19). We also examined the severity of eating-related symptomatology, depression, and stress. The results of the study indicated a differential threat-related attention bias in the two AN subtypes. Accordingly, patients with AN-R showed vigilance to both ED-related and general/social anxiety, whereas patients with AN-B/P revealed the opposite pattern of avoidance from threatening stimuli of both kinds. Both groups were different from controls. The findings for AB did not correlate with the ED-related and comorbid dimensions, or with the participants’ body mass index (BMI). These findings suggest an inherent different neurocognitive pattern for handling anxiety in patients with AN-R vs. AN-B/P. This may call for different ABMT interventions in both groups, because, so far, ABMT is aimed mainly to reduce vigilance.

T125: Eating Disorders and Academic Performance among College Students

Elizabeth Claydon, MA, MPH, Student, West Virginia University School of Public Health, Morgantown, West Virginia
Keith Zullig, PhD, West Virginia University School of Public Health, Morgantown, West Virginia

There is a paucity of research exploring the association between eating disorders (EDs) and academic performance. This study aimed to understand the effect of EDs and treatment on academic performance, with the hypothesis that those with EDs would have a higher GPA (based on characteristics like perfectionism that are associated with EDs), and treatment may improve it. Previous researches in this area have not differentiated the impact of different types of eating disorders on academic performance or have not captured an objective measure of academic performance. Other research has not controlled for key confounders, such as depression or sleep difficulties. The spring 2010 to spring 2011 National College Health Assessment data (N= 231,586) was utilized for the current study. Ordinal logistic regressions, controlling for key confounders (including depression, substance use, sleep difficulties, and student gender), analyzed the association between those diagnosed with anorexia or bulimia and GPA. Students diagnosed with anorexia and treated with medication and psychotherapy were 1.49 (95% CI 1.24, 1.80) times more likely to have a higher GPA (p<0.0001) compared to students not diagnosed with anorexia. Those with bulimia were also more likely to have a higher GPA when treated with both psychotherapy and medication (OR=1.35, 95% CI 1.13, 1.61, p<0.0001) compared to students without bulimia. Findings expand the literature concerning how EDs affect academic performance among college students. Additional research is needed to determine whether the combination of medication and psychotherapy offers the most effective way to improve academic performance among students with eating disorders. Additionally, the finding of reduced academic performance among those with BN who received “other treatment” provides some support for the need for evidence-based treatment. Based on these findings, it is critical to treat college students with EDs not only to help them medically and psychologically, but also to improve college retention and future academic success.

T126: The Role of Orexigenic and Anorexigenic Signals and Autoantibodies Reacting with Appetite-Regulating Hormones in Anorexia Nervosa and Bulimia Nervosa

Kvido Smitka, MD, PhD, | Laboratory of Clinical and Experimental Neuroendocrinology, Institute of Endocrinology, Prague, Czech Republic
Hana Papeţová, MD, PhD | Eating Disorders Centre, Department of Psychiatry First Faculty of Medicine Charles University in Prague, Czech Republic
Professor Karel Vondra, MD, PhD, Martin Hill, PhD, Professor Vojtěch Hainer, MD, PhD, and Jana Nedvidková, PhD | Institute of Endocrinology, Prague, Czech Republic

The balance and interaction between orexigenic and anorexigenic hormones originating from gut, brain, and adipose tissue appear to play an important role in the regulation of food intake, energy homeostasis and growth hormone release. However, the regulation of appetite is also under control by secretion of autoantibodies. An impairment of this balance may
The aim of the present study was to relate physical in predisposed individuals (Hebebrand et al., 2003). It is known that rodents increased physical activity with systematic research, especially in animal models. It is assumed that hyperactivity in anorexia nervosa may reflect the limited food availability and therefore it is assumed that excessive exercise can be an important factor in regulation of negative emotional states. AN patients did not differ from BN patients in any monitored parameters. The similarity between AN and BN groups can be partially explained by the standard daily program during hospitalization and the relatively low BMI, which may indicate relatively recent transition of patients from anorexic to bulimic phase. The intensity of hunger correlated positively with the amount of daily physical activity (r = 0.61, p = 0.003), whereas anxiety correlated with the activity negatively (r = -0.34, p = 0.08). These data suggest that excessive exercise can be an important factor in regulation of negative emotional states.

**T127: rTMS in Binge Eating. Double Blind Controlled Clinical Study**

Katarína Kviatkovská, Silvie Čerešňáková, and Dr. Jakub Albrecht | Eating Disorders Center, Department of Psychiatry, First Faculty of Medicine, Charles University and General University Hospital in Prague, Czech Republic

High-frequency repetitive magnetic stimulation has a potential to activate cortex under the coil, to inhibit neuronal activity in distant cortex and to reduce craving. Our study aimed to show that the rTMS has the potential to contribute to biological treatment in Binge Eating Disorder.

Of 34 outpatients of Eating Disorders Unit fulfilling the DSM-5 criteria of Binge Eating Disorder, 9 finally signed the informed consent and were included into double blind, placebo controlled study. Participants were randomly divided into two groups, one of which is stimulated by sham coil and the second by real rTMS. The frequency was determined to 10Hz, duration of stimulation was 20 minutes and the total number of sessions was 10. Each patient completed the questionnaire at 3 time points, before the first session, immediately after the last session and the month after the end of the treatment stimulation. We used the Food Craving Questionnaire (FCQ) to evaluate the craving level. Our preliminary data are demonstrating that rTMS was effective in reducing the level of cravings at high frequencies stimulation of the dorsolateral prefrontal cortex (DLPFC).

**T128: Physical Activity Correlates with Hunger and Anxiety in Patients with Eating Disorders.**

Dr. Anna Yamamotová, CSc, and Josef Bulant, MSc, and Hana Papežová, MD, PhD | Eating Disorders Centre, Department of Psychiatry First Faculty of Medicine Charles University in Prague, Czech Republic

Patients with anorexia nervosa (AN), even when extremely underweighted, show elevated physical activity and excessively exercise. It seems inconsistent, because long-term starvation and weight loss is usually accompanied by energy loss and increased physical fatigue. This phenomenon, often described in clinical trials was only recently subjected to systematic research, especially in animal models. It is known that rodents increased physical activity with limited food availability and therefore it is assumed that hyperactivity in anorexia nervosa may reflect the mobilization of old phylogenetic patterns of behavior in predisposed individuals (Hebebrand et al., 2003). The aim of present study was to relate physical activity of patients with AN (AN = 17, BMI = 14.3 kg/m2, duration of illness 2.4 years) and bulimia nervosa (BN = 7, BMI = 19.8 kg/m2, duration of illness 2.5 years) to specific (hunger, appetite, satiation) and non-specific (anxiety, depression, fatigue, physical pain, need for sleep) symptoms of eating disorders. Patients in the 2-hour intervals (from 8 AM to 8 PM hours) recorded the intensity of the monitored items on a scale of 0 to 10. Physical activity was measured two days on the non-dominant hand using the Actiwatch Score device (Cambridge Neurotechnology, UK). Data were collected at one minute intervals and parameters obtained for the final analyses were following: average 24-hour activity, average night-time activity, the ratio of daytime and night-time activities, and the acrophase of circadian activity rhythm (assessed by cosinor analysis).

Although recently published meta-analytic study (Nazar et al., 2016) shows increased interest in studies related to the connection between ADHD and ED, only a few are based on empirical data. The association between these two diagnostic entities remains unclear. We are presenting data from epidemiology case-control study (N=226; 133 ED female patients/93 control) conducted at Eating Disorders Unit. Methods: In a consequential part of the study, ADHD (current and childhood symptoms) was assessed by self-report and other-report versions of a BAARS -IV questionnaire. Severity of eating pathology was assessed by EDQ (all ED patients were diagnosed according to ICD-10 criteria). In the following part of the study, detected patients underwent a structured interview (DIVA 2) and Integrated Visual and Auditory Performance Test (IVA Plus) to confirm the ADHD diagnose. Results: 37 % (49) of ED patients were detected as likely having ADHD while only 16% (15) from a healthy control group were also detected as likely having ADHD (using self-report questionnaire of current and childhood symptoms). This result shows a significant elevation (p= 0.000671169) of ADHD incidence among ED patients compare to healthy control population. The implications of the results will be discussed.
Many hormones regulate hunger, appetite and satiety in order to maintain energy homeostasis. In patients with anorexia nervosa (AN) we measured the levels of ghrelin, leptin and cortisol at the admission and at the discharge and examined their association with the clinical status, including level of physical activity.

Forty patients with AN participated in the study, 38 women (age = 25 years, BMI=15 kg/m², duration of illness 6 years) and 2 men (age = 37 years, BMI=13 kg/m², duration of illness 13.5 years). Blood samples were taken at 8am the 3rd day of hospitalization and then 3 days before the discharge. In same days, we recorded their physical activity using Actiwatch AWSC device (Cambridge Neurotechnology Ltd, UK) with one minute sampling frequency, placed on his/her non-dominant hand for 24 hours. Statistical analyzes were performed by analysis of variance (ANOVA) and orthogonal projection to latent structures (OPLS). At the time of discharge, we observed significant increase in BMI (p<0.001) and leptin (p<0.001) as expected. However, contrary to our expectation, the levels of plasma ghrelin (an orexigenic hormone that drives food-motivated behavior) also increased during the special ED program with standardized re-alimentation. This increase seems paradoxical but it may result from a long-term adaptation to the restrained eating. Increase in ghrelin negatively correlated with baseline levels of ghrelin (r = -0.84, p<0.01) and positively with baseline levels of leptin (r = 0.78, p<0.01) and BMI (r = 0.71, p<0.01). An increase in physical activity (the 24-hour average) negatively correlated with baseline systolic (r = -0.86, p<0.01) and diastolic pressure (r = -0.87, p<0.01) while no statistically significant changes were observed in relation to cortisol, ghrelin or leptin levels. The clinical impact of the dynamic relations between neuroendocrine and nutritional parameters and physical activity deserves further characterization.
The current study aimed to assess a new interpersonal model for eating disorders (EDs), in which interpersonal rejection sensitivity, appearance-based rejection sensitivity and social rank were hypothesised to mediate the relationship between insecure attachment and disordered eating. The sample comprised 122 participants with a current or lifetime ED diagnosis (99% female, age M=25 years) ascertained from different ED clinics across Melbourne and 667 healthy control participants (79% female, age M=22 years) from the community. Participants were asked to complete a number of self-report measures related to the variables of interest. Invariance testing between the ED and the healthy control groups indicated that the model was structurally variant (i.e. different between groups), however on inspection the significance and direction of effects were found to be equivalent across groups. Path analysis indicated that the overall model demonstrated good fit (RMSEA=0.060, CFI=0.973, TLI=0.956). For both the ED and the healthy control groups, direct effects were observed for: 1.) appearance-based rejection sensitivity associated with drive for thinness, 2.) attachment avoidance, appearance-based rejection sensitivity, and low social rank associated with body dissatisfaction, and 3.) attachment avoidance and appearance-based rejection sensitivity associated with bulimia. However, indirect effects indicated differences between groups. For the ED group, indirect effects were found for: 1.) anxious attachment on drive for thinness (β=.233, p<.05) and body dissatisfaction (β=.271, p<.05) through appearance-based rejection sensitivity, and 2.) avoidant attachment on drive for thinness through social rank (β=.064, p<.05). For the control group, indirect effects were found for: 1.) anxious attachment on drive for thinness (β=.251, p<.05) and bulimia (β=.168, p<.05) through appearance-based rejection sensitivity, and 2.) anxious attachment on body dissatisfaction through multiple pathways involving interpersonal rejection sensitivity, appearance-based rejection sensitivity and social rank (p<.05). The results indicate that rejection sensitivity and social rank are potential mediators through which insecure attachment may influence disordered eating.
developed specifically for use in bariatric populations. The aim of the present study was to examine the psychometric properties and validity of the Ontario Bariatric Eating Self-efficacy (OBESE) scale in a sample of preoperative bariatric patients (N = 1,094) aged 17 to 74 years (M = 44.42, SD = 10.22; 80% female), recruited from the Toronto Western Hospital Bariatric Surgery Program. Patients completed the 28-item OBESE scale, which assesses: 1) confidence in one’s ability to resist overeating in tempting situations (Part I), and 2) confidence in one’s ability to adhere to established postoperative dietary guidelines (Part II). Patients also completed well-validated measures of eating self-efficacy (ESES), binge eating (BES), emotional eating (EES), and weight-related disability and impairment (SDS). Internal consistency was excellent for OBESE total score (α = .96), and Part I and II (α = .96 and .88, respectively). A strong relationship was found between the OBESE scale and ESES (r = .53, p = .000), providing evidence for convergent validity. Regarding concurrent validity, the OBESE scale was found to be moderately and negatively correlated with BES (r = -.34, p = .000), and Anger, Anxiety, and Depression subscales of the EES (rs = -.37, -.35, -.33, respectively; ps < .001). In a test of discriminant validity, the OBESE scale demonstrated no relationship with SDS (r = -.03, p = .407). Results suggest that the OBESE scale is a valid measure to assess eating self-efficacy among bariatric patients.
### FRIDAY, JUNE 9

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00 a.m. – 5:00 p.m.</td>
<td>ICED Registration Open</td>
<td>Forum Hall Foyer 1, First Floor</td>
</tr>
<tr>
<td>7:30 a.m. – 8:30 a.m.</td>
<td>ICED 2019 Program Committee Meeting</td>
<td>Club C, First Floor (breakfast provided)</td>
</tr>
<tr>
<td>7:30 a.m. – 8:30 a.m.</td>
<td>HLA Chapter Meeting</td>
<td>Club E, First Floor (breakfast provided)</td>
</tr>
<tr>
<td>8:30 a.m. – 10:15 a.m.</td>
<td>Plenary Session II: Wildcard</td>
<td>Forum Hall, Second Floor</td>
</tr>
</tbody>
</table>

**Simultaneously Translated to Spanish**

### Atypical Eating Disorders: Addressing the Overlooked and Misunderstood

**Chairs:** Angela Celio Doyle, PhD and Leah Dean, BA

**Seeing Atypical Eating Disorders in Young Children: Identification and Treatment of Atypical Eating Disorders in the Clinic**

**Richard E. Kreipe, MD, FAED | University of Rochester Medical Center, Rochester, New York, USA**

The goal of this presentation is to provide an overview of atypical eating disorders presentations in young children, highlight recent research describing this population, and present a series of clinical examples. The DSM 5 has reflected our changing notion of atypical eating disorders and it is important to consider how our developing understanding informs early intervention strategies. This talk will highlight genetic, neurobiological, and behavioral aspects, when appropriate, to better conceptualize how the phenotypes may relate to more common eating disorder presentations.

### Looking for Signs and not Symptoms: Improving Precision in the Measurement of Eating Disorders

**Kamryn T. Eddy, PhD, FAED | Massachusetts General Hospital, Boston, MA, USA**

Boundaries between frank eating disorders and normality, among the different eating disorders (e.g., full threshold versus other specified feeding and eating disorder [OSFED] presentations), and within the OSFED presentations can be difficult to discern. Symptoms, including dietary restriction, binge eating, purging, and overvaluation of weight and shape used to define the eating disorder diagnoses can occur trans-diagnostically and change across time. Whereas symptoms are subjective and must be self-reported by patients, signs are objectively measurable indicators of illness. Identification of signs may improve evaluation and management of these complex and heterogeneous illnesses. Using a cross-disciplinary approach, our team is investigating neural, endocrine, and behavioral signs of hunger, reward, sensory perception, and cognitive control that we hypothesize underlie eating disorder symptoms and, in turn, diagnoses. Taken together, this line of research can identify neurodevelopmental mechanisms of illness and inform development of targeted sign-based treatments.

### Never Too Old for Eating Disorders: Eating Disorder Onset and Symptoms in Middle Aged Men and Women

**Hans Wijbrand Hoek, MD, PhD, FAED | Parnassia Psychiatric Institute, The Hague, The Netherlands**

In the past we have overlooked eating disorders in non-western countries and in males. Nowadays, we still overlook and misunderstand eating disorders in older women and men. The onset of eating disorders, especially anorexia nervosa, most frequently occurs during adolescence, but older adults also develop eating disorders quite frequently. On many indices of disordered eating, older persons with eating disorder resemble younger people with similar conditions, although older persons exhibit certain unique concerns, such as dealing with menopause and with aging. The goal of this presentation is to provide a summary of the research on older women and men with later-onset eating disorders in order to optimally assess and treat individuals in this more atypical group.

**Discussant:**

**Can Atypical Presentations of Eating Disorders be Better Understood and Treated?**

**Pamela K. Keel, PhD, FAED, Florida State University, Tallahassee, FL, USA**
Abstract:
Atypical eating disorders comprise a large proportion of eating disorder syndromes. DSM-5 changes have more effectively captured varied presentations of disordered eating with the inclusion of Avoidant/Restrictive Food Intake Disorder (ARFID) and named examples of Other Specified Feeding or Eating Disorder (OSFED); however, there remains great heterogeneity within these groups and in the category of Unspecified Feeding and Eating Disorders. Dedicated research on these more unusual patterns of disordered eating and related experiences is essential for addressing suffering within individuals with atypical presentations and may help to create more valid and reliable phenotypes as more research integrates genetics, neuroscience and behavioral components. In this plenary, speakers will present on our growing understanding of eating disorder phenotypes and chart a course for how the field will forge ahead in the assessment, treatment, and further study of atypical eating disorders.

Learning Objectives:
Participants will be able to:
1. Describe efforts being made to increase precision in the measurement of eating disorders using Research Domain Criteria (RDoC) and what impact this might have on treatment.
2. Summarize the research on older men and women with later-onset eating disorders as well as young children for more optimal assessment and treatment.
3. Synthesize key topics in the understanding of atypical eating disorder phenotypes, taking into consideration the contributions of genetics, neuropsychiatry, and behavioral methods.

10:15 a.m. – 11:15 a.m.
Committee Chair Orientation | Panorama, First Floor

10:15 a.m. – 11:15 a.m.
Refreshments with the Exhibitors | Forum Hall Foyer BC, Second Floor

11:15 a.m. – 12:45 p.m.
Workshop Session II

W 2.1 | Assessment of Avoidant/Restrictive Food Intake Disorder across the Lifespan: Join the PARDI! | Club A, First Floor

Rachel Bryant-Waugh, DPhil, FAED and Lucy Cooke, PhD | Feeding Disorders Team, Great Ormond Street Hospital/University College London, London, United Kingdom
Jennifer J. Thomas, PhD, FAED and Kamryn T. Eddy, PhD, FAED | Eating Disorders Program, Massachusetts General Hospital/Harvard Medical School, Boston, Massachusetts, USA
Nadia Micali, MD, PhD, FAED | Icahn School of Medicine at Mount Sinai/University College London, New York, New York, USA

Avoidant/restrictive food intake disorder (ARFID) was added to a combined DSM-5 Feeding and Eating Disorders chapter in 2013. Given the similarity between ARFID and other restrictive-type eating disorders, as well as the heterogeneity within the ARFID diagnosis (i.e., food avoidance due to sensory sensitivity, lack of interest in eating, and/or fear of aversive consequences), comprehensive multi-disciplinary assessment is critical to effective treatment planning. This workshop aims to: 1. Illustrate key diagnostic features of these common ARFID presentations and their variability across the age ranges (early and late childhood, adolescence and adulthood), 2. Highlight differential diagnoses, relevant psychiatric and medical comorbidities and potential diagnostic pitfalls, 3. Describe a new structured clinical assessment tool: The Pica, ARFID, and Rumination Disorder Interview (PARDI) recently developed by our team to assess ARFID. An international multi-site study evaluating the reliability and validity of the measure is currently underway.

In this interactive workshop, we will use a range of methods and participatory activities: 30 minutes of the workshop will be didactic, with the remainder dedicated to participatory activities. Dr. Bryant-Waugh and Dr. Cooke will illustrate ARFID presentations, and explore heterogeneity within ARFID (15 minutes); delegates will be asked to work in pairs on clinical scenarios focusing on ARFID heterogeneity across ages (15 minutes). Dr. Thomas will introduce the rationale and structure of the PARDI and facilitate a group discussion about key diagnostic features identified by delegates (15 minutes). The final 15 minutes will be reserved for audience questions and discussion.

Learning Objectives:
1. Describe the complexities of diagnosing ARFID across the lifespan, including differential diagnosis and diagnostic heterogeneity.
2. Appreciate the importance of a multidisciplinary assessment to evaluate the three most common ARFID presentations, including food avoidance due to sensory sensitivity, lack of interest in eating, and fear of aversive consequences.
3. Apply questions and concepts from the Pica, ARFID, and Rumination Disorder (PARDI) to facilitate evaluation of ARFID in real-world clinical practice.
Eating disorders (EDs) are serious mental illnesses with the potential for life-threatening medical and psychiatric morbidity and high rates of mortality. Yet EDs often go unidentified and untreated by the medical community. In 2007, members of the Academy for Eating Disorders (AED) identified this global deficit related to the understanding, diagnosis and treatment of EDs among the medical community and formed the Medical Care Standards Task Force (MCSTF). This multidisciplinary, international group of experts was charged with developing a method for delivering reliable and useful information to the medical community about ED diagnosis, detection and medical complications. The 1st Edition of the guidelines, “the Purple Book,” was published in 2010 and quickly followed by an updated 2nd edition. Over the next few years, hundreds of these brochures have been distributed worldwide and translated into several different languages, providing an invaluable resource for medical providers and impacting the care of EDs globally.

In 2014, the MCSTF became a permanent AED committee, renamed as the Medical Care Standards Committee (MCSC). The MCSC has since reviewed and updated evidence pertaining to the medical care of patients with EDs across the lifespan, creating a more comprehensive, evidence-based 3rd Edition of the guidelines, entitled “Eating Disorders: A Guide to Medical Care.” This workshop, presented by members of the MCSC, will review the evidence behind the updated guidelines and discuss creative means for global dissemination. Participant’s questions, feedback and suggestions for future editions will be encouraged. Please come to this session prepared to engage in a lively discussion aimed at improving the care of patients with EDs throughout the world.

**Learning Objectives:**

- Recognize the knowledge deficits prevalent in the community at large regarding the diagnosis, treatment and medical management of eating disorders.
- Understand the recommendations regarding medical care of patients with eating disorders as they are presented in the Academy for Eating Disorders “Eating Disorders: A Guide to Medical Care.”
- Identify appropriate targets for global distribution of these guidelines and describe the different ways this resource can be used.

The landscape of eating disorder treatment has changed dramatically over the past 10 years in the United States. Free standing treatment centers providing one or more higher levels of care (inpatient, residential, PHP) have expanded rapidly. These programs have also consolidated and attracted significant external financial investment. In the face of this changing landscape, academic medical center programs have declined in size and scope and a number of prominent clinicians have left academe. Thus, the long-standing tension between academic and free-standing treatment centers in the USA has intensified. In this workshop, Drs. Lampert, Zerwas, and Van Furth will debate the roles of academic and private treatment. They will also address whether the economics of the health care system drive clinical decision making in USA and European models. Key issues will include: 1) Which patients? How do we decide who needs what care? 2) Cost and Coverage: How and why do families pay when insurance doesn’t cover care? 3) Length of stay: avoiding a revolving door or profiting off of long stays? 4) Swag and trips: Do these affect clinical decision-making? 5) Family: Inclusion in treatment or respite? 6) Evidence: What works and what doesn’t work and for whom? Tensions between varying models of treatment often go un-discussed or unacknowledged openly. However, much of our real-world clinical decision making is dedicated to the 40-60% of patients for whom first-line treatments are ineffective.

Workshop participants (e.g. clinicians from academic, private practice, and residential treatment centers) will be encouraged to take sides in this debate and represent their opinion in group discussion. International participants will be encouraged to provide their perspective on the impact of their own health care system for treatment. In sum, we believe that all treatment providers share the same ultimate values and goals. We are passionate about helping our patients survive their eating disorders and experience a lasting and strong recovery. Through dialogue, we can find a path forward for the field.
**SESSION ABSTRACTS**

### Learning Objectives:
- Describe the tensions between academic and residential treatment centers
- Compare and contrast the decisions that academic and residential providers make when selecting the goals for higher levels of care.
- Synthesize academic and residential clinicians' shared values and generate ideas for future collaboration across varying models of treatment.

### W 2.4 | Adjuncts to FBT: DBT, ASD and Perfectionism | Club H. First Floor

**Kim Hurst, PhD | Griffith University, Gold Coast, Australia**  
**Colleen Alford, MSW | University of New South Wales, Sydney, Australia**  
**Annaleise Robertson, DClinPsy | The University of Sydney, Sydney, Australia**

While Family Based Therapy (FBT) remains the first line treatment for of adolescent Anorexia Nervosa, research shows a significant minority of patients do not respond or experience only a partial remission by 12 month follow up. A new direction in treatment has been the development of therapy adjuncts that are hypothesised to increase treatment effectiveness while adhering to core FBT concepts. The exploration of what to include in these adjuncts and at what point to introduce them into treatment are in the early stages of clinical research. Three different adjuncts are currently being trialled in Australia which were developed in response to common clinical presentations and comorbidities. These include:  
- A 7 session DBT based family adjunct which utilises central concepts from DBT to address high levels of distress, avoidance of conflict or emotional expression and high risk behaviours like self-harm or suicide attempts  
- A 4 session Autism Spectrum Disorder (ASD) based adjunct that can be delivered in family sessions or as a parent group targeting communication, containment and refeeding practices sensitive to ASD  
- 9 CBT sessions targeting perfectionistic thinking aims to assist adolescents to adjust extremely high, unrelenting standards and be less critical around mistakes

This workshop provides a brief overview of the mediators and moderators in FBT, highlighting the ways in which adjuncts have begun to be used to improve treatment efficacy. It is then divided up into 3 sections focusing on DBT, ASD and Perfectionism. Each section will include a description of theoretical and practical suggestions around how and when each adjunct can be utilised.

**Learning Objectives:**
- Determine what adjunct is required and when to best implement this for patients
- Outline the content of three adjuncts that have been trialled so far in Australia—DBT, ASD, and Perfectionism
- Assess how the core concepts of these adjuncts can be implemented in their clinical practice.

### W 2.5 | Exposure-Based Treatment for Comorbid Anxiety: Terrified Patients and Nervous Clinicians | Forum Hall, Second Floor

**Glenn Waller, DPhil, MClinPsychol, FAED | University of Sheffield, Sheffield, United Kingdom**  
**Carolyn Becker, PhD, FAED | Trinity University, San Antonio, Texas, USA**  
**Kelly Vitousek, PhD | University of Hawaii, USA**

Eating disorders and anxiety-based disorders (including PTSD and OCD) commonly co-occur. Successful treatment of an eating disorder sometimes yields concurrent remission of comorbid anxiety, but not for all patients. In these cases, it is beneficial for eating disorder therapists to be well armed to treat anxiety directly. Although exposure therapy is widely recognized at one of the most effective strategies for reducing pathological anxiety, remarkably few clinicians utilize this technique. Exposure can be delivered in everyday practice; yet it often is delivered in ways that omit key elements, with a resulting loss of effectiveness. One reason commonly given for this omission is the clinician’s fear of distressing the patient. This workshop will detail the rationale for using exposure for comorbid anxiety—how it works, and why it depends on both the patient and the therapist tolerating their own anxiety and overcoming their joint safety behaviours. Case examples will be used to illustrate how to introduce, deliver and build on exposure in real-life settings, so that we can treat comorbid anxiety with maximum effectiveness.

**Learning Objectives:**
- Describe key steps in implementing exposure for comorbid anxiety
- Identify patients’ safety behaviors
- Identify clinicians’ safety behaviors and how they interact with those of patients.

---

**FRIDAY (CONTINUED)**
W 2.6 | Cultural and National Differences in Presentation of Eating Disorders
(Partner, Chapter and Affiliate Committee Workshop) | Meeting Hall 1B, First Floor

Eva Trujillo, MD, FAED, CEDS, FAAP, Fiaedp | President, Academy for Eating Disorders, Comenzar de Nuevo A TecSalud Sistema de Salud del Tecnológico de Monterrey, Garza García NL, Mexico
Sebastian Soneira, MD | Nutrition Institute of Buenos Aires, Capital Federal, Argentina
Ashish Kumar, MRCPsych, MSc | Alder Hey Children’s Foundation NHS Trust, Liverpool, United Kingdom
Rachel Bachner-Melman, PhDClinical | Ruppin Academic Center, Emek Hefer, Israel and Hebrew University of Jerusalem, Jerusalem, Israel
Umberto Nizzoli, PhD, MPH | IPU Univeristy, Viterbo, Italy

Eating habits, the social value of food, and idealized body shape are contextualized and vary across cultures. While globalization has spread Western values regarding food and eating traditions across many societies, there are still important differences and conceptions of the social and cultural role of food. Additionally, the ideal body image is modulated by cultural influences. As a result, presentation of Eating Disorders can vary according to the social context. The objective of this workshop is to address the different influences on and presentations of eating disorders across cultural contexts. Speakers from different parts of the world will describe the situation in each country using the same questions as guidelines so the same aspects can be compared for each country. Then we will proceed to discuss the topic with the audience in order to establish similarities and differences of eating disorders in different countries.

Learning Objectives:
1. To define the different clinical aspects of eating disorders in each country and how these aspects are influenced by culture.
2. To exchange information with the audience about the socio-cultural influences on eating disorders and how it may shape the presentation of Eating Disorders symptoms in each country.
3. To establish similarities and differences on the issues presented and assess whether there is a need to design treatment strategies adapted to each society.

W 2.7 | Shifting away from DSM Diagnostic Labels and Towards Dimensional Phenotypes: Will this make Research More Clinically Useful or Widen the Research-Practice Gap? Let’s Talk About it | Terrace 2, Second Floor

Theresa Fassihi, PhD | Private Practice Clinician, Houston, Texas, USA
Ann Haynos, PhD | University of Minnesota Medical Center, Minneapolis, Minnesota, USA
Ursula Bailer, MD, FAED | Medical University of Vienna, Vienna, Austria
Janet Treasure, OBE, MD, FRCP, FAED | Kings College London Institute of Psychiatry, London, United Kingdom
Scott Moseman, MD | Saint Francis Hospital, Tulsa, Oklahoma, USA

New trends in research are moving away from the use of diagnostic classification systems and towards the study of brain systems and behavioral phenotypes. This change is being spearheaded by Research Domain Criteria (RDoC), an initiative promoted through the National Institute of Mental Health (NIMH) in the U.S. that prioritizes funding for research that characterizes psychiatric concerns dimensionally (through specific behaviors, rather than diagnoses) and across multiple domains. This initiative directs much of U.S. government funding resources to basic research and away from clinical treatment trials. Additionally, NIMH funding now requires that treatment trials show evidence of directly targeting biological mechanisms. Although RDoC is a U.S. initiative, this change parallels shifting research priorities and foci internationally, but the nature of the impact is debated. The shift could be a solution to concerns that the DSM-5 diagnostic system is limited in clinical utility with somewhat arbitrary diagnostic cutoffs and based solely on observable behaviors that can be multi-determined.

The new focus also could encourage innovation and improve treatment individualization for people with eating disorders, and thus improve clinical outcomes. However, there are also concerns that this initiative could divert funds from important clinical research, especially for treatments not clearly linked to a biological mechanism. Eating disorders research is underfunded relative to other illnesses globally, so it is critical that the resources be allocated in the most effective ways. There is a concern that the growing focus on basic processes may be difficult to translate to clinical practice, thus widening the research-practice gap. In this workshop, we will review the RDoC framework, discuss the potential advantages and disadvantages of this approach, and brainstorm how to foster research-practice collaborations within this framework to maximize clinical usefulness. In an interview format, clinicians and researchers will discuss the potential benefits and challenges of RDoC and related trends for 30-40 minutes and then open up the conversation to workshop participants.
### Learning Objectives:

- Identify multiple dimensional phenotypes relevant to eating disorders treatment.
- Identify potential advantages and challenges of a dimensional-phenotype approach for research-practice collaborations.
- Develop strategies within the eating disorder community to foster research-practice collaborations in the RDoC framework (e.g., use practitioners’ feedback to identify research targets based on clinical experience; translate technical research into clinically useful information).

### W 2.8 | The FREED (First Episode and Rapid Early Intervention for Eating Disorders) Project: A Novel Early Intervention Service for Young Adults

**North Hall, Second Floor**

**Ulrike Schmidt**, PhD, FRCPsych, FAED, **Jessica McClelland**, PhD, and **Katie Lang**, PhD

**King’s College London, London, United Kingdom**

**Victoria Mountford**, DClinPsy, **Amy Brown**, DClinPsy, and **Danielle Glennon**, RN

**South London and Maudsley NHS Foundation Trust, London, United Kingdom**

Eating disorders (ED) predominantly affect adolescents and young adults. Untreated symptoms have lasting effects on brain, body and behaviour. Evidence supports the need for effective intervention in early stage illness. However, individual and service-related barriers often prevent the early detection and treatment of ED. The aim of this workshop is to describe our experience setting up and running FREED (First Episode Rapid Early Intervention for ED), a novel service for young people (aged 18-25) with recent eating disorder onset (< 3 years), embedded in a specialist adult UK National Health Service ED service. We will first provide the rationale underpinning early intervention. Using group discussion and feedback, we will explore the challenges of early intervention in participants’ practice/service. We will briefly describe our service model and the practicalities of setting up and running this service. We will discuss with participants how we seek to engage young people and their families in active recovery. This will include video footage and discussion of how we tailor treatment to early intervention patients, followed by small group reflection and discussion. We will also present data on the feasibility, acceptability and clinical outcomes of FREED and its impact on duration of untreated eating disorder (DUED) and on wait-times for assessment and treatment. We will include video feedback from patients and carers. Finally, there will be questions and discussion. Lesson plan outline: Rationale for early intervention (15 minutes); Group discussion—what are the challenges of early intervention in your practice/service? (20 minutes); Brief description of the FREED service (10 minutes); Video footage and discussion of how we tailor treatment to patients followed by small group reflection and discussion (40 minutes); Presentation of outcome data including qualitative data and video feedback from patients and carers (10 minutes); Questions & discussion (15 minutes)

### Learning Objectives:

- Discuss the importance of early intervention in the ED
- Appraise the challenges of implementing early intervention in a clinical service
- Apply adapted techniques and information appropriate to the needs of this patient group.
**W 2.9 | Hashtag Diversity: Dialogue in the Eating Disorders Field Through Social Media Engagement | Meeting Hall V, Second Floor**

Andrea LaMarre, MSc | University of Guelph, Guelph, Canada  
Ashley Soloman, PsyD | Eating Recovery Center & Insight Behavioral Health Centers, Cincinnati, Ohio, USA  
June Alexander | Central Queensland University, Laburnum, Australia  
Judy Krasna | F.E.A.S.T. (Families Empowered and Supporting Treatment of Eating Disorders) Israel Task Force, Bet Shemesh, Israel

The diversity in the eating disorders field is crystallized in online fora. From blogs to Twitter, we can find innumerable examples of differences in perspective that infuse this dynamic field—a great benefit, but also a major challenge of the online eating disorder field. In this workshop, we address how social media can bridge major gaps between organizations, researchers, health practitioners, caregivers and people with lived experience of an eating disorder. We discuss and demonstrate practical strategies to enable effective and ethical engagement with blogging, social media, and other online forms of communication.

Workshop participants, whether researchers, clinicians, or people with lived experience, will leave the workshop knowing how to understand and engage in lively discussions and debates happening online around the causes, correlates, and treatments for eating disorders. We will ask participants critical questions about how they have experienced social media (e.g., Facebook, Twitter, Instagram) and blogs and reflect on our own experiences. The presenters, each with high-level engagement in social media, will offer diverse perspectives to contribute to a thorough exploration of this topic. Each has used social media to advance their clinical, research, or advocacy pursuits. We begin the workshop by demonstrating the uses of social media and blogs, including as research tool, data gathering source, communication method, peer support platform, information provision mechanism, and research knowledge translation device. To promote discussion, we invite participants to engage with us in a dialogue about the potential barriers, drawbacks, and advantages to online engagement as bridging device. We conclude with interactive examples of techniques that allow respectful and effective sharing information dissemination, and audience engagement in online fora to encourage greater communication, transparency, and productive diversity in the eating disorder field.

**Learning Objectives:**
- Identify strategies for respectful and productive online dialogue in the eating disorders field.
- Appraise methods of diffusing and resolving conflict that may arise through disagreements in online debates about eating disorders.
- Compare approaches to using social media and blogging to spread awareness about, and build engagement with, diverse stakeholders across the eating disorders continuum.

---

**W 2.10 | Food Addiction: A Controversial Construct | Meeting Hall IV, Second Floor**

Ashley Gearhardt, PhD | University of Michigan, Ann Arbor, Michigan, USA  
Fernando Fernández-Aranda, PhD, FAED and Susana Jiménez-Murcia, PhD | Bellvitge University Hospital-Idiibell, Ciberobn, Barcelona, Spain

The food addiction (FA) construct has become a topic of increasing interest in the scientific community within the last five years and has diagnostic, clinical and potential therapeutic implications. Although research has shown similar vulnerabilities between food intake and addictive behaviors, there are contradictory results in the literature and a lack of longitudinal data. In this workshop the state of the FA field will be discussed, including different clinical populations, from eating disorders (ED) and obesity to behavioral addictions, and the potential effect of FA in therapy response. The main aim of this workshop is to give also basic therapy guidelines for the assessment and treatment of such patients and video recorded cases will be presented.

The issues considered include: a) state of the art of the FA construct and current controversies; b) patients characteristics in different clinical pictures (ED, obesity, behavioral addictions) and associated risk factors; c) evaluation procedures; d) interventions (specific vs. non-specific); e) future research. Participants will be expected to relate what they have observed in their own clinical experience and to take an active role. The workshop should be of interest to all those involved in assessing and treating eating disorder and obese patients, such as psychologists and psychiatrists, therapists, dieticians and nurses.

Bibliography and relevant handouts including case study will be given.

**Learning Objectives:**
- Gain insight on the characteristics of the food addiction construct and studies that have been carried out on food addiction vulnerability factors.
- Distinguish the different screening tools available for food addiction screening and how to interpret their results.
- Gauge the limitations and controversies surrounding this construct.
Eating disorders present a substantial health problem in current society. Their development is affected by multiple individual and societal factors, including traditional and, now, also digital media. Digital technologies (especially the Internet and mobile phones) are embedded in the everyday lives of most people in Western countries: They shape not only the way we communicate, but also affect our norms, values, and behavior. Considering their potential to affect our lives, it is essential to understand their role in relation to eating disorders. The workshop centers on the role of digital technologies in eating habits, with specific focus on the development, prevention, and treatment of eating disorders. The most recent data from ongoing research projects in the Czech Republic will be presented, including interviews with clients who suffer from eating disorders (N=30), interviews with professionals who treat eating disorders (N=30), and quantitative data depicting the behavior of the visitors of websites focused on dieting or exercising (N = 702). First, an overview of the current research findings will be presented in two blocks. Next, in small groups, the participants will be given an opportunity to discuss their own experience with the interaction of eating disorders and digital technologies, be it from the perspective of a researcher or a treatment professional; mixed groups of practitioners and researchers will be encouraged. The goal of the discussion will be to help connect the research findings with the workshop participants' experience. Next, the insights exchanged in the small groups will be shared in a large group and discussed with the workshop organizers. This way, the research findings will be connected to the knowledge the workshop participants themselves carry. Also, the participants' insights will serve to enrich the presented findings, because they, at least partially, constitute one of the studied samples—professionals focusing on the treatment of eating disorders.

**Learning Objectives:**

- Understand the current research findings on the interaction of digital technologies and eating disorders from both the perspective of people suffering from eating disorders and the perspective of professionals who treat eating disorders.
- Understand the eating behaviors of people who use digital technologies to access content related to dieting and exercising.
- Connect the acquired understanding of the current research findings on the interaction of eating disorders and digital technologies with their professional and/or research practice.
This study aimed to compare short-term treatment outcomes and dropout risk in males and females with eating disorders. It also analyzed specific clinical predictors of remission and dropout in both sexes. The whole sample consisted of 131 male and 131 female eating disorder patients, matched for age and diagnosis. All patients were diagnosed according to the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition criteria. Assessment measures included the Eating Disorder Inventory-2, the Symptom Checklist-Revised, and the Temperament and Character Inventory-Revised, as well as other clinical, motivational, and psychopathological indices. All patients underwent the same cognitive-behavioral therapy treatment protocol (day hospital or outpatient group therapy, according to their diagnosis). After adjusting for eating disorder severity, our results suggest that both full remission and risk of dropout were higher for males than for females with eating disorders. Predictive models of treatment outcome indicated some shared factors associated with higher risk of dropout and lower risk of full remission, namely higher scores in novelty seeking. However, in men, younger age and lower levels in reward dependence also predicted higher dropout risk, while higher scores in persistence predicted achieve full remission. In conclusion, this study reinforces the effectiveness of using outpatient cognitive-behavioral therapy as treatment as usual for men with eating disorders. Nonetheless, placing greater emphasis on strategies targeting gender specific issues (namely motivation, stigma and some differential personality traits) could potentially enhance treatment adherence and outcomes.
F003: The Neural Bases of Maladaptive Coping Style in Eating Disorders

Tomomi Noda, MA, Kyoto University, Kyoto
Ema Murao, MD, Kyoto University, Kyoto
Michiko Kawabata, MS, Kyoto University, Kyoto
Masanori Isobe, MD, PhD, Kyoto University, Kyoto
Syun’ichi Noma, MD, PhD, Kyoto University, Kyoto

One of the characteristics of eating disorder patients is that they have maladaptive coping styles. Coping can be classified into approach and avoidant styles. Previous studies indicated that eating disorder patients tend to use avoidant-coping, which is considered maladaptive (Dyson and Renk, 2006), more compared with healthy controls (Troop et al., 1994), and that recovered eating disorder patients use approach-coping, which is considered adaptive (Haley et al., 1996), more compared with before recovery (Troop et al., 1997). Approach-coping requires self-regulatory control (Rueda et al., 2009). Patients with Binge-eating have deficient self-regulatory control, represented at the neural level by reduced prefrontal responses (Steinglass et al., 2009; Murphy et al., 2004). However, the neural bases of coping style in eating disorders have remained unclear.

The purpose of the present study was to investigate the association between coping style and neural responses in prefrontal area corresponding to behavioral inhibition using fMRI. The participants are 12 anorexia nervosa restrictive type (ANR), 12 anorexia nervosa binge/purge type, and 15 healthy controls (HC). fMRI data were acquired on a 3T MRI scanner using Go-NoGo task. To assess coping behavior, we used coping scale, COPE (Carver, 1989). The results showed that approach coping was significantly low in ANR and ANBP compared with HC. fMRI data analyses revealed that the activation of lateral orbit frontal cortex (OFC) was significantly higher in ANR compared with ANBP and HC. Behavioral data showed that the correct answer rate of Go-NoGo task was significantly low in ANBP compared with ANR and HC. Additionally, the activation of lateral OFC was significantly negatively correlated with the scores of approach coping (r = -.637, p < 0.5) in ANBP. Lateral OFC is the region associated with response inhibition. Inhibition is considered as a particular feature of making choices (Elliott et al., 2000) and it may be the critical region for maladaptive coping style in ANBP.

F004: An Open Series of Lamotrigine in Bulimia Nervosa and Anorexia Nervosa with Significant Affect Dysregulation and Poor Impulse Control

Tiffany Nakamura, MA, University of California, San Diego, San Diego, California
Mary Ellen Trunko, MD, University of California, San Diego, San Diego, California
Terry Schwartz, MD, University of California, San Diego, San Diego, California
Anne Cusack, PsyD, University of California, San Diego, San Diego, California
Laura Berner, PhD, University of California, San Diego, San Diego, California

Increasing evidence supports the role of pharmacotherapy, specifically mood stabilizers and selective serotonin reuptake inhibitors (SSRIs) producing short term reductions in symptoms of affective and behavioral dysregulation (ABD) and eating disorder behaviors. Additionally there is limited but promising evidence using lamotrigine as either an effective augmenting agent to SSRIs or as a monotherapy, showing significant reductions in affective dysregulation, impulsivity, and eating disorder symptomology. This open trial sought to evaluate the efficacy of Lamotrigine in 14 patients (mean age 28.2 years; SD = 7.6 years) all with comorbid ABD, impulsivity, and diagnoses of Bulimia Nervosa (BN) (N = 7), Anorexia Nervosa purging type (AN-P) (N = 3) and Anorexia Nervosa binge-purge type (AN-BP) (N = 4) in a university based partial hospitalization, intensive outpatient, and outpatient setting for the treatment of transdiagnostic eating disorders, utilizing dialectical behavior therapy (DBT) as the primary treatment modality. As such, the Zanarini Rating Scale for Borderline Personality Disorder (ZAN-BPD), the Borderline Evaluation of Severity Over Time measure (BEST), and the Eating Disorder Examination Questionnaire (EDE-Q) were used to assess for changes in affective dysregulation and eating disorder symptomology change over time. Analyses with multilevel models indicate significant improvements in overall pathology as measured by the BEST (t = 4.01, p =0.015) and ZAN-BPD (t= 4.36, p=0.001) and eating disorder pathology with global EDE-Q at intake compared to discharge (t= 3.01, p=0.009). There was significant reduction in severity across eating disorder diagnoses with increasing doses of lamotrigine and greater length of time on the medication. Additionally, medium-large reductions in scores on both measures (Cohen’s d = 0.57-1.94) were observed over 45 days. These findings strongly support the application of Lamotrigine in combination with DBT to both decrease ABD as well as eating disorder symptomology in both the short and long term.

F005: Posttraumatic Stress Disorder as a Predictor of Premature Termination of Day Hospital Treatment for Eating Disorders

Kathryn Trottier, PhD, University Health Network and University of Toronto, Toronto, Ontario

Individuals with posttraumatic stress disorder (PTSD) are thought to have difficulty tolerating and engaging with eating disorder (ED) treatment due to a functional relationship between PTSD and ED wherein ED symptoms function as a coping mechanism for PTSD symptoms. The aim of this study was to determine
whether PTSD predicts premature termination from day hospital (DH) ED treatment, particularly in the initial phase of treatment. We also aimed to compare clinical characteristics of ED individuals with and without PTSD. One hundred and forty-three patients with BN or OSFED admitted to a DH program completed measures of ED symptoms and psychopathology, PTSD, and other clinical characteristics at pre-admission. Fifty-six patients (39%) screened positive for PTSD. They reported significantly higher ED psychopathology, impairment, as well as other psychopathology on multiple measures. There were no between group differences in ED symptom frequencies. In our DH program, a complete duration of treatment for BN and OSFED is 7 to 8 weeks with a minimum dose defined as 4 weeks. Sixty-eight percent of patients completed treatment and 32% terminated prematurely. Cox regression revealed that PTSD was associated with an increased risk of premature termination (b = -0.60, p = .04). Forty-one percent of patients with PTSD compared with 26% of those without PTSD, terminated DH prematurely (c2 = 3.34, p = .067). Examination of the proportions of individuals who completed treatment, terminated early (completion of < 4 weeks), and terminated late (completion of ≥ 4 and < 7 weeks) revealed that 79% of early terminators had PTSD, whereas 37% of late terminators and 34% of completers had PTSD (c2 = 10.24, p = .006). Results suggest that individuals with PTSD are particularly likely to have difficulty engaging with and tolerating DH ED treatment. Future research should seek to understand why, and in particular, determine whether this is due to PTSD-related distress. It is likely that interventions to facilitate ED treatment engagement and retention for individuals with co-occurring PTSD need to be developed and evaluated, and may have the potential to enable more individuals with BN and OSFED to experience good ED treatment outcomes.

**F006: Rumination in Patients with Binge-Eating Disorder and Obesity: Associations with Eating-Disorder Psychopathology and Weight Bias Internalization**

Shirley Wang, Student, The College of New Jersey, New Haven, Connecticut
Janet Lydecker, PhD, Yale School of Medicine, New Haven, Connecticut
Carlos Grilo, PhD, Yale School of Medicine, New Haven, Connecticut

The presence of overvaluation of shape/weight in patients with binge-eating disorder (BED) and obesity is associated with greater eating-disorder (ED) psychopathology and greater likelihood of internalizing negative weight biases, which—in turn—are associated with poorer mental and physical health behaviors. Little is known, however, about other cognitive processes, such as rumination, that could contribute to either or both ED psychopathology and weight bias internalization. This study examined the significance of rumination, including brooding and reflective rumination, and overvaluation of shape/weight on ED psychopathology and weight bias internalization in a series of 237 treatment-seeking patients with comorbid BED and obesity. The Eating Disorder Examination interview assessed ED psychopathology; rumination and weight bias internalization were measured with established questionnaires. Rumination was significantly correlated with both ED psychopathology and weight bias internalization (p<.01). Hierarchical multiple regressions revealed that rumination was associated with ED psychopathology (ΔR²=.03, p=.01) and weight bias internalization (ΔR²=.18, p<.001) above and beyond overvaluation of shape/weight. Our findings suggest that, among patients with BED and obesity, rumination is an important cognitive process associated with severity of ED psychopathology. Importantly, the effects of rumination persisted after accounting for overvaluation of shape/weight. Because rumination involves a repetitive focus on distressing situations and thoughts, it is possible that patients characterized by higher levels of rumination are more likely to dwell on experiences with weight-based discrimination and internalize these negative attitudes. With additional controlled examination, findings that rumination plays a role in ED psychopathology and weight bias internalization could offer additional targets for treatment interventions.

**F007: Peer Influence in Preadolescents and Adolescents: A Predictor for Body Dissatisfaction**

Adriana Amaya-Hernández, PhD, Universidad Nacional Autónoma de México, México, Ciudad de Mexico
Juan Manuel Mancilla-Díaz, PhD, Universidad Nacional Autónoma de Mexico, Mexico, Ciudad de Mexico
Georgina Leticia Alvarez-Rayón, PhD, Universidad Nacional Autónoma de México, Mexico, Ciudad de Mexico
Mayaro Ortega-Luyando, PhD, Universidad Nacional Autónoma de México, Mexico, Ciudad de Mexico

It has been documented that disordered eating behaviors and body dissatisfaction have its occurrence peak during adolescence, also sociocultural factors, such as peer influence, have an impact on the presence of these; however, recent research has suggested that disordered eating behaviors and body dissatisfaction are present at a younger age. Therefore, the aims of this study were to compare disordered eating behavior, body dissatisfaction and peer influence between preadolescents and adolescents, and to analyze the role of peer influence in the development of disordered eating behaviors and body dissatisfaction. Two hundred seventy two preadolescents (135 women and 138 men) and 175 adolescents (95 women and 80 men) participated answering four questionnaires: Children Eating Attitudes Test, Body Shape Questionnaire, Sociocultural Attitudes Toward Appearance Questionnaire- Revised version, Inventory of Peer Influence on Eating Concerns, besides height and weight were obtained. As a first finding, statistical analysis showed significant differences in disordered eating behaviors, thin-ideal internalization, interaction with peers of the same sex and body mass index between groups, being preadolescents who obtained higher scores on these last three variables. Path analysis
showed in both groups that body dissatisfaction was the predictor of disordered eating behaviors, while thin-ideal internalization and likability with peers of opposite sex had a direct effect on body dissatisfaction. With these models were explained 64% and 57% of the variance of body dissatisfaction and 27% and 40% of disordered eating behaviors for preadolescents and adolescents, respectively. These data support the hypothesis that from an early age can be observed disordered eating behaviors and discomfort with the body image. In addition to highlighting the role of peer influence as an important predictor of body image, so this kind of influence can be a key resource in social interventions aimed at increasing satisfaction with body image. This research was sponsored by PAPIIT IA-303616 and IN-306615.

F008: Examining Treatment Outcomes Comparing Eating Disordered Patients with and without Substance Use Disorder

Tamara Pryor, PhD, FAED Eating Disorder Center of Denver, Denver, Colorado
Ian Palombo, MA, Eating Disorder Center of Denver, Denver, Colorado
Charlee Borg, MA, University of Denver (DU), Denver, Colorado

Eating disorder and substance use disorders frequently co-occur but are rarely treated in a comprehensive integrated fashion. Studies suggest that patients that receive non-integrated services have poorer treatment outcomes. In an effort to create an integrated program that addresses both disorders we decided to first examine pre/post treatment data and compare our ED patients to our ED/SUD patients to measure if there are unique differences between groups that may inform specific treatment interventions. Archival data from an ED treatment facility was used. 77 women with comorbid eating disorder and substance abuse (ED/SUD) diagnoses were compared to 339 with eating disorder (ED) diagnoses only. Subjects’ scores were compared on 3 scales from the Eating Disorder Inventory-3 (EDI-3) by group, and pre/post treatment. The scales were Interceptive Deficits (ID), Perfectionism (Perf), and Emotional Dysregulation (EmD). Subjects were also compared on 4 scales of the Temperament Character Inventory (TCI) at admission. The scales were Novelty Seeking (NS), Harm Avoidance (HA), Persistence (P), and Self-Directedness (SD). All subjects benefited from treatment on the EDI 3 pre/post measures. However, upon discharge the ED/SUD group exhibited significantly higher scores on EmD than the ED only group when variances in baseline scores were controlled for. On the TCI, ED/SUD scored significantly higher on NS, and lower on P. and SD. As the ED field explores the treatment of comorbid SUD in ED treatment facilities, these results support approaches that focus on increase distress tolerance, developing coping skills for frustration and emotional regulation, addressing behavioral activation, as well as a focus upon increasing persistence, and enhancing self-directedness.

F009: Prevalence of Eating Disorders and Problem Eating Behaviors in Elderly Women

Eva Conceição, PhD, School of Psychology, University of Minho, Braga, Braga
Fabiana Gomes, MSc, School of Psychology, University of Minho, Braga, Braga
Ana Pinto-Bastos, MSc, School of Psychology, Universidade do Minho, Braga, Braga
Ana R. Vaz, PhD, School of Psychology, Universidade do Minho, Braga, Braga
Paulo P.P. Machado, PhD, School of Psychology, Universidade do Minho, Braga, Braga

The aim of this study is to examine the point prevalence of eating disorders and problem eating behaviors such as picking (or nibbling) in women aged 65 or over. This is a two stage epidemiological study that assessed 342 women aged between 65 and 94 years old. In Stage 1, screening measures used to identify possible cases were: Mini Mental State Examination—to screen and exclude patients with cognitive impairment; Weight Concerns Scale; SCOFF (Sick, Control, One, Fat, Food)—Questionnaire; Eating Disorder Examination—Questionnaire—dietary restraint subscale; three questions to screen for picking or nibbling and night eating syndrome. Women selected for Stage 2 (n=118) were interviewed with the diagnostic items of Eating Disorder Examination. According with DSM-5 the prevalence of eating disorders was 3.25% (1.83 – 5.7, 95% C.I.). Binge eating disorder was 1.68% (0.82 – 3.82, 95% C.I.); other specified feeding or eating disorder 1.48% (0.63– 3.42, 95% C.I.); bulimia nervosa 0.3% (.05 – 1.7, 95% C.I.). Binge eating episodes were reported by 5.62% of women. No anorexia nervosa or night eating syndrome cases were identified. The prevalence of picking or nibbling was 18.9% and associated with increased body mass index (t(322)=-3.28, p<0.001). Eating disorders are rare but present problems in the elderly population, and picking or nibbling was the most frequently endorsed problem eating behavior. Considering the association of such problems with psychological, cognitive impairment, and weight management difficulties research is warranted to better explore such problems.

F010: Disordered Eating Behaviors: Two Decades of Study

Mayaro Ortega-Luyando, PhD, Universidad Nacional Autónoma de México, Mexico, Ciudad de México
Adriana Amaya-Hernandez, PhD, Universidad Nacional Autónoma de México, Mexico, Ciudad de México
Georgina Alvarez-Rayon, PhD, Universidad Nacional Autónoma de México, Mexico, Ciudad de México
Juan Manuel Mancilla-Diaz, PhD, Universidad Nacional Autónoma de México, Mexico, Ciudad de México

International research suggests that disordered eating behaviors (DEB), have shown an increase over the years. However this has been a topic of constant debate since still there is not a consensus, not only for the scarcity of longitudinal studies, but also because from those longitudinal studies, few carry out trend analysis. To count with this kind of epidemiological data is relevant.
since this could enhance the effectiveness in planning health services, due to the designation of financial resources depends on the magnitude and frequency of the disease. Therefore, the objective of this study was to estimate the prevalence of DEB (diet, fasting, abuse of laxatives or diuretics, self-induced vomiting and binge eating) in Mexican university students over a 20-year period (1994-2013) divided into four cohorts. The sample was not randomize, consisting of 1250 women aged between 15 and 29 years old. Prevalence and trend analysis were performed. The results indicated that binge eating, dieting and fasting were the behaviors with highest prevalence, however the trend analysis showed a decrease over time ($R^2=0.83$, $R^2=0.30$ y $R^2=0.89$, respectively). On the other hand self-induced vomiting and use of laxatives and diuretics showed lower prevalence rates and trend remained relatively stable over time ($R^2=0.05$ y $R^2=0.04$, respectively). Data showed that DEB trend in young Mexican women is not increasing over time as international studies report, these inconsistencies are discussed under a methodological and cultural perspective. Project sponsored by PAPIIT-INS06615, PAPIIT-IA303616

**F011: Emotional Reactions to Binge Eating and Overeating: An Experience Sampling Study**

**Katrin Kukk**, MA, University of Tartu, Tartu, Tartumaa  
**Kirsti Akkermann**, PhD, University of Tartu, Tartu, Tartumaa

Eating behavior is influenced by many factors such as social and situational cues as well as emotions. Eating larger amounts of food in a brief period has been referred to as binge eating and overeating, the former accompanied by loss of control. It has been implied that binge eating and overeating may have different emotional effects since the presence of loss of control has been indicated as an important psychopathological determinant. The current study investigated the emotions accompanying binge eating, overeating healthy eating episodes using the Experience Sampling Method (ESM). 97 women and 61 men with a mean age of 22.3, answered a short questionnaire regarding their emotions and eating behavior on a palmtop computer 7 times a day during a three-day period. Among women, binge eating and overeating episodes differed significantly in subsequent sadness, shame, guilt, satisfaction, confidence, anxiousness, disappointment, loneliness,endum, joy and motivation. The latter two had lower and other emotions had higher levels in the occasion of binge eating. Comparing binge eating episodes with healthy eating episodes differences appeared in subsequent sadness, shame, guilt, loneliness, and disappointment. Among men differences between binge eating and overeating episodes appeared only in the levels of joy. Binge eating episodes and healthy eating episodes differed significantly in the level of satisfaction and confidence, both of the emotions had lower levels in the presence of binge eating. The results indicate that binge eating and overeating may affect emotions differently. Also, women seem to be more sensitive to binge eating and overeating as they have more negative emotions following excessive eating.

**F012: The Prevention of Eating Disorders and Obesity: Long-term Effects of School-based Programs in Germany**

**Felicitas Richter**, MSc, Institute for Psychosocial Medicine and Psychotherapy, Jena, Thuringia  
**Luise Adamez**, MSc, Institute for Psychosocial Medicine and Psychotherapy, Jena, Thuringia  
**Julia Muehleck**, MSc, Institute for Psychosocial Medicine and Psychotherapy, Jena, Thuringia  
**Katharina Wick**, DiplPsych, PhD, Institute for Psychosocial Medicine and Psychotherapy, Jena, Thuringia  
**Bernhard Strauss**, DiplPsych, PhD, Professor, Institute for Psychosocial Medicine and Psychotherapy, Jena, Thuringia  
**Uwe Berger**, DiplPsych, PhD, Institute for Psychosocial Medicine and Psychotherapy, Jena, Thuringia

Eating disorders are difficult to treat and produce high treatment costs. Consequently, a number of universal and selective prevention programs were developed and evaluated in different countries in the past decade. The following research aims to summarize the evidence of the short- and long-term effects of the school-based prevention programs “PriMa” for preadolescent girls and “Torera” for preadolescent girls and boys in Germany. Two consecutive projects were conducted to evaluate the prevention programs comprehensively according to the standards of the Society for Prevention Research. The efficacy trial was conducted between 2004 and 2006 followed by the effectiveness evaluation in 2007-2008 and 2016. The examination of the broad dissemination completed the evaluation in 2016. A combination of quantitative and qualitative approaches was used in the data analysis. Long-term effects were examined in different trials combining self-report data of girls (N=100), secondary health insurance data (N=14,931), and qualitative teacher interviews (N=12). Results showed that body self-esteem as a key protective factor could be strengthened from early adolescence to young adulthood. In disordered eating, no group differences were obtained. Risk-group members as well as pupils, who participated in two programs instead of just one, benefited the most. To gain a more detailed understanding of the effects, it was examined whether program participation led to a decreased utilization of health care services concerning eating problems in the long-term. Concerning the broad dissemination of the prevention programs, challenging factors were a lack of the individual teacher’s interest, organizational barriers, and missing structural support via school administrations and political decision makers. A prevention strategy identifying possible ways into sustainable prevention dissemination will be introduced. This strategy may also serve as a model for health promotion in different areas.
**F013: Yoga as an Adjunct to Intensive Eating Disorder Treatment: A Randomized Comparison**

**Traci McFarlane**, PhD, Eating Disorder Program, University Health Network, Toronto General Hospital, Toronto, Ontario  
**Kelli Young**, MEd, BScOT, Eating Disorder Program, University Health Network, Toronto General Hospital, Toronto, Ontario  
**Anne Marie Smith**, MSW, Eating Disorder Program, University Health Network, Toronto General Hospital, Toronto, Ontario  
**Patricia Colton**, MD, FRCP. Eating Disorder Program, University Health Network, Toronto General Hospital, Toronto, Ontario

There is very little research in the area of yoga and disturbed eating/body image. Of the three randomized studies available in the literature, only one included participants with diagnosed eating disorders (ED). This study demonstrated that yoga led to decreases in weight/shape concerns and food preoccupation; however, the sample was limited to adolescent participants and outpatient treatment. The current study builds on existing literature by investigating adult ED patients currently in an intensive treatment setting. Participants were randomized to one of two conditions: yoga (n=20) or a wait-list control (n=21). The yoga group completed five weekly sessions of beginner-level Hatha yoga with a focus on breathing and movement, and exploration of body awareness and acceptance through gentle movement and stretching. A series of 2 (condition: yoga, control) by 2 (time: pre and post) repeated measures ANOVAs/MANOVAs were conducted on the self-report measures that were administered. Intention to treat analyses were used. The last observation was carried forward for the 7 people who either dropped out of yoga because of the early time slot (n=3) or who were discharged prematurely from intensive treatment (n=4). As expected results showed a significant main effect for time for most variables measured; all participants improved in weight and shape concerns, anxiety, and depression over time throughout their ED treatment. Additionally, there was a significant time by condition interaction for the Self-Compassion Scale (p=.01). Those in the yoga condition reported a significant increase in self-compassion (pre: M=21.95, SD=6.90; post: M=26.95, SD=7.68), while those in the control condition had a slight drop in self-compassion over the study period. Individuals with ED generally exhibit low levels of self-compassion, which has also been associated with poorer treatment outcome. This is the first study to show that yoga may increase self-compassion in individuals with ED, indicating that yoga can be a valuable and positive adjunct to intensive treatment.

**F014: Meta-Analysis of the Effectiveness of Psychological Treatments for Binge Eating Disorder**

**Marilou Ouellet**, BSc, PhD, Student, Student in Psychology, University of Quebec, Trois-Rivières, Trois-Rivières, Québec  
**Ève-Line Bussières**, PhD, University of Quebec, Trois-Rivières, Trois-Rivières, Quebec  
**Johana Monthuy-Blanc**, PhD, University of Quebec, Trois-Rivières, Trois-Rivières, Quebec  
**Marie-Pierre Gagnon-Girouard**, PhD, University of Quebec, Trois-Rivières, Trois-Rivières, Quebec

The cognitive-behavioral treatment described by Fairburn (2013) is one of the most used treatments for binge-eating disorder in adults. However, there are not enough evidences in the current literature to identify for what symptoms this treatment and its derivatives are the most effective. The aim of this meta-analysis was to compare mean effects of studies that used Fairburn’s treatment and his derivatives with other types of treatments (Mindfulness based therapy, dialectic therapy, behavioural therapy, etc.). A total of 29 independent samples (24 randomized controlled trials) were included (N=1878 adult participants with or without obesity). Treatments based on Fairburn (2013) show large to very large significant effects on frequency of binge eating (d=0.92 [95% CI 0.43 to 1.40]; k=12) and concerns about shape, weight and eating (d=1.06 [95% CI 0.59 to 1.52]; k=15) as well as medium significant effects on dietary restraint (d=0.62 [95% CI 0.19 to 1.05]; k=9) and psychological indicators of well-being (d=0.46 [95% CI 0.17 to 0.75]; k=17). There was no significant effect on weight reduction. Other treatments show a very large effect on frequency of binge eating (d=1.65 [95% CI 0.11 to 3.19]; k=3), a large effect on psychological indicators (d=0.69 [95% CI 0.37 to 1.02]; k=10) and a small effect on concerns about shape, weight and eating (d=0.31 [95% CI 0.13 to 0.49]; k=6), but no significant effect on dietary restraint and weight reduction. These results suggest that different treatments significantly reduce frequency of BE concerns and psychological indicators, but no treatment addressed all problematic dimensions of BED.

**F015: Identifying Fundamental Criteria for Eating Disorder Recovery: A Systematic Review and Qualitative Meta-Analysis**

**Jan Alexander de Vos**, MSc, Human Concern foundation, center for eating disorders, Amsterdam, Noord Holland  
**Andrea LaMarre**, MSc, Guelph University, Guelph

Outcome studies for eating disorder recovery regularly measure only pathology change as an outcome. Researchers, patients and recovered individuals highlight the importance of using additional criteria for measuring eating disorder recovery. There is, however, no clear consensus on which criteria to use. The aim of this study was to find fundamental criteria for eating disorder recovery according to individuals who were considered recovered. A systematic review
and a qualitative meta-analytic approach were used. Eighteen studies with recovered patients and meeting various quality criteria were included. Results of the included studies were analyzed using a meta-summery technique where the frequency of the found criteria was examined. Several dimensions of psychological well-being and self-adaptability were found to be fundamental criteria for eating disorder recovery, besides the absence of pathology. The most frequently mentioned criteria were: self-acceptance, positive relationships, personal growth, decrease in eating disorder behavior/cognitions, self-adaptability/resilience and autonomy. Recovered patients rate the presence of aspects of psychological of psychological well-being as important as aspects of recovery in addition to the absence of pathology. Supplementary criteria are needed to understand and measure recovery. We recommend to include instruments measuring psychological well-being and self-adaptability in monitors and guidelines for the measurement of eating disorder recovery.

**F016: Autistic Trait and Functional Connectivity in Patients with Anorexia Nervosa**

Michiko Kawabata-Nishida, MS, Kyoto University, Kyoto, Kyoto
Masanori Isobe, MD, PhD, Kyoto University, Kyoto, Kyoto
Ema Murao, MD, Kyoto University, Kyoto, Kyoto
Tomomi Noda, MA, Kyoto University, Kyoto, Kyoto
Hidehiko Takahashi, MD, PhD, Kyoto University, Kyoto, Kyoto
Toshiya Murai, MD, PhD, Kyoto University, Kyoto, Kyoto
Shun’ichi Noma, MD, PhD, Kyoto University, Kyoto, Kyoto

Autistic trait is reported to be present in patients with eating disorders, and this trait might be related to their difficulties in social situations. However, it is still under debate whether concurrent psychopathology as well as underlying mechanism are in common with the autistic trait seen in general populations, or specific to eating disorders. To elucidate this issue, we investigated brain functional connectivities and their associations of the autistic trait in patients with eating disorders, and compared them with healthy individuals. Specifically, we focused on two networks. The first is the central executive network (CEN) known as a task positive network, which is required for appropriate task performance. The second is the default mode network (DMN), which is deactivated during performance of tasks. MRI data, including rsfMRI data, were acquired for 21 anorexia nervosa (AN group) and 25 age and gender matched healthy controls (Hc group), using T2*-weighted echo-planar sequences (TR=2000ms, TE=30ms), on a 3T scanner. The resting state functional connectivity of CEN as well as DMN between AN and Hc. Autistic trait was assessed using a self-reported questionnaire Autism-Spectrum Quotient (AQ). We analyzed the correlations between MRI parameters and the AQ score. AQ total score was significantly higher in AN group compared with Hc group (p<0.05). AN group showed significantly increased CEN compared with Hc group (p<0.05, FWE corrected). We did not observe the group differences in DMN. Functional connectivity in CEN was positively correlated with AQ total score in Hc group, and on the other hand, was negatively correlated with AQ total score in AN group (p<0.05, FWE corrected). Our findings suggest that underlying brain mechanism of autistic trait is different between eating disorder and general populations.

**F017: Epigenetic Modulation of the Ghrelin System in Acutely Underweight and Recovered Patients with Anorexia Nervosa**

Victoria-Luise Zorn, BSc, MSc, Technische Universität Dresden, Dresden, Saxony
Franziska Ritschel, DiplPsych, Technische Universität Dresden, Dresden, Saxony
Lucia Haemmerl, Student, Technische Universität Dresden, Dresden, Saxony
Esther Walton, PhD, Technische Universität Dresden, Dresden, Saxony
Helge Frieling, MD, Medical School Hanover, Hanover, Niedersachsen
Stefan Ehrlich, MD, Technische Universität Dresden, Dresden, Saxony

Ghrelin plays a crucial role in the regulation of hunger and meal initiation. In patients with anorexia nervosa (AN) several studies indicate higher ghrelin levels than in normal weight healthy controls. Recent studies suggest that hormone expression levels may also be modulated by epigenetic mechanism and that AN is characterized by DNA hypermethylation in hormone-related genes. Considering that ghrelin acts on the growth hormone secretagogue receptor (GHSR), the aim of the present study was to examine whether there was evidence of alterations in methylation status of the GHSR gene promoter. We hypothesized that the overall methylation of the GHSR gene promoter and methylation at specific CpG islands will be affected by malnutrition and differ between acutely underweight (acAN) and recovered patients (recAN) compared to healthy controls (HC). DNA methylation of the GHSR gene promoter was determined in peripheral blood mononuclear cells by means of bisulfite conversion and sanger sequencing. We matched groups for age using an automated pairwise matching algorithm (Fuzzy), deriving two matched subsamples with sample sizes of n(acAN) = 42 vs n(HC) = 42 and n(recAN) = 23 vs n(HC)= 23. We used t-tests to compare overall mean promoter methylation and methylation at single CpG in the different groups. Results showed that overall promoter methylation was not statistically different between acAN and HC, or between recAN compared to HC. There was a nominal differences in DNA methylation at Cpg 1430 (1430 base pairs upstream of Exon 1)—but this difference was not significant after bonferroni correction. These findings do not lend support to the hypothesis of general DNA hypermethylation in hormone-related genes in AN. Further investigations are required to determine whether epigenetic changes at specific CpG islands in the GHSR gene can predispose individuals to anorexia nervosa.
The purpose of this study was to evaluate the impact of an intervention aimed at preventing eating disorders (ED) in female adolescents. An intervention based on the principles of the cognitive dissonance theory and on the media literacy approach to education, has been designed. The intervention has been implemented in the course of three sessions in a group format. The sample included 88 female students aged between 12 and 17 (M = 14.49, SD = 1.25) from Buenos Aires, Argentina. Participants completed the following self-administered instruments: Sociodemographic Questionnaire, Cuestionario de Influencia del Modelo Estético Corporal-26 (Questionnaire of influence of the Aesthetic Corporal Model-26, CIMEC-26) and risk subscales of the Eating Disorder Inventory-3 (EDI-3). They were interviewed by the Eating Disorder Examination (EDE). Assessment took place before the intervention, immediately after it and at six months follow-up. After the intervention, scores on two of the subscales of the CIMEC-26 decreased significantly: Body image distress (M = 7.45 for pre vs. M = 6.24 for post, t = 4.34, p < .001) and Mass media influence (M = 2.75 for pre vs. M = 1.94 for post, t = 3.36, p = .001). A similar trend was observed on two of the EDI-3’s risk subscales: Bulimia (M = 6.45 for pre vs. M = 2.45 for post, t = 7.98, p < .001) and Body Dissatisfaction (M = 16.45 for pre vs. M = 14.38 for post, t = 2.45, p = .016). At six months follow-up, this decrease in scores was held in Body image distress (M = 7.45 for pre vs. M = 6.31 for follow-up, t = 3.36, p = .001) and Bulimia (M = 6.45 for pre vs. M = 3.22 for follow-up, t = 4.89, p < .001). The findings are promising and suggest that preventive intervention based on cognitive dissonance and media literacy is effective and feasible and that such programs may be utilized in high schools as natural universal-selective interventions to prevent eating disorders.

Compulsive treatment and forced feeding in anorexia nervosa (AN) has been controversial, the national laws differs, and the scientific literature is unclear. Forced feeding has been particularly debated, and there is a lack of European qualitative studies investigating patient experiences of involuntary treatment and forced feeding in treatment of AN. The aim of this study was twofold: 1) to examine the course of recovery of patients who have been admitted to compulsive treatment in a Norwegian psychiatric hospital in the period 2003 – 2012. 2) to assess the patient’s perception and experiences of involuntary hospital admissions and the use of forced feeding. In total, eleven women with AN were admitted for compulsory treatment with forced feeding. One of the patients had died, the remaining ten were invited to participate in the study, and eight gave their consent to participate. All participants were assessed using self-report questionnaires measuring eating disorder symptoms and general psychiatric symptomatology at admission, discharge and follow up. Medical history was collected and we conducted a semi-structured interview about their experiences on involuntary treatment and coerced feeding. At follow-up, 60 % (N:6) reported that they no longer had an eating disorder, one presented with severe AN, and 1 patient had relapsed. Two patients had a BMI below 17.5, while the others (N:6) had a normal weight. There was a clear reduction of symptoms of eating disorders and psychiatric symptoms in all assessments during follow up, and an improvement in global function. The participants’ experiences of compulsory treatment and forced feeding varied widely from undoubtedly negative to positive experiences. Coercion is an infringement on an individual’s liberty, but may save lives of young patients and also gives a better prognosis. Clinicians should decide when involuntary treatment should be implemented with respect for the patient’s autonomy.

According to the sociocultural model of eating disorders, media internalization acts as a catalyst for eating disorder pathology and development. However, the effects of the thin ideal on disordered
eating varies throughout the literature, suggesting that additional factors and individual predispositions may moderate this relationship. The current study assessed the influence of personality indices on physiological, psychological, and behavioral responses linked with disordered eating following an experimental induction of the thin ideal. 52 healthy undergraduate females completed personality measures of self-discrepancy and self-consciousness, and were randomly assigned to read thin ideal (TI) or neutral (N) magazine articles. After reading, participants’ Galvanic Skin Responses (GSR) to presentation of a doughnut were measured. Participants then ate their doughnut and completed the Binge Eating Disorder Screener (BEDS-7) in clinical practice.

This study evaluated physician knowledge of and attitudes about binge eating disorder (BED) and the value and ease of use of the 7-Item Binge Eating Disorder Screener (BEDS-7) in clinical practice. Two internet surveys (wave 1 [April 15-May 6, 2015]; wave 2 [August 19-25, 2015]) were administered to general practitioners (GPs) and psychiatrists. Wave 1 invitees were from a panel of US-based physicians spending ≥50% of their time in direct patient care and reporting “no” to “some to average” experience with eating disorder patients; respondents completing wave 1 qualified for wave 2. A total of 122 GPs and 123 psychiatrists completed both waves. Composite BED knowledge (percent correct) increased from wave 1 to wave 2 in GPs (55.2% to 60.0%, P<0.001) and psychiatrists (73.0% to 76.4%, P<0.05); GP knowledge was lower in both waves (both P<0.001). Composite belief scores about the importance of being knowledgeable about BED were high in both groups in both waves. Composite comfort scores for diagnosing and treating BED were significantly lower in GPs than psychiatrists in both waves (both P<0.001). The BEDS-7 was used in clinical practice by 32.0% of GPs and 26.8% of psychiatrists. During wave 2, all BEDS-7 users reported the BEDS-7 to be ‘very’ or ‘somewhat’ valuable and nearly all BEDS-7 users (GPs: 97.4%; psychiatrists: 100%) reported the BEDS-7 to be ‘very’ or ‘reasonably’ easy to use. A majority of BEDS-7 users (GPs and psychiatrists) reported that important uses of the BEDS-7 included assisting clinicians in identifying BED patients (71.8% and 87.9%) and encouraging/initiating doctor-patient discussions about BED (71.8% and 66.7%). These data indicate that knowledge of and comfort with diagnosing and treating BED was higher in psychiatrists than GPs, but both groups acknowledged the importance of being knowledgeable about BED. In addition, respondents who used the BEDS-7 in clinical practice reported that it was a highly valued, easy-to-use screener for BED.

F022: The Changing Profile of Feeding and Eating Disorders in a Japanese Clinical Sample

Yoshikatsu Nakai, MD, Kyoto Institute of Health Sciences, Kyoto, Kyoto
Kazuko Nin, PhD, School of Health Sciences, Faculty of Medicine, Kyoto University, Kyoto, Kyoto
Shun’ichi Noma, MD, Department of Psychiatry, School of Medicine, Kyoto University, Kyoto, Kyoto
Kimihiro Suzuki, PhD, Tokyo Future University, Tokyo, Tokyo
Stephen A. Wonderlich, PhD, Department of Clinical Neuroscience, University of North Dakota, Fargo, North Dakota

The purpose of this study is to examine the changing profile of feeding and eating disorders in a Japanese clinical sample between 1965 and 2015. We completed a retrospective review of 1349 patients (432 adolescents and 917 adults) with a feeding and eating disorder (FED) assessed with a standard clinical interview by eating disorder specialists between 1965 and 2015. The patients seen among 1965-1977 (period I, n=34), 1978-1990 (period II, n=395), 1991-2003 (period III, n=469) and 2004-2015 (period IV, n=461) were compared. In period I10 (29%) patients were categorized as having anorexia nervosa (AN), 7 (21%) as having avoidant/restrictive food intake disorder (ARFID) and 17 (50%) as other specified FED (OSFED). There was no participant with bulimia nervosa (BN) or binge-eating disorder (BED) in period I. In period II, 139 (34%) patients were categorized as having AN, 119 (30%) with BN, 12 (3%) with BED, 45 (11%) with ARFID and 89 (22%) with OSFED. In period III, 151 (32%) were categorized as having AN, 173 (37%) with BN, 20 (4%) with BED, 35 (8%) with ARFID and 90 (19%) with OSFED. In period II-III, there was a general increase in the proportion of patients with binge-eating/purging...
and/or over-concern with body weight/shape. In period IV, 294 (34%) were categorized as having AN, 392 (45%) with BN, 109 (11%) with BED, 26 (3%) with ARFID and 56 (6%) with OSFED. In period IV, the proportion of ARFID patients decreased and the proportion of BED patients increased. The overview of the risk factors of FEDs in each period revealed the increasing role of sociocultural background on FEDs in Japan. There were some differences and similarities in the risk factors of FEDs between Japan and Western countries.

F023: Disordered Eating and Body Image Pathology Among Women on Gluten-Free Diets

Leah Boepple, MA, University of South Florida, Tampa, Florida
Joel (Kevin) Thompson, PhD, University of South Florida, Tampa, Florida

Limited research has investigated the relationships between specific dietary lifestyles (i.e., vegetarianism, veganism, gluten free) and disordered eating and body image pathology. Findings of a 2012 study suggest that individuals with a previous eating disorder diagnosis report higher rates of current and past vegetarian diets (Bardone-Cone et al.). Dietary restraint is both associated with and predicts disordered eating and body image pathology (Delinsky & Wilson, 2008; Stice, 2002), suggesting that individuals who restrict their diets are at increased risk of disordered eating and body image pathology. Recent polls suggest that 1 in 6 Americans endorse a gluten free diet (Gallup, 2015); however, no research to date has investigated the relationships between gluten free diets and disordered eating and body image pathology. The current study was an investigation of these relationships. Participants were 156 (78 Gluten Free; 78 non Gluten Free) undergraduate females at a university in the southeastern united states. Body image and eating pathology constructs were measured (i.e., Eating Disorder Examination Questionnaire: restraint & shape/weight/eating concern; Physical Appearance Comparison Scale-R: Appearance comparison; Objectified Body Consciousness Scale: body image). T-test analyses revealed that individuals on gluten free diets may report higher levels of behavioral switches compared to healthy controls. On the neural level, recAN showed impaired task performance and an elevated number of functional connectivity analysis. RecAN showed increased activation in the left inferior frontal junction (IFJ) and bilateral angular gyrus (AG) during lose-shift. Functional connectivity analysis revealed a trend for increase in coupling between IFJ and left AG during lose-shift in recAN. Our results in recAN differ from that of our previous study in acAN. Current findings of reduced task performance, but increased neural responses in cognitive control regions (IFJ, AG, but not the dACC) during a PRL task may indicate neural inefficiency of these brain regions in recAN.

F025: Neural Mechanisms Underlying Guided Exposure Therapy in Patients with Anorexia Nervosa

Samantha Rennalls, BSc, MSc Student, King’s College London, London, UK
Valentina Cardi, BSc, MSc, DClinPsy, PhD, King’s College London, London, UK
Iain Campbell, BSc, DSc, PhD, King’s College London, London, UK
Janet Treasure, OBE, MD, FRCP, FAED, King’s College London, London, UK
Owen O’Daly, BSc, MSc, PhD, King’s College London, London, UK

Anorexia nervosa (AN) is characterised by a persistent desire to be thin, severe restriction of food intake and an intense fear of gaining weight. The food-related anxiety experienced by individuals with AN can be a key barrier to successful treatment. Guided exposure therapy is an established intervention for anxiety disorders, and is developed based on fear extinction principles. This study investigates the neural underpinnings of exposure therapy to yield potential
mechanistic insight. A particular focus was placed on how motivational systems and sensory input pathways are influenced by exposure therapy. Sixteen patients with AN completed a range of self-report measures and underwent a functional magnetic resonance imaging (fMRI) scan before and after receiving 10 sessions of exposure therapy sessions over 3 months. A matched healthy control group (n=20) also had two brain scans 3 months apart. During the scans, participants completed a food image paradigm, comprised of blocks of food and non-food images. Patients reported a decrease in food-related anxiety, eating-related concern and preoccupations, and an increase in confidence to change. While context-dependent (i.e. food vs non-food) modulation of functional connectivity (CDMFC) of the occipital lobe with the amygdala and insula was not altered, a significant group (healthy controls vs patients) x time point (before vs. after exposure therapy) interaction in CDMFC between the visual cortex and striatum was observed. Whilst top-down processing may be influenced by the exposure therapy, changes in bottom-up sensory processing may also play a key role in altering patients experiences of food, due to the altering of the routing of sensory information to motivational circuits in AN following exposure therapy.

F026: Thin Ideal Internalization: How Much Is Too Much?

Lauren Schaefer, MA, University of South Florida, Tampa, Florida

Natasha Burke, PhD, Uniformed Services University of the Health Sciences, Bethesda, Maryland

J. Kevin Thompson, PhD, University of South Florida, Tampa, Florida

Internalization of the thin ideal is a risk factor for eating disorders that frequently persists into recovery and increases patient risk for relapse. Addressing thin ideal internalization (TII) as a core element of eating disorder prevention and treatment produces significant reductions in eating pathology. However, research has not yet quantified levels of TII that may signal increased versus decreased risk for disordered eating. To address this gap in the literature, receiver operating characteristic (ROC) curve analysis was used to identify a TII cutoff score that signified clinically-meaningful eating disorder pathology. 787 college women (age M=20.17, SD =2.41; BMI M=23.58, SD=5.29) were classified as “healthy” (N=717) or “eating disordered” (N=70) using established clinical cutoffs for the Eating Disorder Examination-Questionnaire (EDEQ). ROC curve analysis was used to test the performance of the Sociocultural Attitudes Towards Appearance Questionnaire-4 (SATAQ-4) Internalization: Thin/Low Body Fat subscale in predicting disordered eating status, and identify a cutoff score that maximized sensitivity and specificity to discriminate between healthy and eating disordered samples. Mean SATAQ-4 internalization scores were 3.27 (SD=0.92) and 4.27 (SD=0.62) for healthy and eating disordered participants, respectively. The SATAQ-4 internalization scores were good predictors of disordered eating status (area under the curve=.81, 95% CI: 76.86). The optimal cutoff of 3.78 (measured on a 1-5 Likert scale) yielded a sensitivity of .81 and specificity of .64. Overall, results provide preliminary support for the discriminant validity of SATAQ-4 thin internalization scores and suggest that even moderate levels of TII may be predictive of clinically-significant eating pathology. It may be important for prevention and intervention work to actively seek to reduce internalization levels below this clinical cutoff, though future work is needed to bear this out.

F027: Therapist Drift in Cognitive Behavioural Therapy for Eating Disorders: Differences between the UK and Latin America

Maria Elena Hernandez Hernandez, BA, MSc, University of Sheffield, Sheffield, Yorkshire

Glenn Waller, BA, MPhil, DPhil, FAED, University of Sheffield, Sheffield, Yorkshire

Eva Trujillo, MD, FAED, Comenzar de Nuevo Eating Disorders Center, Mexico, Mexico

This study aimed to determine how widely core CBT techniques for eating disorders are used by clinicians of different cultural backgrounds - specifically, Latin America and the United Kingdom. Specific a priori predictions were made, based on Hofstede’s model of personal and social characteristics of individuals in different cultures. The sample consisted of 30 UK and 45 Latin American therapists who delivered CBT for eating disorders (mean age = 38.3 years; 82.5% females). Participants were approached via e-mail and completed an online survey about the frequency of use of individual CBT techniques, along with tests of anxiety, personality and social desirability. Entirely in line with theoretical predictions, UK clinicians were more likely to use specific CBT techniques (introduction of regular meals; behavioural experiments; exposure work; monitoring physical risk; weighing the patient), while Latin American therapists were more likely to use pre-therapy motivation work. UK therapists were also more likely to use a range of general CBT techniques (thought records; homework; monitor progress; agenda-setting). In contrast, Latin American clinicians were more likely to use methods that are unsupported in CBT (e.g., relaxation; encourage the patient to talk about whatever was on their mind). As predicted, differences in clinician personality (particularly extraversion) explained some of these differences in therapy implementation. There are cultural differences in the delivery of CBT for eating disorders, with greater evidence of therapist drift in Latin American countries. Those differences are as predicted from cultural theories, and seem to centre on personality differences across the cultures. Supervision and training in manualized protocols is recommended for clinicians from both cultural backgrounds, but this is especially important for Latin American clinicians, since most of the protocols are in English and this creates a language barrier.
POSTER SESSION II

**F029: The Efficacy of Psychological Therapies in Reducing Weight And Binge Eating in People with Bulimia Nervosa and Binge Eating Disorder Who are Overweight or Obese—A Critical Synthesis and Meta-analysis**

Marly Palavras, MSc, Student, Federal University of São Paulo and CAPES Foundation, Ministry of Education, São Paulo, São Paulo

Phillipa Hay, DPhil, FAED Western Sydney University and CAPES Foundation, Ministry of Education, Brazil, Sydney, South Wales

Celso Alves dos Santos Filho, MSc, Federal University of São Paulo, São Paulo, São Paulo

Angélica Claudino, PhD, Federal University of São Paulo, São Paulo, São Paulo

Recurrence binge eating episodes, the core feature of Bulimia Nervosa (BN) and Binge Eating Disorder (BED), are frequently comorbid with obesity. Psychological interventions, notably Cognitive Behavioural Therapy (CBT), are effective for binge eating reduction in BED or BN but not for weight loss. Behavioural weight loss treatment (BWLT) shows effectiveness for binge eating reduction and weight loss but this appears poorly sustained over time. Our aim was to review evidence for efficacy of psychological therapies for the BN/BED associated with overweight or obesity. A systematic search for randomized controlled trials with adult samples who had BN or BED was conducted considering articles in English, French, Spanish and Portuguese with no restrictions for the timeline publication ending in March, 2016. A quality appraisal of the trials and a meta-analysis comparing BWLT to CBT was done. 1830 articles were screened and 19 published articles were selected. Insufficient evidence was found for superiority for BWLT efficacy considering binge eating remission, reduction of binge eating frequency and weight loss. More research is needed to test the efficacy of psychological treatments for BED or BN with co-morbid overweight or obesity, including trials evaluating binge eating remission and weight loss in the long-term.

**F029: Maladaptive Eating Behaviors and Metabolic Profile in Patients Submitted to Bariatric Surgery: A Longitudinal Study**

Eva Conceição, PhD, School of Psychology, University of Minho, Braga, Braga

Mara Pinho, MD, MSc, Faculty of Medicine, University of Porto, Hospital de São João, Porto, Porto

Isabel Brandão, MD, PhD, Faculty of Medicine, University of Porto, Hospital de São João, Porto, Porto

Diogo Pestana, MD, PhD, Cintesis-Center for Research in Health Technologies and Information Systems, Porto, Porto

Li Cao, MSc, Neuropsychiatric Research Institute, Fargo, North Dakota

Filipa Arrojado, MSc, School of Psychology, University of Minho, Braga, Braga

Ana R. Vaz, PhD, School of Psychology, University of Minho, Braga, Braga

Ana Pinto-Bastos, MSc, School of Psychology, University of Minho, Braga, Braga

To investigate relations between maladaptive eating behaviors (MEB) and metabolic profile in patients submitted to bariatric surgery. Longitudinal study including 70 patients before (T0), in the first year after surgery assessment (T1) and the second year after surgery assessment (T2). A face-to-face clinical interview assessed MEB at T0 and T2. Blood samples were collected at T0, T1 and T2 to assess fasting plasma glucose (FPG); glycated haemoglobin (HbA1c); insulin; insulin resistance (IR); triglycerides (TG). Mixed model analyses with growth curves tested the differences between patients with MEB (M-group) and non-MEB patients (NM-group) on the course of metabolic parameters, while controlling for total weight loss and type of surgery. No differences between both groups was reached for levels of FPG (F(1,140)=2.936, p=0.089), HbA1c(F(1,96)=0.099, p=0.754), insulin (F(1,121)=0.146, p=0.703), IR (F(1,60)=0.976, p=0.327) and TG (F(1,128)=0.725, p=0.396). All parameters improved from T0 to T1 for both groups. A distinct trend on the course of metabolic markers in M-group, but not NM-group is observed, presenting an increase in HbA1c levels, insulin and TG levels. Both groups progressed favorably in the first 12 months of surgery, MEB may be associated with a trend for deterioration of metabolic profile after 12 months of surgery. The study should be replicated with longer term assessments and a larger sample size.

**F030: Psychometric Properties of the Contextual Body Image Questionnaire for Female Athletes**

Carolyn Becker, PhD, Trinity University, San Antonio, Texas

Nicole Wesley, BA, Pennington Biomedical Research Center, Baton Rouge, Louisiana

Robbie Boyl, PhD, Pennington Biomedical Research Center, Baton Rouge, Louisiana

Lisa Kilpela, PhD, University of Texas Health Science Center San Antonio, San Antonio, Texas

Ron Thompson, PhD, Retired, Bloomington, Indiana

Roberta Sherman, PhD, Retired, Bloomington, Indiana, Tiffany Stewart, PhD, Pennington Biomedical Research Center, Baton Rouge, Louisiana

First identified by de Bruin (2010), contextual body image (CBI) refers to the dual nature of female athlete body image, which consists of body image in sport and in everyday life. Body dissatisfaction has been identified as a significant risk factor for numerous negative outcomes (e.g., depression, eating disorders (ED), unhealthy weight control behaviors) in non-athletic populations; yet the association of CBI with negative outcomes has received less attention. One challenge in studying CBI has been the lack of a well-established measure. This poster presents data pertaining to the psychometric properties of the Contextual Body Image Questionnaire for Athletes. In the only validation study to date, de Bruin et al. found that the CBIQ consisted
POSTER SESSION II

F031: The Relationship between Motor-Related Body Schema and Body Image Impairments in Eating Disorders: A Preliminary Study

Giovanna Cristina Campione, PhD, PsyD, Child Psychopathology Unit, Scientific Institute, IRCC
Eugenio Medea, Bosio Parini, LC
Beatrice Fumagalli, PsyD, Child Psychopathology Unit, Scientific Institute, IRCCS Eugenio Medea, Bosio Parini, LC
Gianluigi Mansi, MD, Child Psychopathology Unit, Scientific Institute, IRCCS Eugenio Medea, Bosio Parini, LC
Alessandra Fumagalli, PsyD, Child Psychopathology Unit, Scientific Institute, IRCCS Eugenio Medea, Bosio Parini, LC
Nadia Micali, FAED, MD, MRCPsych, PhD, Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York, New York

Body representation disturbances in body image (i.e. conscious perceptual/affective body representations) and body schema (i.e. unconscious sensorimotor body representations for action) are core symptoms in Eating Disorders (EDs). However, the nature of these disturbances and the relationship between body image and body schema have not been fully elucidated yet. Recently, it has been proposed that body schema directly depends on the motor system, which is strongly implicated in discriminating between one’s own and someone else’s body. The aim of the present study was twofold. First, we investigated whether the ability to implicitly recognize one’s own body was impaired in EDs as part of body schema disturbance. Secondly, we studied whether this impairment was associated with body image distortion. Female outpatients diagnosed with EDs (N=15), and healthy controls (N=18) matched for age, handedness, BMI, and education underwent a task involving a laterality judgment and implicit self-recognition (i.e. motor mental rotation of their own and someone else’s hands). Group differences in the temporal advantage when processing self vs. non-self stimuli (i.e. self-advantage effect, SAE) were evaluated by means of a mixed ANOVA. Correlation analyses were carried out between SAE size and perceptual and affective body image-related scores. Statistical analyses confirmed that controls showed a SAE, whereas EDs did not (p=0.02). SAE negatively correlated with affective body image (r=0.34, p=0.04). This study provides initial indication that motor function might be compromised as part of body schema disturbances in EDs, and this impairment correlates with body image disturbance.


Molly Vierhile, BA, Stanford University, Stanford, California
Shiri Sadeh-Sharvit, PhD, Stanford University, Stanford, California
Linsey Utzinger, PsyD, Stanford University, Stanford, California
James Lock, MD, PhD, FAED, Stanford University, Stanford, California

Moderators are clinical characteristics that help clinicians match patients to treatment most likely to be effective for them. Elevated scores on the Yale-Brown-Cornell Eating Disorder Scale (YBC-ED) are the only replicated moderator for adolescents with anorexia nervosa (AN), and suggest that patients respond better to FBT than other approaches but will likely need longer treatment. However, YBC-ED scores are not typically available in clinical settings, so the practical clinical relevance of this moderator is limited. The current study examines the relationship of clinical characteristics of adolescents with AN and the YBC-ED to improve the clinical relevance of this moderator. To conduct this study we utilized stepwise regression of clinical variables (e.g., Global Score on the Eating Disorder Examination (EDE-G), co-morbid psychiatric diagnosis assessed by the Beck Depression Inventory (BDI), Children’s Yale-Brown Obsessive Compulsive Scale (CY-BOCS), age adjusted IBW, age, and duration of AN) in two independent samples from two separate treatment studies that employed the same inclusion and exclusion criteria. The results of the first sample tested (N=158) found that elevated YBC-ED scores were significantly associated with elevated eating-related psychopathology and higher levels of co-morbidity of depressive symptoms and obsessionality. We attempted to replicate these findings in a second independent sample (n=45), and found that elevated YBC-ED scores were again significantly associated with elevated EDE-G and CY-BOCS scores. We conclude that YBC-ED likely captures relevant clinical constructs related to severity (e.g., eating related psychopathology) and complexity (co-morbid symptoms of depression and obsessionality). In a clinical setting where YBC-ED scores are not typically available, clinicians should consider matching patients with elevated eating related psychopathology and co-morbid obsessive-compulsive symptoms to FBT and expect treatment to be longer in duration.
Eating disorders are serious, complex mental illnesses. Binge eating is a debilitating cardinal symptom of eating disorders, seen across the Diagnostic and Statistical Manual (DSM-V) eating disorder diagnostic groups. Recurrent binge eating is a diagnostic criteria for Bulimia Nervosa (BN), Binge Eating Disorder (BED), Anorexia Nervosa-Binge Purge type (AN-BP) and is a common feature of Other Specified Feeding and Eating Disorder (OSFED). With advances in neuroimaging techniques, there is an emerging body of research on the neurobiological processes and potential underpinnings of Anorexia Nervosa. There have been a large number of structural neuroimaging studies completed since the 1980’s, followed by a growing body of research using functional magnetic resonance imaging (fMRI) in more recent years. However the neurobiological research on BN and BED is not as substantial. A systematic review, summarising the current state of the literature regarding the neurobiology of binge eating, was lacking. A systematic literature search was completed across five electronic databases: PubMed, PsycINFO, Medline, Web of Science and Google Scholar. A quality appraisal of papers was undertaken. To be included in the systematic review, papers had to be an original research study, human research, English language, used samples or participants with a diagnosed eating disorder and included a control sample. Overall, 45 studies were included in the review. The findings summarise a number of structural and functional brain differences found in individuals with a diagnosed eating disorder characterised by recurrent binge eating, including: Areas of neural activation in response to images of food; reward-related brain regions; neurotransmitter function; regional cerebral blood flow; and, blood oxygen level dependent response (BOLD). A clear and comprehensive understanding of the neurobiological functioning of people who binge eat is important, as it provides information on the future directions of psychological and pharmacological treatment for this complex clinical group.

F034: Executive Difficulties in Patients with Anorexia Nervosa or Bulimia Nervosa

Siri Weider, PhD, Department of Psychology, Norwegian University of Science and Technology (NTNU). Trondheim, Sør-Trøndelag
Marit Sæbø Indredavik, MD, PhD, Regional Centre for Child and Youth Mental Health and Child Welfare, NTNU, Trondheim, Sør-Trøndelag
Knut Hestad, PhD, Department of Research, Inlandet Hospital Trust, Brumunddal, Hedmark

A number of studies have found difficulties in executive functioning in patients with anorexia nervosa (AN) and bulimia nervosa (BN). However, most studies have investigated only a limited number of executive functions. The aim of this study was to assess performance over several executive domains using a number of neuropsychological tests. A total of 40 patients with AN and 39 patients with BN from the Specialised Eating Disorder Unit at Levanger Hospital, Norway, participated in a larger study on neuropsychological functioning, and was compared to a group of 40 healthy controls (HCs). All patients completed a test-battery measuring the following domains with the following neuropsychological tests: set-shifting: (Category Test, Wisconsin Card Sorting Test, Trail Making Test, Part B); planning (Tower Test), inhibition (Color-Word Interference Test), verbal fluency (Verbal Fluency Test) and working memory (Paced Auditory Serial Addition Test [PASAT], Spatial Span from Wechsler Memory Scale-Revised and Letter Number Sequencing and Digit Span from Wechsler Adult Intelligence Scale-III). Significant differences were found between the groups on all measures within the set-shifting, planning and inhibition domains. Within the working memory domain, there were some differences on the PASAT and on measures of spatial span. There were no differences on any measures from the Verbal Fluency Test. Post-hoc tests revealed that the AN group performed below the HCs on all measures within the set-shifting, planning and inhibition domain and also below the BN group on both measures of inhibition. In addition, the AN group performed below the HCs on the PASAT and on a measure of spatial span. The BN group performed significantly below the HCs on the PASAT. The results reveals that patients with AN show significant difficulties over several domains of executive functioning, while patients with BN show some difficulties related to working memory.

F035: The Role of Neuropsychological Features in Predicting Response to Treatment in Anorexia Nervosa

Elena Tenconi, PhD, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Elisa Bonello, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Giovanni Croatto, MD, Department of Neuroscience, University of Padova, Padova, Italy
Daniela Degortes, PhD, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Tatiana Zanetti, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Tommaso Catapano, MD, Department of Neuroscience, University of Padova, Padova, Italy
Paolo Santonastaso, MD, Department of Neuroscience, University of Padova, Padova, Italy
Angela Favaro, MD, PhD, Department of Neuroscience, University of Padova, Padova, Italy

Neuropsychological impairments in anorexia nervosa (AN) have been considered both as putative risk factors and as a target for treatment. However, the role of neuropsychological variables as predictors of outcome is not clear. The aim of this study is to investigate the role of neuropsychological variables as predictors of
F036: Decision-Making and Anorexia Nervosa: Clinical and Neuropsychological Correlates

Elena Tenconi, PhD, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Valeria Giannunzio, MD, Department of Neuroscience, University of Padova, Padova, Italy
Daniela Degortes, PhD, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Elisa Bonello, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Enrico Collantoni, MD, Department of Neuroscience, University of Padova, Padova, Italy
Jessica Lamponi, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Silvia Michelon, MD, Department of Neuroscience, University of Padova, Padova, Italy
Giovanni Miotto, MD, Department of Neuroscience, University of Padova, Padova, Italy
Angela Favaro, MD, PhD, Department of Neuroscience, University of Padova, Padova, Italy
Paolo Santonastaso, MD, Department of Neuroscience, University of Padova, Padova, Italy

The present study aims at investigating decision making (DM) abilities in patients with anorexia nervosa (AN). In particular, we were interested in exploring the relationship between DM and age (adolescence versus adulthood) and between DM and diagnostic status (acute AN, weight-recovered eating disorder and fully recovered AN). The Expectancy Valence Model (EVM) was applied to explore the psychological processes related to DM. Finally, we considered the relationship between DM and the course of the treatment. The participants were 268 patients with a lifetime diagnosis of AN and 230 healthy women. All subjects underwent clinical and neuropsychological assessment. In order to explore the relationship between the IGT performance and the weight changes during treatment, linear regression analysis was performed with the IGT net score as the independent variable and the BMI at 3 months, at 6 months, at 12 months and final BMI as the dependent variables. An additional variable, called Δ (delta) BMI was used, that is the difference between the final BMI and the BMI at moment of neuropsychological assessment. In adult subjects, a significant difference emerged in the IGT performance in the comparison between patients and healthy women. No difference, on the contrary, emerged in the comparison between adolescent patients and controls. Adolescent patients displayed lower scores in the “updating rate” parameter and the “motivational parameter” of EVM in comparison to healthy adolescents, whereas no differences emerged in adults. Considering the diagnostic status, no significant differences emerged between acute AN, weight recovered eating disorder and fully recovered AN on the IGT performance and EVM parameters. IGT performance did not predict response to treatment at 3, 6 and 12 months of treatment, but was significantly associated with delta BMI. In conclusion, our study revealed a different decision making profile in adolescent and adult patients with AN, as well as a relationship between decision making abilities and the amount of weight gain. A characterisation of the developmental trajectories of decision making abilities may provide a better understanding of AN psychopathology and may yield the development of tailored treatment strategies.

F037: The Role of Craving in Emotional and Uncontrolled Eating: A Test and Extension of Cognitive Processing Model of Alcohol Craving

Christina Verzijl, BA, University of South Florida, Tampa, Florida
Brittany Lang, BS, MA, University of South Florida, Tampa, Florida
Erica Ahlich, BA, University of South Florida, Tampa, Florida
Diana Rancourt, BA, MA, PhD University of South Florida, Tampa, Florida
Robert Schlauch, BA, MS, PhD, University of South Florida, Tampa, Florida

Recent applications of addictive models to disordered eating have received preliminary support. One model that may be relevant to overeating is the cognitive processing model of alcohol craving. This model posits that when alcohol is unavailable, an individual’s craving for alcohol increases, leading to increased alcohol consumption. This model may be particularly useful in predicting uncontrolled (UE) and emotional eating (EE) among individuals engaging in restrained eating (RE). Specifically, individuals high in RE may report higher food craving and higher subsequent UE and/or EE. Food craving was examined as an indirect effect of the association between RE and 1) UE and 2) EE.
A total of 1069 individuals participated via Amazon’s Mechanical Turk (59.68% female; M age = 37.11, SD = 11.79) and completed the Trait General Food Craving Questionnaire, the Restraint Eating subscale of the Dutch Eating Behavior Questionnaire, and the uncontrolled and emotional eating subscales of the Three Factor Eating Questionnaire. Two models of indirect effects were estimated in SPSS using bootstrapping. Results suggested higher levels of RE were associated with higher levels of food craving (b = 0.47, 95% CI = [0.33, 0.59]), p < 0.001, which were associated with more frequent uncontrolled (b = 0.21, 95% CI = [0.20, 0.22], p < 0.001) or emotional eating (b = 0.17, 95% CI = [0.15, 0.18], p < 0.001). Craving emerged as an indirect effect in both models, accounting for 84% of the total effect in the UE model (b = 0.12, 95% CI = [0.07, 0.13]) and 79% of the total effect in the EE model (b = 0.07, 95% CI = [0.06, 0.10]). These findings broaden our understanding of the negative effects of RE on eating patterns. In particular, individuals with high food craving may be at greater risk of engaging in a cycle of dietary restraint and overeating.

**F038: The Role of Stress During Pregnancy as an Early Risk Factor for Anorexia Nervosa: A Controlled Study**

Elena Tenconi. PhD, PsyD, Department of Neuroscience, University of Padova, Padova, Italy

Daniela Degortes. PhD, PsyD, Department of Neuroscience, University of Padova, Padova, Italy

Elisa Bonello. PsyD, Department of Neuroscience, University of Padova, Padova, Italy

Tatiana Zanetti. PsyD, Department of Neuroscience, University of Padova, Padova, Italy

Manuela Soave. PsyD, Department of Neuroscience, University of Padova, Padova, Italy

Marco Del Tenconi. MD, Department of Neuroscience, University of Padova, Padova, Italy

Paolo Santonastaso. MD, Department of Neuroscience, University of Padova, Padova, Italy

Angela Favaro. MD, PhD, Department of Neuroscience, University of Padova, Padova, Italia

The literature shows that early risk factors, such as pregnancy complications and prenatal stress exposure, may have a role in the development of psychiatric disorders. Our study aims to investigate the impact of prenatal stressful experiences exposure on the development and clinical profile of anorexia nervosa. The study sample was composed of 109 patients with a lifetime diagnosis of anorexia nervosa (according to DSM-5 criteria), recruited at the Eating Disorders Unit of the Hospital of Padova, Italy, and 118 unaffected healthy controls recruited from the general population. All participants underwent a broad clinical and neuropsychological battery, in addition to clinical interviews and questionnaires. All the mothers of patients and controls underwent a specific interview tailored for this study, concerning in detail the presence of stressful life events that occurred during the pregnancy period. In addition, all obstetric and neonatal medical records were consulted. The mothers of patients experienced more, and subjectively more severe stressful episodes than the mothers of controls (Z=3.65; p=0.001, Z=3.71; p=0.001). While in the mothers of controls the severity of stressful events during pregnancy was significantly associated with the outcome of pregnancy, in the mothers of patients only perceived distress during pregnancy showed significant positive correlation with both total number of obstetrical complications and placental weight. In patients, the severity of stressful events was significantly associated to cognitive rigidity and perseveration. Our data suggests that prenatal stress exposure might be a risk factor for the development of AN.

**F039: The Influence of Social Media on Body Image: Considering School Environment as a Protective Factor**

Blair Burnette. BA, Virginia Commonwealth University, Richmond, Virginia

Melissa Kwitowski. MS, Virginia Commonwealth University, Richmond, Virginia

Suzanne Mazzeo. PhD, Virginia Commonwealth University, Richmond, Virginia

Sociocultural models of body dissatisfaction posit that media, peers, and parents transmit messages about appearance that heighten the risk of body dissatisfaction. Although the impact of television and magazine exposure is well-researched, social media are relatively new and rapidly evolving. Additionally, most research on social media has focused on teens and young adults. Little is known about the effects of social media on body dissatisfaction in early adolescents. However, because peer influence becomes more powerful as children enter adolescence, and social media typically involves intensive peer interaction, it is important to study the impact of social media on this age group. This study used focus groups to examine the influence of social media on social comparison, thin-ideal internalization, and body dissatisfaction in 7th and 8th grade females (n = 38) from a private, single-sex school. Students indicated that the supportive school environment communicated messages that attenuated some potentially harmful effects of social media. Students perceived themselves as less likely than peers from outside the school environment to engage in appearance-based social media activities (e.g., taking ‘selfies’), and less likely to make appearance-based social comparisons. They also endorsed relatively high confidence and low body dissatisfaction. Results suggest that school environment might buffer some of the potentially harmful effects of social media for early adolescent females. Given the high rates of social media use in this age group, further evaluation of the potential of the school environment to serve as a protective factor could inform the design of prevention and intervention strategies.
F040: Exploring Gender Differences in the Link Between Weight Suppression and Eating Pathology

Blair Burnette, BA, Virginia Commonwealth University, Richmond, Virginia
Courtney Simpson, MS, Virginia Commonwealth University, Richmond, Virginia
Suzanne Mazzeo, PhD, Virginia Commonwealth University, Richmond, Virginia

Weight suppression, defined as the difference in an individual’s highest adult weight and current weight, has implications for the onset, maintenance, and treatment of eating disorders. Although men are more likely to have a history of overweight and often present to treatment at higher BMIs than their female peers, previous research has not examined if gender moderates the association between weight suppression and dimensions of eating pathology. The purpose of this study was to examine gender differences in the relations between weight suppression and dietary restraint, compensatory behaviors, and loss-of-control eating in an undergraduate sample. University students (n = 828, 71.7% female) completed surveys assessing demographics, weight history, and eating attitudes and behaviors. Weight suppression was significantly associated with dietary restraint and compensatory behaviors, but not loss-of-control eating, in the total sample. Gender did not significantly moderate the link between weight suppression and loss-of-control eating. The additive effects of gender and weight suppression were significantly associated with dietary restraint, but the interaction term did not reach statistical significance. Yet, gender significantly moderated the association between weight suppression and compensatory behaviors, such that men higher in weight suppression engaged in more compensatory behaviors. The association for women was not statistically significant. Results indicate that weight suppression influences dietary restraint and compensatory behaviors in a non-clinical sample. Further, findings suggest that weight history might be particularly important to consider when identifying and treating men who engage in these behaviors.

F042: Evidence-Based Psychotherapy for Treatment of Anorexia Nervosa in Children and Adolescents: Systematic Review

Alicia Cobelo, MS, FAED, Institute of Psychiatry, University of São Paulo School of Medicine, São Paulo, São Paulo
Felipe Alckmin-Carvalho, MS, Institute of Psychiatry, University of São Paulo School of Medicine, São Paulo, São Paulo
Juliana Vega, MS, Institute of Psychiatry, University of São Paulo School of Medicine, São Paulo, São Paulo
Alessandra Fabbi, MS, Institute of Psychiatry, University of São Paulo School of Medicine, Sao Paulo, Sao Paulo
Vanessa Pinzon, MS, Institute of Psychiatry, University of São Paulo School of Medicine, São Paulo, São Paulo

Few clinical trials have evaluated the efficacy of psychotherapy in treatment of anorexia nervosa (AN) in children and adolescents. Systematic reviews on this topic are needed. We evaluated the efficacy of evidence-based psychological interventions in the treatment of AN among children and adolescents. The literature search was conducted in July 2016 in the following databases...
with eating-disorder psychopathology (EDE global weighed daily. Self-weighing was significantly correlated weighed more than twice per week, and 20.3% (n=14) than once per week, 10.1% (n=7) weighed once per behavior and frequency. During the prior 28 days, Surgery Version, which also measured self-weighing and eating-disorder psychopathology were assessed LOC eating at least once per month. Mean age and BMI were reported loss-of-control (LOC) eating at least once patients assessed 6-months post-operatively who sleeve gastrectomy (BMI) based on weighing frequency. Participants were evaluated. Sixteen from 139 article were selected. The interventions used were: Family-Based treatment (FBT), Behavioral Family Systems Therapy (BFST), Adolescent Focused Individual Therapy (ASIF), Cognitive Behavior Therapy (CBT), Cognitive Behavior Therapy Enhanced (CBT-e), Systematic Family Therapy (SyFT), and Acceptance-based Separated Family Treatment (ASFT). The FBT is the most widely tested model, with total remission rate ranging between 20% - 49% of participants (who had begun treatment). Such result is similar or slightly higher than those found in other interventions. In terms of cost/benefit, the FBT shows better results because it is associated with faster weight restoration, and therefore, fewer days of hospitalization. FBT is considered the first-line treatment for AN in children/adolescents. Even in FBT, there was complete remission in less than half of patients who began treatment. Such result indicates the importance of developing new research’s protocols in psychotherapy in this area. These new protocols should integrate the components of FBT to maintainers variables of AN among children and adolescents, widely reported in the literature, such as deficits in parents social and educational skills. Different remission criteria used in each study makes difficult the comparison between studies. Other limitations will be analyzed.

**F044: Group Psychotherapy for Eating Disorders: A Meta-Analysis**

**Renee Grenon**, BA, MA, University of Ottawa, Ottawa, Ontario  
**Dominique Schwartzte**, DiplPsych, Institute of Psychosocial Medicine and Psychotherapy, University Hospital Jena, Jena, Thuringia  
**Nicole Hammond**, BA, MA, Children’s Hospital of Eastern Ontario, Ottawa, Ontario  
**Iryna Ivanova**, BA, PhD, Department of Psychology, The Ottawa Hospital, Ottawa, Ontario  
**Nancy Mcquaid**, BA, PhD, Department of Psychiatry, University of Ottawa, Ottawa, Ontario  
**Genevieve Proulx**, BSc, MD, Department of Psychiatry, University of Ottawa, Ottawa, Ontario  
**George Tasca**, BA, MA, PhD, School of Psychology and Department of Psychiatry, University of Ottawa, Ottawa, Ontario

In the current meta-analysis we review the effect of group psychotherapy compared to both wait-list controls and other active treatments for eating disorders. Evaluating the efficacy of various treatment options for eating disorders is important and necessary to inform both treatment guidelines, and clinicians’ practices. The number of randomized controlled trials (RCTs) that investigate the efficacy of group psychotherapy for eating disorders have increased, and results have been promising. Twenty-seven RCTs with a total of 1,853 participants were included in this meta-analysis. Effect size data for primary (abstinence rates, bingeing and/or purging frequency, and eating disorder psychopathology) and secondary (depressive symptoms, self-concept, and interpersonal problems) outcomes were extracted. All RCTs were rated on methodological quality. Results indicated that group psychotherapy is significantly more effective than wait-list controls at achieving abstinence rates of binge-eating and/or purging, decreasing the frequency of binges and/or purges, and reducing eating disorder psychopathology after treatment. The effects of group psychotherapy and other active treatments (e.g., behavioral weight loss,
self-help, individual psychotherapy etc.) did not differ on any outcome at post-treatment, at short-term follow-up (≤ 6 months), or at long-term follow-up (> 6 months). Group cognitive behavioral therapy (CBT) and other forms of group psychotherapy did not differ significantly on outcomes at any time point. Additional research is needed to evaluate other group psychotherapy approaches, along with CBT, in order to provide more evidence-based treatment options for individuals with an eating disorder. Group psychotherapy appears as effective as other common treatments and is perhaps more cost-effective than the most popular treatment, individual psychotherapy.

**F045: A Conservative Refeeding Approach in Female Inpatients with Restrictive Eating Disorders is not Protective of Refeeding Syndrome**

Shane Jeffrey, BSc, PD, Grad Dipl, Royal Brisbane Women’s Hospital, Metro North Mental Health, Brisbane, Queensland

Elsie Patterson, BSc, Student, University of the Sunshine Coast, Maroochydore, Queensland

Tetyana Rocks, BSc, University of the Sunshine Coast, Maroochydore, Queensland

Hattie Wright, BSc, MSc, PhD, RD, Grad Dipl, University of the Sunshine Coast, Maroochydore, Queensland

The purpose of this study was to describe the effect of a conservative refeeding protocol on rates of hypophosphatemia, hypokalaemia, hypomagnesemia and hypoglycaemia in female inpatients with restrictive eating disorders and explore differences in measured variables in patients reaching medical stability at different stages of hospitalisation. Historical medical records of female, adult patients admitted for treatment from January 2010 to December 2013 were retrospectively reviewed. Demographic characteristics, anthropometric measures, energy prescription and presence of hypophosphatemia (≤0.81mmol/L), hypokalaemia (≤3.5mmol/L) hypomagnesemia (≤0.7mmol/L) and hypoglycaemia (≤4.0mmol/L) at day 1 (admission), day 3, day 7 and day 14 were recorded. Twenty seven female patients were included, mean age 33 (20;35) yrs. Medical stability was reached at 18.6 ± 10.3 days, 63% (n=17/27) reached medical stability ≤14 days of hospitalisation. In the total group, hypoglycaemia (59%, n=16), hypokalaemia (56%, n=15), hypophosphatemia (44%, n=12) and hypomagnesemia (19%, n=5) developed primarily after day 3. Patients who reached medical stability ≤14 days had significantly higher weight (43 ± 7.4 vs 34 ± 6.7kg; P=0.01) and body mass index (15.2 ± 2.6 vs 12.8 ± 2.7kg/m2; P=0.01) than those reaching medical stability >14 days of hospitalisation. Both groups displayed weight loss during the first week. Weight (34.0 vs 36.7kg; P=0.004) and body mass index (12.8 vs 13.8kg/m2; P=0.004) increased significantly from admission to day 14 in patients who reached medical stability ≥14 days of hospitalisation. No difference was found in those reaching MS <14 days. Patients with restrictive eating disorders receiving a conservative refeeding protocol developed abnormal blood values and displayed reductions in body mass. Further investigation is required before recommending a more appropriate refeeding approach for this population.

**F046: Food Addiction in Bulimia Nervosa: Clinical Correlates and Association with Response to a Brief Psychoeducational Intervention**

Fernando Fernández-Aranda, PhD, University Hospital of Bellvitge-Idibell, Ciberobn, Hospital de Llobregat, Barcelona

Inés Hilker, PhD, Hospital Clinic of Barcelona, Barcelona, Barcelona

Isabel Sánchez, PhD, University Hospital of Bellvitge-Idibell, Ciberobn, Hospital de Llobregat, Barcelona

Trevor Steward, MSc, University Hospital of Bellvitge-Idibell, Ciberobn, Hospital de Llobregat, Barcelona

Susana Jiménez-Murcia, PhD, University Hospital of Bellvitge-Idibell, Ciberobn, Hospital de Llobregat, Barcelona

Roser Granero, PhD, Universitat Autònoma de Barcelona, Ciberobn, Barcelona, Barcelona, Barcelona

Ashley N. Gearhardt, PhD, University of Michigan, Ann Arbor, Michigan

Rita Cristina Rodríguez-Muñoz, MSc, University Hospital of Bellvitge, Hospital de Llob, Barcelona

Carlos Dieguez, MD, PhD, University of Santiago de Compostela-Instituto de Investigación Sanitaria, Ciberobn, Santiago de Compostela, A Coruña

Ana Belén Crujeiras, PhD, Complejo Hospitalario Universitario de Santiago de Compostela, CIBEROBN, Santiago de Compostela, A Coruña

Iris Tolosa-Sola, MSc, University Hospital of Bellvitge, Hospital de Llob, Barcelona

Felipe F Casanueva, MD, PhD, Complejo Hospitalario Universitario de Santiago de Compostela, Ciberobn, Santiago de Compostela, A Coruña

José M. Menchón, MD, PhD, University Hospital of Bellvitge-Idibell, Cibersam, Hospital de Llobregat, Barcelona

Food addiction (FA) has been examined in different populations. Although high FA levels are associated with greater eating-disorder severity, few studies have addressed how FA relates to treatment outcome. Therefore, the goals of the present study were: (1) to determine whether a brief intervention for bulimia nervosa (BN) reduces FA diagnosis or severity compared to baseline; and (2) to determine if FA is predictive of treatment outcome. 66 female BN patients participated in the study. The Yale Food Addiction Scale was administered at two time points: prior to- and following a 6-week intervention. The number of weekly binging/purging episodes, dropout and abstinence from bulimic behavior were used as primary outcome measures. The results showed that this brief intervention reduced FA severity and FA diagnosis in the 55 patients who completed treatment. FA severity was a short-term predictor of abstinence from binging/purging episodes after treatment (p=0.018). In conclusion, FA appears to be prevalent in BN although FA severity can improve following a short-term intervention.
F047: Mediators of the Relationship between Weight Stigma Concerns and Disordered Eating in Bariatric Surgery Patients

Aliza Friedman, MA, PhD Student, Department of Psychology, Ryerson University, Toronto, Ontario
Susan Wnuk, PhD, Toronto Western Hospital, Bariatric Surgery Program, Toronto, Ontario
Sanjeev Sockalingam, MD, Toronto Western Hospital, Bariatric Surgery Program, Toronto, Ontario
Stephanie Cassin, PhD, Department of Psychology, Ryerson University, Toronto, Ontario

The relationship between weight stigma and disordered eating has been well documented in obese populations; however, the mechanisms underlying this association remain unclear. The purpose of this study was to examine body shape concerns and general psychological distress as potential mediators in the relation between weight stigma concerns and two facets of disordered eating (binge eating and emotional eating) in pre-operative bariatric surgery patients. Adult bariatric surgery patients (N = 103, Mage = 42.32, MBMI = 49.31kg/m2) completed a series of questionnaires assessing weight stigma concerns, psychological distress, body shape concerns, binge eating, and emotional eating (eating in response to anger/frustration, anxiety, and depression) as part of an ongoing research study at the Toronto Western Hospital, Bariatric Surgery Program. Results revealed that bariatric surgery patients who reported concerns about being stigmatized for their weight/shape were at an elevated risk for both binge eating and emotional eating in response to anger/frustration and anxiety, but not for emotional eating in response to depression. Using nonparametric bootstrapping analyses, body shape concerns emerged as a significant mediator in the relations between weight stigma concerns, binge eating, and emotional eating in response to anger/frustration and anxiety, but not for emotional eating in response to depression. The total effect of body shape concerns and psychological distress emerged as a significant mediator of these relations; however, neither variable was a significant independent mediator. Taken together, these results demonstrate that body shape concerns emerged as the most relevant explanatory mechanism in the relation between weight stigma concerns and disordered eating, highlighting that reducing body shape concerns should be considered an important treatment target within disordered eating interventions in pre-surgical bariatric surgery patients.

F048: Effects of Exposure to Weight Concerned and Non-Weight Concerned Others on Body Image, Eating and Self-Attitudes

Kathryn Miller, BSc, MA, University of Waterloo, Waterloo, Ontario
Allison Kelly, BA, PhD, University of Waterloo, Waterloo, Ontario

Research firmly illustrates the detrimental correlates of being exposed to others who are overly concerned with their body shape and/or weight. However, there is virtually no research on how exposure to non-weight concerned others affects one’s body image and eating. Thus the present study investigated the unique contributions of exposure to weight preoccupied and non-weight preoccupied others to young women’s eating, body image, and global self-attitudes, both between-persons and within-persons. For one week, 92 female college students completed nightly online questionnaires. Multilevel modelling revealed that at the between-persons level, college women who reported a higher average level of exposure to non-weight preoccupied over the week generally reported more intuitive eating, less dietary restraint, more body appreciation, higher self-esteem, and higher self-compassion. Women with higher average levels of exposure to dieters reported less intuitive eating, more dietary restraint, less body appreciation, and higher self-criticism. At the within-persons level, on days when women were more exposed to more non-weight preoccupied eaters than usual, intuitive eating, body appreciation, and state body image were all higher. On days when exposure to dieters was higher than usual, so too was self-criticism. Finally, a higher-than-usual daily level of exposure to normal eaters was most beneficial on days when exposure to dieters was low. Findings are the first to suggest that independent of a young women’s level of exposure to dieters, her level of exposure to normal eaters—both on a given day and across days—contribute to eating habits, body image, and self-attitudes. Practically, results suggest that encouraging young women to cultivate social environments that minimize exposure to weight concerned others and maximize exposure to non-weight concerned others may help them maintain adaptive eating habits and body image, and encourage generally positive self-relating.

F049: Sociocultural Influences on Body Dissatisfaction in Adolescent Males

Rosalia Vazquez-Arevalo, PhD, Universidad Nacional Autónoma de México, Mexico, Ciudad de Mexico
Maria de los Angeles Alcantara Lopez, CPsychol, National Autonomous University of Mexico, Mexico City, APO AE
Xochitl Lopez Aguilar, PsyD, National Autonomous University of Mexico, Mexico City, APO AE
Juan Manuel Mancilla-Diaz, PhD, Universidad Nacional Autónoma de Mexico, Mexico, Ciudad de Mexico

Body dissatisfaction arises at the time that the individual exceeds the regulatory discomfort and their body dissatisfaction leads him to harmful health behaviors. The purpose of this research was to investigate the peer influence, BMI and internalization of the aesthetic model on body dissatisfaction adolescent males. Participants were 143 male students with an average age of 12.9 (SD 1.1), who underwent an anthropometric measurement and answered a battery of tests that included: Questionnaire of Sociocultural Influence on the Aesthetic Body Shape Model (CIMEC), Peer influence Inventory on Food Concern (I-PIEC), Drive...
F050: The Effects of Cognitive Dissonance and Weight Stereotype Activation on Internalization of Weight Bias and Food Consumption

Suman Ambwani, PhD, Dickinson College, Carlisle, Pennsylvania
Cai Guo, BA, Stanford University, Stanford, California
Lea Simms, BA, Dickinson College, Carlisle, Pennsylvania
Emily Abromowitz, Student, Dickinson College, Carlisle, Pennsylvania

Although research suggests that internalization of weight bias (i.e., self-endorsement of negative weight stereotypes) is linked with multiple forms of psychopathology and is distinct from anti-fat attitudes, there is a paucity of experimental research and the factors impacting weight bias internalization and their behavioral sequelae remain unclear. The present experimental study thus examined the impact of exposure to stereotypes about obesity (i.e., exposure to stereotypical vs. non-stereotypical images) and cognitive dissonance (i.e., forced counter-attitudinal vs. non-counter-attitudinal thinking) on college women’s (N=97) internalization of weight bias, anti-fat attitudes, and food consumption behaviors. Although the stereotypical and non-stereotypical images were obtained from previous research, the materials for the cognitive dissonance manipulation were novel and thus tested in a pilot study (N=18). Data collection sessions were administered in individual study rooms wherein participants completed computerized measures while consuming a selection of snacks as part of an ostensible taste test. Results from a 2x2 factorial ANOVA (controlling for participant BMI) indicated a significant main effect for stereotype activation on weight bias internalization: the main effect for cognitive dissonance and the interaction term were not significant. Analyses testing the impact of the experiment on anti-fat attitudes and food consumption behaviors were not statistically significant. Current findings offer experimental evidence that internalization of weight bias is indeed distinct from anti-fat attitudes. These data also suggest that exposure to weight-stereotypical images exerts a potent effect that may be difficult to change through cognitive dissonance interventions. Future studies may evaluate alternate cognitive dissonance strategies and the impact of different types of stereotypes on individuals varying across dimensions of weight status and eating psychopathology.

F051: Perfectionism, Depression and Obsessivity in a Sample of Adolescents with Anorexia Nervosa or Obsessive-Compulsive Disorder

Itziar Flamarique, MD, PhD, Hospital Clinic de Barcelona, Barcelona, Barcelona
Josefina Castro-Fornieles, MD, PhD, Hospital Clinic de Barcelona, Barcelona, Barcelona
Maria Teresa Planas, MD, Hospital Clinic de Barcelona, Barcelona, Barcelona
Elena Moreno, PsyD, Hospital Clinic de Barcelona, Barcelona, Barcelona
Luisa Lazaro, MD, PhD, Hospital Clinic de Barcelona, Barcelona, Barcelona

The aim of the study was to investigate the relationship of two perfectionism dimensions (self-oriented perfectionism and socially prescribed perfectionism) with obsessive and depressive symptoms and study whether any dimension of perfectionism was specific to Anorexia Nervosa (AN) or Obsessive-Compulsive Disorder (OCD) compared to healthy controls in a sample of adolescents. The sample consisted of 79 adolescents with AN, 32 with OCD and 76 healthy controls. Perfectionism was assessed with the Child and Adolescent Perfectionism Scale (CAPS). The CAPS has two dimensions, the self-oriented perfectionism (SOP) and the socially prescribed perfectionism (SPP). They were also assessed with the Leyton Obsessional Inventory-Child Version (LOI-CV) and the Childhood Depression Inventory (CDI). The AN group showed higher scores on the SOP and the CDI compared to the OCD and control groups (p<0.001). With regard SPP, no differences were observed between the AN group and the OCD group or the control group. Mean total scores of LOI-CV were higher for both the AN group and the OCD group than the Control group (p<0.001). The interaction between group and SOP regarding the LOI-CV was statistically significant between the AN group and the Control group (p=0.013). For each point increased in the SOP, belonging to the AN group was associated with an increase of 0.41 points on the LOI-CV compared to the control group. With regard SOP and CDI, there was a significant interaction between group and SOP to explain depressive symptomatology, also for the AN group compared to the control group (p=0.002). For each point increased in the SOP, if you belonged to the AN group, an increase of 0.35 was observed in the CDI compared to the control group. No interaction was found between SPP and group regarding depressive or obsessive symptoms. To summarize, self-oriented perfectionism seemed more specific to AN than to OCD compared with controls in a sample of adolescents, whereas socially prescribed perfectionism did not show differences between groups. Moreover, belonging to the AN group implied that self-oriented perfectionism was associated with more severe depressive and obsessive symptoms than healthy controls.
**F052: Do Food Attitudes Differ Across Adolescence?**

**Arielle Wolinsky**, BA, MA, Rutgers, The State University of New Jersey, Camden, New Jersey  
**Charlotte Marky**, PhD, Rutgers, The State University of New Jersey, Camden, New Jersey

This study investigated the relations between age and individuals’ food attitudes; gender, weight status, and body satisfaction were explored as moderators. It was hypothesized that there would be an overall negative correlation between age and food attitudes with older participants having less healthy attitudes about food; this relation was expected to be stronger for girls than boys. Adolescents (N = 1107, Mage = 15.58 years) from a public high school completed self-report questionnaires assessing their age, gender, weight status, body satisfaction, and food attitudes. Contrary to our expectations, results indicated that older adolescents experienced greater pleasure from food than younger adolescents. Further, adolescents’ weight status predicted decreased pleasure from food and increased weight concerns. We did not find a significant difference in weight concerns for younger versus older boys regardless of weight status; however, there was a significant difference in weight status for younger versus older girls, regardless of weight status. These results suggest that to understand an adolescent’s eating attitudes and weight concerns, age, weight status, and gender need to be considered. These findings may have application in the creation of interventions to address food attitudes that may contribute to preventing the development of disordered eating attitudes and behaviors among adolescents.

**F053: Insidious: the Relationship Between Patients and their Eating Disorders and its Dmpact on ED Symptoms, Illness Duration and Self-image**

**Emma Forsén Mantilla**, MSc, Karolinska Institute, Stockholm, Sweden  
**Andreas Birgegård**, PhD, Karolinska Institute, Stockholm, Sweden

Patients with eating disorders (EDs) often spontaneously talk about their disorder in terms of a symbolic other (a demon, a voice, a guardian). Further, externalizing exercises where patients are encouraged to separate their true self from their ED self are common in some treatment approaches. Yet, no previous quantitative study has investigated this phenomenon. We examined the patient-ED relationship (using the interpersonal Structural Analysis of Social Behavior methodology) and its implications for ED symptoms, illness duration and self-image. Participants were 16-25 year old female patients (N=150) diagnosed with anorexia nervosa (N=55), bulimia nervosa (N=33) or eating disorder not otherwise specified (N=62). Results suggested that patients had comprehensible and organized relationships with their EDs. EDs were primarily experienced as acting critical towards patients. Higher ED control was associated with more ED symptoms and longer illness duration, especially when coupled with patient submission. Patients reacting more negatively towards their EDs than their EDs were acting towards them had lower symptom levels and more positive self-images. Externalizing one’s ED, relating to it like a symbolic seemed to make sense to patients and depending on its quality seemed to influence ED symptoms, illness duration and self-image. We put forward both clinical and theoretical implications based on the assumption that the patient-ED relationship may function in similar ways as real-life interpersonal relationships do.

**F054: Does Duration Matter? Clinical Impairment as Predicted by Length of Dietary Restricting**

**Danielle Chapa**, BA, Student, University of Kansas, Lawrence, Kansas  
**Brittany Bohrer**, MA, Student, University of Kansas, Lawrence, Kansas  
**Kelsie Forbush**, PhD, University of Kansas, Lawrence, Kansas

More severe than “dieting,” dietary restricting (DR) to maintain low weight or to compensate for binge-eating episodes is associated with marked distress and psychosocial impairment. Despite recognition that DR is a clinically important eating disorder (ED) symptom, clinical and research perspectives of DR vary widely. Definitions of DR include: 1) meal skipping, 2) restricting for eight or more waking hours, or 3) restricting for 24 hours or longer. The purpose of this study was to test which temporal definition of DR was most highly associated with clinical impairment and binge eating in a sample of adults with a DSM-5 ED (N=204; 81.4% women). Semi-structured clinical interviews were administered to assess what and when participants ate on DR days. Duration of DR was calculated by identifying the number of consecutive hours that participants ate considerably less than what would be expected based on their age, sex, BMI, and activity level. Linear regression showed that the number of DR hours and meal skipping did not predict clinical impairment or the number of binge-eating episodes. However, ANOVA analyses indicated that participants who engaged in DR for 24-hours were significantly more clinically impaired compared to those who restricted for eight-hours or less. In conclusion, our findings support cognitive-behavioral interventions that promote helping clients establish regular eating patterns. Although there were few differences between definitions of DR for predicting binge eating, restricting for a full day was associated with greater ED-related clinical impairment. Clinicians and researchers should consider inquiring about length of dietary restriction, with particular attention to persons who engage in day-long periods of inadequate intake. Future research is needed to understand whether 24-hour definitions of restricting out-predict other definitions of DR for understanding clinical course, prognosis, and diagnostic recurrences.

**F055: Clinical Features of Males with Anorexia Nervosa in Japan**

**Tomoko Harada**, PhD, Department of Neuropsychiatry, Osaka City University, Graduate School of Medicine, Osaka, Osaka  
**Tuneo Yamauchi**, PhD, Department of Neuropsychiatry, Osaka City University, Graduate School of Medicine, Osaka, Osaka

Clinical symptoms of males with anorexia nervosa (AN) in Japan are less understood compared with females. AN is a clinically important eating disorder (ED) symptom, more severe than “dieting,” which is associated with marked distress and psychosocial impairment. Despite recognition that DR is a clinically important ED symptom, clinical and research perspectives of DR vary widely. Definitions of DR include: 1) meal skipping, 2) restricting for eight or more waking hours, or 3) restricting for 24 hours or longer. The purpose of this study was to test which temporal definition of DR was most highly associated with clinical impairment and binge eating in a sample of adults with a DSM-5 ED (N=204; 81.4% women). Semi-structured clinical interviews were administered to assess what and when participants ate on DR days. Duration of DR was calculated by identifying the number of consecutive hours that participants ate considerably less than what would be expected based on their age, sex, BMI, and activity level. Linear regression showed that the number of DR hours and meal skipping did not predict clinical impairment or the number of binge-eating episodes. However, ANOVA analyses indicated that participants who engaged in DR for 24-hours were significantly more clinically impaired compared to those who restricted for eight-hours or less. In conclusion, our findings support cognitive-behavioral interventions that promote helping clients establish regular eating patterns. Although there were few differences between definitions of DR for predicting binge eating, restricting for a full day was associated with greater ED-related clinical impairment. Clinicians and researchers should consider inquiring about length of dietary restriction, with particular attention to persons who engage in day-long periods of inadequate intake. Future research is needed to understand whether 24-hour definitions of restricting out-predict other definitions of DR for understanding clinical course, prognosis, and diagnostic recurrences.
F056: Risk for Disordered Eating in Heterosexual and Sexual Minority Women: Examining the Role of Relationship Status, Relationship Satisfaction, and Sexual Identity

Elizabeth Velkoff, BA, Miami University, Oxford, Ohio
Aimee Yeager, BA, Miami University, Oxford, Ohio
April Smith, PhD, Miami University, Oxford, Ohio

The present study examined the role of relationship factors, sexual identity, and unique sexual minority (SM) experiences in association with eating disorder (ED) symptoms among women. A sample of heterosexual (n = 48) and SM (n = 51) women completed several self-report questionnaires online. Research finds that romantic relationships may protect against ED symptoms among SM men, and satisfying romantic relationships have been shown to protect against other negative mental health outcomes among SM women. Additionally, uncertainty about one’s sexual identity may confer risk for poorer mental health outcomes. Finally, SM-specific experiences may play a unique role in risk for ED behaviors among SM women. Given these previous findings, we tested the following hypotheses: (1) single SM women would have more ED symptoms than single heterosexual women, but partnered heterosexual and SM women would not show differences in ED symptoms, (2) greater relationship satisfaction would predict fewer ED symptoms for all women, but the negative association would be stronger for SM women than heterosexual women, (3) greater discrepancy between sexual orientation identity, sexual attraction, and sexual behavior would be related to higher ED symptoms, and (4) among the sample of SM women, some factors unique to SM individuals (i.e., acceptance concerns and identity uncertainty) would positively relate to more ED symptoms, whereas other unique factors (i.e., identity affirmation) would negatively relate to ED symptoms, serving as protective factors. Results indicated that there was not a significant interaction of sexual orientation and relationship status in the prediction of ED symptoms, and greater relationship satisfaction was associated with fewer ED symptoms among both heterosexual and SM women. We found that greater discrepancy between sexual identity and attraction was associated with more ED symptoms. Finally, our results indicated that fear of stigma is associated with greater ED symptoms among SM women.

F057: Eating Disorders Among Collegiate Rugby Players in Argentina: An Exploratory Study

Emilio J. Compte, PhD, Favaloro University, Buenos Aires, Buenos Aires
Sofia Schweiger, Student, Favaloro University, Buenos Aires, Buenos Aires
Michelle Bressan, Student, Favaloro University, Buenos Aires, Buenos Aires

In recent years interest in understanding the features of eating disorders (EDs) in males has increased. More specifically, athletes have been considered at risk population given their exposure to several risk factors such as competitive anxiety, past injuries, food supplement intake, a positive attitude towards performance-enhancing substances and steroids use, and the exposure to the cultural body ideal, among others. However, previous research has mainly focused on sports that emphasize leanness, and was conducted in developed countries. The main aim of this study was to evaluate the psychological features of collegiate rugby players in Buenos Aires (Argentina) at risk for EDs, compared with rugby players who are not at risk. For that purpose, athletes completed a survey during their training sessions that included the Eating Disorders Examination-Questionnaire, Exercise Dependence Scale, Emotion Regulation Questionnaire, Performance Enhancement Attitude Scale, Physical Appearance Comparison Scale, Competitive State Anxiety Inventory, and questions about their height, current and desired weight, attitudes towards steroid use, supplement intake, position in the field (forward or back), and history of past injuries. From the 203 Rugby players that
completed the survey. 8.9% (n=18) were found to be at risk for EDs. Players at risk showed higher desired BMI, and also higher levels of physical comparison, exercise dependence and competitive anxiety. A multiple regression analysis showed that attitudes towards steroids and performance-enhancing substances, food supplement intake, current BMI, physical comparison, and competitive anxiety were predictors of EDs among rugby player, and together these variables accounted for 55% of the variance. We hope that the availability of this data will enhance our understanding of EDs among athletes and will contribute to healthy practices in support of sports performance and health.

**F058: To go or not to go: Food-Specific Inhibition Training in Bulimia Nervosa**

Bruno Nazar, MSc, MD, PhD, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil
Robert Turton, BA, King's College London, London, UK
Emilee Burgess, BA, CPsychol, King's College London, London, UK
Natalia Lawrence, BSc, PhD, University of Exeter, Exeter, Exeter
Valentina Cardi, CPsychol, PhD, King's College London, King's College London, London, UK
Colette Hirsch, CPsychol, PhD, Professor, King's College London, London, UK
Janet Treasure, OBE, MD, FRCP, FAED, Professor, King's College London, London, UK

Impaired inhibitory control could underlie the impulsive features of Bulimia Nervosa (BN). Go/no-go paradigms have been developed to help increase inhibitory control over automatic eating impulses. However, this approach has not been tested in eating disorders. The aim of this study was to examine whether a session of food-specific go/no-go training can help to reduce the consumption of binge-foods in BN. 22 participants with BN and 17 Healthy Controls (HCs) have taken part to date. Participants were given one session of food-specific go/no-go training and one control session, using a within-subjects AB/BA crossover design. The primary outcome measure was food consumption on a taste test following the training. A Mann-Whitney U test showed that people with BN consumed significantly less of the binge foods (i.e., chocolate and crisps) than the HCs between the experimental and control condition (p = .046, r = .32). No significant differences in the consumption of non-binge/novel foods were found (p > .6). Preliminary results suggest that go/no-go training is helpful for people with BN in reducing the consumption of binge foods relative to HCs. We are also testing this paradigm for people with binge eating disorder. Further research with more sessions of training and long-term follow-ups is needed to ascertain whether go/no-go training might be useful as an adjunct treatment enhancer. This could involve people uploading their own ‘trigger foods’ into the training.

**F059: Eye Movements and GABA in Anorexia Nervosa: Implications for the Underlying Neurobiology of Anorexia Nervosa**

Andrea Phillipou, BSc, PhD, St Vincent’s Hospital, Melbourne, Victoria
Larry Abel, PhD, The University of Melbourne, Melbourne, VIC
David Castle, MD, The University of Melbourne, Melbourne, VIC
Richard Nibbs, Swinburne University of Technology, Melbourne, VIC
Matthew Hughes, PhD, Swinburne University of Technology, Melbourne, VIC
Caroline Gurvich, DPsych, Monash Alfred Psychiatry Research Centre, Melbourne, VIC
Bradford Moffat, PhD, The University of Melbourne, Melbourne, VIC
Susan Rossell, PhD, Swinburne University of Technology, Melbourne, VIC

Anorexia Nervosa (AN) is associated with the highest mortality rate of any mental illness, yet the neurobiological underpinnings of the condition remain unclear. The neurobiology involved in the production of saccadic eye movements is well understood, and saccadic eye movement tasks have been used to investigate neurobiological deficits in a range of other psychiatric populations. In our recent research, we identified distinctive eye movement abnormalities in AN indicative of neuronal disinhibition. These deficits included saccadic ‘intrusions’ during fixation, hyperscanning of stimuli, faster saccadic reaction times to peripheral stimuli and an inability to suppress eye movements to unattended stimuli. These deficits are suggestive of gamma-aminobutyric acid (GABA) dysfunction in individuals with AN. Pilot data has also been collected directly investigating GABA concentrations in different brain regions in participants with AN, those recovered from AN and healthy controls, in relation to performance on saccadic eye movement tasks. Magnetic resonance spectroscopy was performed on the superior colliculus (involved in the eye movement deficits observed in AN) and the left supramarginal gyrus (a control region). Given the overlap between behaviours related to GABAergic function and AN, including anxiety and feeding behaviour, these findings have the potential to inform the utilisation of agents that modulate GABA in the treatment of this illness.

**F060: An fMRI Investigation of Implicit Processing of Food Stimuli in Anorexia Nervosa**

Julius Steding, MSc, Student, Technische Universität Dresden, Dresden, Saxony
Franziska Ritschel, DiplPsych, Technische Universität Dresden, Dresden, Saxony
Daniel Geisler, Dipl.-Inf., Technische Universität Dresden, Dresden, Saxony
Joseph King, DiplPsych, PhD, Technische Universität Dresden, Dresden, Saxony
Ilka Böhm, DiplPsych, Technische Universität Dresden, Dresden, Saxony
Although suffering from severe underweight, patients with anorexia nervosa continue to avoid food intake. Previous studies have shown impaired brain activation in response to food images in AN patients (Oberndorfer et al., 2013; Uher et al., 2003). In this study, we use fMRI to investigate neural correlates of reaction to food stimuli that are not in the focus of attention. This study included 32 acute AN patients (acAN) and 32 matched healthy controls (HC). Participants performed a block-designed distractor n-back (Ladoceur et al., 2009) consisting of a 2-back working memory (WM) task flanked by disorder relevant pictures (food, non-food). Performance data were analyzed with repeated measures ANOVAs. Two-sampled t-tests were used to compare whole brain activation between groups. On behavioral level, reaction times differed between conditions (food > non-food) and a trend effect for group difference occurred (HC > acAN). No differences in accuracy were found. On neuroimaging level, first, task feasibility was confirmed by robust activations of the WM-network when performing the task and a food specific network (as described by Killgore et al., 2005) when comparing food against non-food pictures. Preliminary hypothesis-driven ROI analysis focusing on amygdala activity did not reveal significant group differences if applying stringent control for multiple comparisons. Psychophysiological interaction analyses revealed a reduced connectivity of amygdala with ACC for food stimuli in AN patients compared to HC, which might indicate a impaired ACC top-down regulation of amygdala reactivity for food stimuli in AN patients.

**F061: Angry Rumination in Patients with Anorexia Nervosa and Bulimia Nervosa: Associations with Eating-Disorder Psychopathology, Impulsivity, and Perfectionism**

Shirley Wang, Student, The College of New Jersey, Ewing, New Jersey
Ashley Borders, PhD, The College of New Jersey, Ewing, New Jersey
Elizabeth Frenkel, PhD, University Medical Center of Princeton at Plainsboro, Plainsboro, New Jersey
Melinda Parisi, PhD, University Medical Center of Princeton at Plainsboro, Plainsboro, New Jersey

Depressive rumination is significantly implicated in the onset and maintenance of eating-disorder (ED) psychopathology. Angry rumination has also been associated with ED psychopathology among nonclinical samples. However, little is known about the association between angry rumination and ED psychopathology, and other processes that influence these relationships, among individuals with clinical significant EDs. In the current study, 78 patients with anorexia nervosa (AN) or bulimia nervosa (BN) completed the eating disorder examination-questionnaire, as well as established questionnaires assessing angry rumination, depressive rumination, impulsivity, and perfectionism. Angry rumination was significantly correlated with global ED psychopathology, including restraint, eating concern, shape concern, and weight concern. Parallel mediation analyses revealed that both negative urgency and self-oriented perfectionism mediated the association between angry rumination and ED psychopathology. Moreover, negative urgency remained a significant mediator even when statistically controlling for the effects of depressive rumination. Our findings suggest that, among patients with AN or BN, angry rumination is an important cognitive process associated with severity of ED psychopathology, and that these associations can be partially explained through heightened impulsivity and perfectionism. Importantly, the effects of angry rumination persisted after accounting for depressive rumination. With further examination, findings that angry rumination plays a role in ED psychopathology could offer additional targets for prevention and treatment interventions.

**F062: Do Weekly Variations in Specific Emotion Regulation Strategies and State Mindfulness have an Influence on Bulimic Symptoms? A Naturalistic Weekly Diary Study**

Ines Wolz, MSc, Institute of Biomedical Research Bellvitge, Barcelona, Catalonia
Isabel Sánchez-Diaz, PhD, Hospital de Bellvitge, Barcelona, Catalonia
Roser Granero, MSc, Universitat Autónoma de Barcelona, Barcelona, Catalonia
Fernando Fernández-Aranda, PhD, Hospital de Bellvitge, Barcelona, Catalonia

Variations in binge-/purging symptomatology are related to the experience of negative emotions, but it has also been shown that the way in which emotions are dealt with, i.e. the use of emotion suppression compared to reappraisal, might be more important than the emotional event per se. This study aimed to look at the variation of state mindfulness and state use of the emotion regulation strategies reappraisal and suppression and to look at the influence of positive and negative emotions as well. Over a six week period, during psychoeducative treatment, patients with bulimia nervosa filled in a weekly protocol of measures of emotion regulation and symptomatology. Trait measures of emotion regulation did not change from baseline to post psychoeducative treatment. The most strongly felt emotions over the six-week period were anxiety, strain and sadness, sadness decreased more strongly over time. Positive emotions were reported less and to a smaller extent; the strongest positive emotions were love, amusement and joy. Canonical correlations showed a significant association between binge- and purge-symptomatology and suppression, reappraisal, mindfulness and positive and negative emotions.
over time. Pearson correlations showed that higher mindfulness was related to more positive and less negative emotions, and less binge-eating and purging over time. For reappraisal, associations were similar, but less strong. Suppression was related to more negative and less positive emotions, but not clearly to binge-purging symptomatology. More negative emotions and less positive emotions were related to more binge-purging symptomatology. Altogether, results show that emotion regulation and mindfulness interact dynamically with binge-purging symptomatology in everyday life.

F063: Perceptions of the Causes of Eating Disorders: A Comparison Between Mothers and Their Daughters with Eating Disorders

Valeria Soto-Fuentes, MPych, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico
Verónica Vázquez-Velázquez, PhD, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City
Ingrid Rocha-Velis, MPych, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City
Lucy Reid-Martínez, PhD, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City
Marcela Rodríguez-Flores, MSc, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City
Eduardo García-García, MD, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico, Mexico City

The aim of this study was to examine differences in perceptions regarding the causes of eating disorders among mothers and their daughters with eating disorders. Sixty dyads of mothers and daughters were grouped according with the daughter’s diagnosis of anorexia nervosa (AN) or bulimia nervosa (BN). 30 of AN (Daughters 18.2±2.9 years, BMI 16.9±3.2; Mothers 45.2±5.5 years, BMI 26.3±4.1) and 30 of BN (Daughters 19.1±3.1 years, BMI 22.2±3.2; Mothers 47.6±5.1 years, BMI 26.0±6.5). Through an open question to the mothers: “What do you think was (were) the cause(s) of your daughter eating disorder?” and to the patients: “What do you think was (were) the cause(s) of your eating disorder?”, a list of eleven codes for the causes of eating disorders was created from the responses of both mothers and daughters based on a review of the literature: body dissatisfaction, emotional/psychological factors, family factors, medical problems, obesity, aspects related to the social/media aspects, family attitudes to shape and weight, school factors, aspects related to father and unknown cause. Frequencies and chi square analyses demonstrated differences in rates of agreement between mothers and daughters in all causes, except when the daughter had obesity. Daughters most frequently endorsed body dissatisfaction, having obesity, social/media aspects and emotional/psychological factors, but not school, family factors and unknown causes. Mothers attributed their daughter’s eating disorder most frequently to social/media aspects, emotional/psychological factors and family factors, with body dissatisfaction, medical problems and school least endorsed. As a conclusion, the noteworthy differences between mothers and daughters suggest that there is a need for greater understanding of the etiology of eating disorders inside families, which could potentially aid the treatment process.

F064: Depression and Self-Esteem FBT vs CBT in BN

Fabiola Valenzuela, BS, Stanford University, Stanford, California
Daniel Le Grange, MA, PhD, Postdoctoral Fellowship, University of California, San Francisco, San Francisco, California

This study examines change in secondary clinical symptoms present in individuals with bulimia nervosa (BN), such as depression and low self-esteem, in a randomized clinical trial comparing Cognitive Behavioral Therapy (CBT) and Family-Based Therapy (FBT). Depressive symptoms and low self-esteem are prevalent in individuals with BN, and it is important to study how CBT and FBT impact these related clinical symptoms. While CBT is an individual therapy, the traditional CBT model primarily places greater emphasis on behavioral modulation vs. cognitive-emotional modulation. Because evidence suggests that individuals with BN with high levels of negative affect have difficulty with emotion-regulation, the traditional form of CBT may result in poorer prognosis as it places less emphasis on adaptive coping strategies for better emotion-regulation. In contrast, FBT may demonstrate a decrease in depressive symptoms and an increase in self-esteem due to the presence of improved family support. During FBT, family may help patients with emotion-regulation. The aim of this study is to explore the relationship between change in depression and self-esteem measures with CBT and FBT therapy for adolescents with BN. At baseline (BL), 37 adolescents (17 CBT and 20 FBT) with BN between the ages of 12-18 completed the Beck Depression Inventory (BDI) and the Rosenberg self-esteem assessment. Additionally, the BDI and Rosenberg measures were given at session 9 (during treatment), end of treatment (EOT), at a 6 month follow up (6MFU), and at a 12 month follow up (12MFU) for both CBT and FBT treatments. Results reveal that both CBT and FBT significantly improve depressive symptoms and self-esteem, and neither treatment appears to be superior to the other. This is meaningful because families are sometimes concerned that family therapy will not address their child’s depressive symptoms, and here is evidence that it does.

F065: Pre-Treatment Weight Suppression, Eating Pathology, Depressive Symptoms, and Weight Outcomes in a Behavioral Weight Loss Program

Christine Call, BA, Drexel University, Philadelphia, Pennsylvania
Margaret Clark, BS, Drexel University, Philadelphia, Pennsylvania
Alexandra Convertino, BS, Drexel University, Philadelphia, Pennsylvania
Bipolar disorder is associated with various physical health sequelae, partly due to common pharmacotherapies. High rates of comorbidities with eating disorders also contribute to poor physical health, with around 25% of those with bipolar disorder experiencing binge eating. It has been suggested that this aspect of psychological health is neglected when targeting physical health. This systematic review aimed to explore lifestyle interventions that target weight loss or maintenance in Bipolar Disorder. It aimed to investigate whether psychological factors were routinely measured, and whether comorbidities with eating disorders were screened for or targeted. Finally, it aimed to assess the utilization of evidence-based psychological methods such as CBT to promote physical health gains. PubMed, Medline, SCOPUS and Ovid were systematically searched. Searches were limited to English-language papers and a manual search was also conducted. In total, 242 studies, excluding 52 duplicates, were screened. After reviewing the full text of 35 studies, 25 quantitative studies were assessed for quality. Common study limitations included no control group, highly heterogeneous samples of varying weight and failure to report BMI or waist circumference. Only four of the 25 studies screened and excluded participants with eating disorders. None explicitly targeted eating-disordered cognitions and behaviours, although one did consider binge eating as an outcome measure. Use of psychological techniques was limited to a third of studies, with psychological outcomes assessed in only half. Research into appropriate lifestyle interventions for bipolar disorder is in its infancy, and is generally characterized by a number of methodological issues. Future research should consider exploring psychological pathways to improving diet, exercise, and other health behaviours, by limiting participants to those bipolar disorder, and considering eating-disorder symptoms and targets.

F067: Treating Binge Eating Disorder: To CBT or to DBT?

Mirjam Lammers. MSc, GGNet Amarum, Expertise Centre for Eating Disorders, Radboud University, Zutphen, Nijmegen, Outside US
Tatjana van Strien. PhD, Professor, Radboud University, Free University Amsterdam, Nijmegen, Amsterdam

We test whether dialectical behaviour therapy (DBT) is as effective as cognitive behaviour therapy (CBT) for treating binge eating disorder (BED). Therefore we compare DBT to our CBT treatment-as-usual in a randomized controlled trial (RCT). The DBT-protocol is adapted for BED by Safer, Telch & Chen (2009). The CBT-protocol is an extended version of the manual developed by Fairburn, Marcus and Wilson (1993). We assess eating disorder related characteristics, emotion regulation, psychopathology, BMI and overall quality of life both at the start and at the end of treatment. Data-collection is almost complete (N = 60 at present). Findings indicate that both CBT and DBT are effective on all measures. Both treatments are comparably effective on measures related to emotion regulation, psychopathology, BMI and overall quality of life.
However, at the end of treatment differences do emerge when looking at binge eating frequency, shape concerns and weight concerns in favour of CBT. All in all we conclude that CBT and DBT are equally effective treatments for BED in many respects. Although CBT seems to do better on eating disorder related measures in the short term, there might be a delayed effect of DBT at follow-up, half a year after treatment. This would be in line with the delayed effect of interpersonal psychotherapy (IPT) when compared to CBT. Indeed, both DBT and IPT do not target disordered eating directly. Collection of follow-up data is still ongoing.

F069: The Effects of Religious Affiliation (Amish, Catholic, Muslim, Non-affiliated) and Religiosity on Women’s Body Image Coping Strategies

Denise Davidson, BS, MS, PhD, Loyola University Chicago, Chicago, Illinois
Elizabeth Hilvert, MA, BA, Loyola University Chicago, Chicago, Illinois
Kelly Hughes, BA, MA, Auburn University, Auburn, Alabama
Ieva Misiunaite, BA, Loyola University Chicago, Chicago, Illinois

Although there is ample evidence that religiosity is linked to psychological well-being (Gillespie, 2001), research is only beginning to explore the relations between religion and body image. Of the studies conducted, most have found that religion and body image are linked in positive ways (e.g., Dunkel, Davidson, & Qurashi, 2010; Homan & Boyatzis, 2009). The goals of the present research were to explore the relations between religious affiliation, degree of religiosity and body image coping strategies. Also examined were the relations between religiosity and participants’ self-evaluative salience, or the extent to which someone believes looks influence personal worth, and body satisfaction. 356 women participated (18 to 71 years); Catholic (N = 178), Muslim (N = 75), Amish (N = 21) or were not affiliated with a religion (N = 82). Measures included: Body Image Coping Strategies Inventory (Cash, 2003), Appearance Schemas Inventory-Revised (Cash, 2004), Faith Questionnaire (Diduca & Joseph, 2007), Photographic Figure Rating Scale (Swami et al., 2008) and a personal inventory (e.g., age, weight, height, education). Results showed that Amish women engaged in less appearance fixing and more positive rational acceptance body image coping strategies than other women, whereas no differences were found between the other groups. Increased body dissatisfaction (PFRS) and self-evaluative salience (ASI-R) were related to using an avoidance body image coping strategy in all women. For religious women, a lower level of religiosity and a greater degree of body dissatisfaction as well as self-evaluative salience were related to a greater use of an appearance fixing coping strategy. For religious women, a greater degree of religiosity corresponded to a greater use of a positive rational acceptance coping strategy. These results provide evidence that the specific values that are endorsed by a religion, as well as degree of religiosity, may affect how women cope with body image challenges.

F069: A Questionnaire Survey of Support Required by Yogo Teachers to Effectively Manage Students Suspected of Suffering from Eating Disorders

Michiko Nakazato, MD, PhD, Research Center for Child Mental Development, Chiba University, Chiba City, Chiba Prefecture
Kaoru Seike, CPsychol, United Graduate School of Child Development, Osaka University, Chiba City, Chiba Prefecture
Hisashi Hanazawa, MD, PhD, Chiba University, Chiba City, Chiba Prefecture
Toshihiro Ohtani, MD, PhD, Research Center for Child Mental Development, Chiba University, Chiba City, Chiba Prefecture
Shizuo Takamiya, MD, PhD, Nishi Kobe medical Center, Kobe City, Hyogo Prefecture
Ryoichi Sakuta, MD, PhD, Department of Pediatrics, Dokkyo Medical University Koshigaya Hospital, Koshigaya City, Saitama Prefecture

The cooperation of Yogo teachers is essential in helping these students to find appropriate care. To assist Yogo teachers, it is helpful to clarify the encounter rates (the proportion of Yogo teachers who have encountered ED students) and kinds of requested support. As the proportion of teens in the estimated onset ages has increased recently, it has become important to find out and develop support network for ED students early in school and clarify the way of support. Thus, we conducted a wide area survey in Japan for proposing a better framework of support for Yogo teachers in the early support of ED students. A questionnaire survey organized by ED type (based on DSM-5) was administered to Yogo teachers working at elementary/junior high/senior high/special needs schools in four prefectures of Japan in 2015, and 1886 responses were obtained. Based on the results, the encounter rates (the proportions of Yogo teachers who had met ED students) were calculated, and factors that could affect the rates were examined by logistic regression analysis. The order of the encounter rates of the ED type at the four school types was Anorexia Nervosa (AN)>Bulimia Nervosa (BN)>Avoidant/Restrictive Food Intake Disorder (ARFID)>Binge Eating Disorder (BED)>Others. The factors significantly affecting the rates were ‘location, school type, number of students, experience years, in all the subtypes of the EDs. The predicting factors for encounter the students suffering from AN are having knowledge of symptoms about EDs, school type (high school, junior high school), location (urban area). On the other hand, the predicting factors for finding out students with BN are having knowledge of EDs, location, school type, experience years. The support most required for all ED types was “a list of medical/consultation institutions”. A factor affecting the encounter rate of all ED types was the ED knowledge. In addition, senior high schools were the type of school with the highest encounter rates for AN, BN and BED, and special needs schools had the highest rates for Others. These findings imply that in order to find out and support students having the potential of suffering from EDs. Construction for development of support network system is required as well as providing knowledge of the corresponding ED symptoms and management at school in the community.

POSTER SESSION II
**F070: Can't See the Forest for the Trees? Refining our Understanding of Weak Central Coherence in Adolescent Anorexia Nervosa**

Noam Weinbach, PhD, Stanford University, Palo Alto, California
Amit Perry, PhD, Ben-Gurion University of the Negev, Beer-Sheva, Israel
Helene Sher, MD, Soroka Medical Center, Beer-Sheva, Israel
Avishai Henik, PhD, Ben-Gurion University of the Negev, Beer-Sheva, Israel
James Lock, MD, PhD, Stanford University, Palo Alto, California

Over-processing of details (local processing bias) at the expense of processing the bigger picture (global processing) is a phenomena known as “weak central coherence” (WCC). Multiple studies in recent years showed that WCC is a central feature in patients with anorexia nervosa. Some suggested that WCC is a cognitive marker for the disorder with genetic origins (i.e., an endophenotype). However, there are several important questions yet to be answered: is WCC in anorexia nervosa present at adolescence? What are the underlying mechanisms of WCC in anorexia nervosa? Can WCC be remediated? The goal of the present study was to answer these questions. 19 weight-restored adolescents with anorexia nervosa and 22 healthy adolescents performed the global/local processing task (Navon Task). Alerting cues that are known for enhancing global processing were integrated into the task. The results demonstrated that the central feature of WCC in anorexia nervosa is greater interference from details (local interference) when attending to the bigger picture. Furthermore, greater local interference was associated with greater illness severity and poor body-image. Alerting cues reduced patients’ local interference to a comparable level with controls, illustrating that WCC is a modifiable process. Findings of this study support the view that WCC may be an endophenotype for anorexia nervosa that is also correlated with clinical severity.

**F071: Family Cognitive Remediation Therapy for Adolescents with Anorexia Nervosa: A Case Report**

Rie Kuge, MD, Student, Tokyo Metropolitan Children’s Medical Center, Fuchu-shi, Tokyo
Ayano Yokota, CPsychol, Tokyo Metropolitan Matsuzawa Hospital, Setagaya-ku, Tokyo
Noriko Numata, NS, Chiba University, Chiba-shi, Chiba
Michiko Nakazato, MD, PhD, Chiba University, Chiba-shi, Chiba

Cognitive remediation therapy (CRT) aims to increase patients’ cognitive flexibility by practicing new ways of thinking as well as facilitating bigger picture thinking, supporting patients with relevant tasks, and making them aware of their own thinking styles. CRT has since been applied in the treatment of anorexia nervosa (AN), and it has proven to be effective, acceptable, and beneficial. In adolescents, CRT has been piloted in both individual and group format observational studies. Family therapy is also proven to be an effective treatment for 70-80% of adolescents with AN. However, there are limited number of studies integrating CRT and family therapy for adolescents with AN. The objective of this case report is to illustrate how family CRT can be feasible and acceptable for adolescents with AN. A 15-year-old patient had been suffering from AN for 2 years. She suffered from intense anxiety and low self-esteem. In the first session, which was conducted with her alone, it was difficult for her to think about her own thinking styles, but she did homework with her mother and found reflection to be easier when her mother advised her. Her mother was invited to the next session and her father occasionally participated in the sessions. During the sessions with her parents, she became relaxed as her parents helped her to reflect, provided positive feedback, and could encourage her to apply the strategies to daily life. She along with her parents completed 10 sessions. Family CRT could also improve communication among family members. Family CRT for adolescents with AN was well received. Further research will be required to evaluate the effectiveness of family CRT.
Historically, SickKids has not used a shared care model involving PCPs while a patient is receiving treatment in our program. This may occur for many reasons including the need for specialized medical care by adolescent medicine physicians, family preference, and lack of familiarity with eating disorder treatment by the PCP. This QI project explores the experience of PCPs receiving patients who are ageing out of the SickKids Eating Disorders Program who may or may not also be transitioning to specialized adult eating disorder services. Through interviews with PCPs, we seek to understand their perceived barriers (and enablers) to providing care to these patients and their comfort with recognizing medical complications of eating disorders. The results will inform the development of a set of tools and procedures to improve engagement of PCPs in shared care throughout the course of their patient’s eating disorder treatment at SickKids and during the transition period leading up to and after their patient’s 18th birthday.

F073: Avoidant/Restrictive Food Intake Disorder: Categorization of Subtypes and Longitudinal Outcomes after Day Hospitalization

Amanda Bryson, BS, Pennsylvania State University College of Medicine, Hershey, Pennsylvania
Anna Scipioni, BS, Penn State Health Children’s Hospital, Hershey, Pennsylvania
Rollyn Ornstein, MD, Penn State Health Children’s Hospital, Hershey, Pennsylvania

The purpose of this study was to describe subtypes of patients with ARFID, and examine their course and outcome through day treatment and follow-up. An in-depth retrospective chart review was performed on a group of 20 patients with ARFID. Follow-up data, including interviews, anthropometrics, and Children’s Eating Attitudes Test (ChEAT) scores, were available as part of a larger prospective cohort study of patients admitted to an ED day hospital, at least 12 months after discharge. Patients were grouped into three subtypes: 5 patients with anxiety and/or gastrointestinal symptoms (Subtype 1); 7 patients with inadequate/restricted food intake (Subtype 2); and 8 patients with fear of choking or vomiting (Subtype 3). The study sample was 70% female, with a mean age of 11.4 ± 1.6 years at admission to the day hospital. Duration of day hospitalization was 6.8 ± 3.6 weeks. The average time between discharge and study follow-up was 31 ± 14.7 months. %MBW was higher at discharge than at admission (88.1 vs. 81.4%; p=0.0002) and at follow-up than at discharge (95.1 vs. 88.1%; p=0.008). ChEAT score was lower at discharge than at admission (p=0.049), but was not significantly different at follow up than at discharge. At follow-up, 75% described themselves as mostly or fully recovered, and all subtypes achieved ≥90% %MBW and had subclinical ChEAT scores. Subtype 1 had the lowest %MBW at admission (78.1 ± 16.7%) and the highest ChEAT score (27.2 ± 21.7). Subtype 3 had the highest rate of self-reported recovery (87.5%) compared to Subtypes 1 (60%) and 2 (57%), while Subtype 2 had the lowest percentage of patients reporting current ED symptoms (28.6%), compared to Subtypes 1 (80%) and 3 (62.5%). Subtypes 1 and 3 each had one recorded relapse, while Subtype 2 had none. This study describes 3 subtypes of ARFID, with favorable outcomes achieved through participation in day treatment, and at longer-term follow up, based on weight and ChEAT scores. The persistence of subclinical ChEAT scores over time may indicate that patients with ARFID do not subsequently develop another ED, such as anorexia nervosa. Additionally, these results suggest there may be a difference in the outcomes of ARFID patients based on the predominant presenting symptom.

F074: Prevalence and Correlates of Childhood Obsessive-Compulsive Traits in Eating Disorders

Paolo Meneguzzo, MD, Department of Neuroscience, University of Padova, Padova, Italy
Daniela Degortes, PhD, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Tatiana Zanetti, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Elea Tenconi, PhD, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Elisa Bonello, PsyD, Padova, Italy
Manuela Soave, PsyD, Department of Neuroscience, University of Padova, Padova, Italy
Paolo Busetto, MD, Department of Neuroscience, University of Padova, Padova, Italy
Paolo Santonastaso, MD, Department of Neuroscience, University of Padova, Padova, Italy
Angela Favaro, MD, Department of Neuroscience, University of Padova, Padova, Italy

Few studies to date have investigated the prevalence and clinical and neuropsychological correlates of obsessive-compulsive personality traits, in particular perfectionism, in patients with eating disorders (ED). The aims of the present study were twofold: 1) to retrospectively examine the prevalence of childhood obsessive-compulsive personality traits in adult patients with ED and in healthy controls (HC) and 2) to explore the quantitative relationship between these premorbid traits and several clinical and neuropsychological variables. 203 ED patients -130 with pure Anorexia Nervosa (AN), 25 with pure Bulimia Nervosa (BN), and 48 with BN with a prior history of AN (AN+BN)- and 144 healthy women were assessed by the self-reported Childhood Retrospective Perfectionism Questionnaire (CHIRP) to examine childhood traits such as perfectionism, inflexibility and drive for order and symmetry. Several other standardized instruments were used to assess the clinical and neuropsychological profile. Participants with an ED reported a significantly higher prevalence of Perfectionism, Inflexibility and Symmetry in childhood compared to controls. In particular, the AN+BN group reported the highest rate of obsessive-compulsive personality traits. No significant difference was found between pure BN and HC. In patients with ED, a dose-response relationship was found between the number of childhood obsessive-compulsive personality traits and the risk of having an ED, and between the number of childhood obsessive-compulsive personality traits and psychopathology,
including neuropsychological difficulties such as set shifting and weak central coherence. These findings suggest the need of early identification and treatment of childhood perfectionism as well as other obsessive-compulsive traits, for prevention or improvement of ED outcome.

**F075: Investigating the Influence of Shame, Depression, and Distress Tolerance on the Relationship between Internalized Homophobia and Binge Eating in Lesbian and Bisexual Women**

Vanessa Bayer, PhD, Eating Recover Center of Houston, Houston, Texas

Danielle Gonzales, PsyD, University of California, San Diego, San Diego, California

There is limited research evidence about the specific factors influencing disordered eating for lesbian and bisexual women. Therefore, this study investigated relationships among binge eating, internalized homophobia, shame, depression, and distress tolerance in a sample of lesbian (n = 72) and bisexual women (n = 66). Two hypotheses were tested. First, it was hypothesized that shame and depression would mediate the relationship between internalized homophobia and binge eating. Second, it was hypothesized that distress tolerance would moderate the relationship between shame and binge eating and the relationship between depression and binge eating in the mediation relationships proposed in the first hypothesis. Results indicated that shame was a significant mediator for the relationship between internalized homophobia and binge eating, that depression was not a significant mediator, and that distress tolerance did not moderate the significant mediation relationship between shame and binge eating. The data in this study also indicated that the proportions of lesbian and bisexual participants who reported binge eating and compensatory behavior did not differ significantly, but that bisexual participants reported significantly more depression and shame than lesbian participants.

**F076: Problematic Eating behaviours and Social Cognition in Preadolescence—An epidemiological study of risk factors in the Copenhagen Child Cohort 2000**

Stephanie Stensbjerg Christensen, Student, Medical Student, University of Copenhagen, Medical Student, Copenhagen, Capital Region

Else Marie Olsen, MD, PhD, FAED, Child and Adol Psychiatrist, University of Copenhagen, Department of Public Health, Section for Social Medicine, Copenhagen, Capital Region

Lars Clemmensen, MS, PhD, Child and Adolescent Mental Health Centre, Copenhagen, Capital Region

Mette Bentz, MS, PhD-Student, Child and Adolescent Mental Health Centre, Copenhagen, Capital Region

Anja Munkholm, MD, PhD-Student, Department of Paediatrics, Hillerød, Capital Region

It has been hypothesized that deficiencies in social cognition might influence the onset or maintenance of eating disorders. Deficits in two subdomains of social cognition are well documented in eating disorder patients: emotion perception and Theory of Mind (ToM). However, the causal direction is unclear, and the association between impaired social cognition and problematic eating prior to the development of any eating disorder has only been sparsely studied. The aim of the present study is to investigate possible associations between problematic eating and social cognition in a general population of preadolescents. The study is part of the Copenhagen Child Cohort 2000 (CCC2000) following 6090 children prospectively from birth. The cohort has been assessed in infancy (0-1y), preschool-age (5-7y), and preadolescence (11-12y), including measures of problematic eating and mental difficulties. At 11-12 years 1630 children attended a test of ToM (the Storybook Frederik), while problematic eating was measured using the Eating Pattern Inventory for Children. Mental disorders were assessed using the Development and Well-Being Assessment (DAWBA). Also, register data of hospital diagnosed eating or autism-spectrum disorders from 0-12 years of age are available. Analyses will be carried out during the winter/spring 2017 including logistic regression adjusting for possible confounders and mediators (gender, onset of puberty, mental disorders, cognitive function, socio-economic status, and weight). The results will be ready for presentation at the congress. We expect to find cross-sectional associations between problematic eating and poor ToM in preadolescence, especially concerning restrictive eating patterns. Associations are expected to be only partly explained by weight-status, cognitive function, and comorbidity. With a significance level of 5% and power of 80%, the study will be able to detect an association between impaired ToM and problematic eating with an OR of 2.

**F077: How does the Desire to Lose Weight Affect Engagement in an Online Eating Disorder Intervention?**

Neha Goel, BA, Stanford University School of Medicine & Palo Alto University, Stanford & Palo Alto, California

Rachael Flatt, BS, Stanford University, School of Medicine & Palo Alto University, Stanford & Palo Alto, California

Shiri Sadeh-Sharvit, PhD, Stanford University, School of Medicine, Stanford, California

Ellen Fitzsimmons-Craft, PhD, Washington University in St. Louis, School of Medicine, St. Louis, Missouri

Katherine Balantekin, PhD, RD, Washington University in St. Louis, School of Medicine, St. Louis, Missouri

Grace Monterubek, BA, Washington University in St. Louis, School of Medicine, St. Louis, Missouri

Mickey Trockel, MD, PhD, Stanford University, School of Medicine, Stanford, California

Denise Wilfley, PhD, Washington University in St. Louis, School of Medicine, St. Louis, Missouri

C. Barr Taylor, MD, Stanford University, School of Medicine & Palo Alto University, Stanford & Palo Alto, California
Patients in eating disorders (EDs) treatment often express a desire to work on other health outcomes, such as losing weight. Regardless of whether an intervention addresses weight loss, it is important to understand how this desire can affect a patient’s engagement with treatment. Understanding patients’ weight loss goals (WLG) could inform development and refinement of interventions that would acknowledge these concerns, increase adherence, and improve treatment satisfaction. This study evaluated how weight gain prior to enrollment and WLG influenced participants’ engagement in treatment. Participants were 144 female college students from 13 campuses across the United States who screened positive for an ED participating in the Healthy Body Image program (HBI), an online, CBT-based, guided self-help program that does not specifically address weight loss. Participants’ average age was 22.0 years and 61.3% were Caucasian, 24% Asian, and 6% African American. Content analysis of users’ stated goals at baseline assessed subjective motivation for enrollment; 31% explicitly self-endorsed WLG. Users that endorsed WLG completed an average of 17.3 out of 63 total sessions and gained an average of 14.0 lbs in the year prior to entering the program compared to their non-WLG counterparts who completed an average of 18.0 sessions and gained 11.7 lbs. Using a one-way ANOVA, no significant differences in number of completed sessions or weight gain were observed between users who endorsed WLG and those who did not. Findings suggest that WLG are independent of recent weight gain, and regardless of the presence of WLG, female college students can remain engaged in an online ED intervention. Though weight gain and WLG could be motivating factors for female college students when initially enrolling in an ED program, they remain engaged for additional reasons. As such, participants with an ED who want to lose weight can still engage in a program that does not focus on weight loss.

F078: Effect of Parental Criticism on Disordered Eating Behaviors in University Students from Mexico City

Concepcion DiazdeLeon-Vazquez, MSc, Metropolitan Autonomous University, Mexico City, Mexico
Claudia Unikel-Santoncini, PhD, National Institute of Psychiatry "Ramón de la Fuente Muñiz", Mexico City, Mexico City
Arennis Villalobos-Hernandez, PhD, National Institute of Public Health, Mexico City, Mexico City
Jose Alberto Rivera-Marquez, PhD, Metropolitan Autonomous University, Mexico City, Mexico City

The objective of this work was to analyze the effect of parental criticism on the risk of disordered eating behaviors (RDEB) in university students from Mexico City. A sample of 892 first year students from a public university (502 female, with an average age of 19.3 ± 2.5 years; and 390 male with an average age of 20.4 ± 3.3 years) was included in the study. Sociodemographic variables (sex, age, socioeconomic status), body dissatisfaction, self-esteem, depressive symptoms and body mass index were explored. Ordinal regression models were used to analyze the association of RDEB and criticism from parents. In female students RDEB increased as a result of criticism from both parents (OR=2.5), criticism from their mothers only (OR=2.0), overweight (OR=1.7), obesity (OR=2.1), drive for thinness (OR=8.3) and depressive symptoms (OR=3.3). Whereas in men, RDEB increased as a result of criticism from both parents (OR=2.7), obesity (OR=2.4), drive for thinness (OR=3.4) and depressive symptoms (OR=2.8). All associations were statistically significant (p < 0.05).

Criticism from parents is important to understand disordered eating behaviors in university students. Where possible, the family should be included in planning and carrying out disordered eating behaviors prevention among this population group.

F079: Childhood Maltreatment among Treatment-Seeking Patients with Binge-Eating Disorder: Prevalence and Associations with Eating Disorder Psychopathology, Functional Variables and Treatment Outcome

Michaela Nagi, DiplPsych, University of Leipzig, Department of Psychosomatic Medicine and Psychotherapy, Leipzig, Sachsen
Birgit Wagner, PhD, Medical School Berlin, Berlin, Berlin
Ruth Doelemeyer, DiplPsych, University of Leipzig, Department of Psychosomatic Medicine and Psychotherapy, Leipzig, Sachsen
Grit Klinitzke, PhD, University of Leipzig, Department of Psychosomatic Medicine and Psychotherapy, Leipzig, Sachsen
Jana Steining, PhD, University of Leipzig, Department of Psychosomatic Medicine and Psychotherapy, Leipzig, Sachsen

The study aimed to examine the prevalence of different types of childhood maltreatment among patients with binge-eating disorder (BED) seeking treatment within a randomized-controlled trial (RCT) of a 16-week Internet-based cognitive behavioral therapy for BED. Additionally, we explored associations of histories of childhood maltreatment with eating disorder psychopathology, functional variables and treatment outcome. The RCT sample consisted of 139 patients with BED (DSM-IV) aged between 18 and 61 years. Of those, 69 were randomized to the intervention group (IG) and 70 to a wait-list condition. Assessment times were before and directly after the intervention and 3, 6, and 12 months follow-up. Histories of physical, emotional, and sexual abuse as well as physical and emotional neglect were retrospectively assessed with the Childhood Trauma Questionnaire. The following measures were used as outcome assessments: Eating Disorder Examination Questionnaire, Beck Depression Inventory, General Self-Efficacy Scale, Satisfaction with Life Scale, Body Mass Index (BMI). 89.1% reported a history of any childhood maltreatment. Physical, emotional, and sexual abuse were reported by 27.5%, 67.4% and 31.2%. The prevalence of physical and emotional neglect was 42.0% and 74.6%. At baseline, childhood maltreatment was not...
associated with eating disorder psychopathology or depressive symptoms (Bonferroni correction). Emotional abuse, and emotional and physical neglect were associated with lower self-efficacy and lower satisfaction with life (-0.32≤r≤-0.24; p-values < 0.005). Physical abuse was associated with a higher BMI (r = 0.26, p=0.002). In the IC, treatment dropout was predicted by all types of childhood maltreatment, except for sexual abuse. At posttreatment, a history of emotional neglect was associated with a higher level of weight concerns (r=0.42, p=0.002) in the IC among those who completed the intervention. Furthermore, emotional and physical neglect were associated with lower satisfaction with life after the intervention. At follow-up assessments, no associations between a history of any childhood maltreatment and treatment outcome variables were found (completer analysis, Bonferroni correction).

**F080: Exploring Attitudes Towards Bariatric Surgery Patients and Policies in Canada**

Lauren David, BA, MA, Ryerson University, Toronto, Ontario
Paula Brochu, PhD, Nova Southeastern University, Fort Lauderdale, Florida
Stephanie Cassin, PhD, Ryerson University, Toronto, Ontario

Explicit and implicit stigma toward individuals with obesity are widespread. A burgeoning new literature also indicates that “residual” weight stigma exists for individuals who had previously been, but are no longer, obese. These negative attitudes are affected by weight loss method, such that stigma is strongest for people who lose weight through bariatric surgery as compared with diet and exercise. Stigma associated with obesity has been found to be a key contributing factor to poor quality of life, and thus it is important to develop a better understanding of the factors contributing to the development and maintenance of negative attitudes towards bariatric surgery and their malleability. The purpose of the current study was to examine the impact of visual portrayals of obesity on support for Canadian policies that facilitate patient access to bariatric surgery and on attitudes towards individuals who undergo the procedure. A total of 275 Canadian participants (N = 175 for the original study, and N = 100 for a replication) were recruited using Crowdflower, a crowd-sourcing platform for online recruitment and data collection. Participants read a news story about a policy to facilitate obese individuals’ access to bariatric surgery and were randomly assigned to view the article accompanied by a nonstigmatizing image, stigmatizing image, or no image of an obese individual. Contrary to our hypotheses, the groups generally did not differ in their support of the policies depicted in the article. In the original study, the no image condition reported the least stigmatizing attitudes towards patients (p < 0.18); however, this finding was not replicated in the subsequent study. Although the results suggest that visual portrayals do not significantly influence attitudes towards bariatric surgery, it was found that more favourable views towards the procedure were significantly associated with participant Body Mass Index (r = .31, p < .001), knowing someone who is considering or has had bariatric surgery (t = 3.61, p < .001), and greater perception of knowledge about the procedure (r = .24, p = .001). This line of research continues to be imperative in order to inform strategies for reducing stigma, thereby improving access to bariatric care for those who can benefit from it and quality of life for those who have had the procedure.

**F081: Psychological Distress in Obese Women at Risk for Eating Disorder from Buenos Aires, Argentina**

Jessica Custodio, CPsychol, Facultad de Psicología, Universidad de Buenos Aires, Buenos Aires, Argentina
Brenda Murawski, CPsychol, PhD, Facultad de Psicología, Universidad de Buenos Aires, Buenos Aires, Argentina
Luciana Elizathe, CPsychol, PhD, Facultad de Psicología, Universidad de Buenos Aires, Buenos Aires, Argentina
Guillermina Rutsztein, CPsychol, PhD, Facultad de Psicología, Universidad de Buenos Aires, Buenos Aires, Argentina

One of the most common complications in obesity treatment is that it usually co-exists with eating disorders (ED) and intense psychological distress. The aim of the study was to compare psychological distress in obese patients at risk and non-risk for eating disorder. The opportunity sample included 65 obese women (according to World Health Organization criteria) aged 18 to 65 from Buenos Aires. Patients were in the initial stage of treatment. They voluntarily completed the three subscales of risk of Eating Disorder Inventory-3 (EDI-3) and the Symptoms Checklist-90-Revised (SCL-90). The Global Severity Index of the SCL-90 (GSI) is a good indicator of severity distress because it combines current symptoms with intensity of perceived distress. Two groups were formed: patients at risk for eating disorder (RED group) and patients at non-risk for eating disorder (NRED group). In the RED group, the average age was 38.06 years (S.D. = 9.70) and a BMI of 34.76 kg/m2 (S.D. = 2.99). In the NRED group, the average age was 44.69 years (S.D. = 9.93) and a BMI of 34.02 kg/m2 (S.D. = 2.99). The 50.8% of the sample was at risk for eating disorder (RED group) while the 49.2% did not present risk (NRED group). The 50.8% of the sample is striking. Also, high levels of psychological distress in obese patients at risk and non-risk for eating disorder (RED group) while the 49.2% did not present risk (NRED group). Mann-Whitney test was applied to compare groups regarding the GSI. Significant differences were found (U = 214.500, Z = - 4.11, p < 0.001). The RED group presented a GSI significantly greater (Mdn = 3.03) than the NRED group (Mdn = 2.99). The 50.8% of the sample was at risk for eating disorder (RED group) while the 49.2% did not present risk (NRED group). Mann-Whitney test was applied to compare groups regarding the GSI. Significant differences were found (U = 214.500, Z = - 4.11, p < 0.001). The RED group presented a GSI significantly greater (Mdn = 3.03) than the NRED group (Mdn = 2.99). The 50.8% of the sample was at risk for eating disorder (RED group) while the 49.2% did not present risk (NRED group). Mann-Whitney test was applied to compare groups regarding the GSI. Significant differences were found (U = 214.500, Z = - 4.11, p < 0.001). The RED group presented a GSI significantly greater (Mdn = 3.03) than the NRED group (Mdn = 2.99).
F082: Self-Compassion in the Face of a Body Image Threat is Contagious Across Individuals

Kathryn Miller, BSc, MA, University of Waterloo, Waterloo, Ontario
Allison Kelly, BA, PhD, University of Waterloo, Waterloo, Ontario
Julia Banica, BSc, University of Waterloo, Waterloo, Ontario

Research shows that hearing others engage in ‘fat talk,’ which involves making self-disparaging comments about one’s appearance, can lead to higher levels of body dissatisfaction in the listener. However, there is little research investigating the impact of more positive forms of body talk on listeners. Self-compassion is the ability to be accepting and kind to oneself in the face of personal distress and has been shown to protect against the effects of negative body image. The current study examines whether hearing someone else’s self-compassionate reaction to a situation that threatened their body image could attenuate the negative impact of considering a personal body image threat. Ninety-five female university students listened to a self-compassionate, self-esteem enhancing, or objective reaction to a body image threat and then completed various visual analog measures of affect and self-compassion while recalling a personal body image threat. Factor analysis of the visual analog items revealed a positive affect factor comprised of feeling reassured, happy, proud, energized, self-compassionate, and caring towards oneself. ANOVAs revealed a Condition X time effect such that hearing a self-compassionate reaction caused significantly greater improvements in positive affect when recalling a personal body image threat than hearing a self-esteem enhancing or factual reaction. These findings add to the literature establishing self-compassion as a buffer against body-image threats and extend these findings by suggesting that displays of body-focused self-compassion can be transmitted across individuals. Clinical implications include the potential benefits of having self-compassion modelled by one’s peers, and suggest that group therapies for eating disorders find ways to capitalize on this process. Practically, they also suggest that interacting with self-compassionate others could mitigate the negative impact of day-to-day social interactions that threaten young women’s body image.

F083: A Comparative Content Analysis of Thinspiration vs. Fitspiration Messaging

Melissa Kwitowski, MS, Virginia Commonwealth University, Richmond, Virginia
Courtney Simpson, MS, Virginia Commonwealth University, Richmond, Virginia,
Suzanne Mazzeo, PhD, Virginia Commonwealth University, Richmond, Virginia

Fitspiration refers to online content nominally intended to promote health and fitness. Fitspiration messages are often viewed as the ‘healthier’ alternative to thinspiration, or content that actively advocates weight loss and disordered eating behaviors. Yet, some research suggests that fitspiration messaging might not be fully distinct from thinspiration. This study analyzed body image standards communicated in thinspiration and fitspiration content. Fitspiration (n = 1050) and thinspiration (n = 1050) messaging on the photo-sharing social media platform Pinterest were evaluated using content analytic strategies. Two independent raters coded the images and text present in the posts. Body image messages were categorized as appearance-related or health-related. Chi square analyses compared type of content (thinspiration or fitspiration) and standards promoted (appearance-related or health-related). Results revealed a statistically significant association between content type and body image standard promoted. Thinspiration pins were more likely to promote appearance-based body image standards. Yet, both the majority of thinspiration pins (83.8%) and majority of fitspiration pins (71.7%) promoted appearance-related standards rather than health-related standards. Thinspiration pins were also more likely than fitspiration pins to praise model thinness and portray a pose emphasizing thinness (all ps < .05). Conversely, fitspiration pins were more likely than thinspiration pins to praise model fitness and depict a pose emphasizing fitness (all ps < .05). Findings suggest that although thinspiration pins more frequently promote appearance-related body image standards, the majority of both fitspiration and thinspiration content espouse the importance of appearance as related to body image. Thus, fitspiration images might be harmful to those at risk for eating disorders and related conditions.

F084: Objectified Body Consciousness, Appearance Schemas, and Body Image in Religious (Catholic, Muslim) and Non-religious Women

Denise Davidson, BS, MS, PhD, Loyola University Chicago, Chicago, Illinois
Kelly Hughes, BA, MA Auburn University, Auburn, Alabama
Elizabeth Hilvert, BA, MA, Loyola University Chicago, Chicago, Illinois
Ieva Misiunaite, BA, Loyola University Chicago, Chicago, Illinois
Chelsea Hoy, Student, Loyola University Chicago, Chicago, Illinois

A number of studies have explored the profound negative consequences of a culture’s objectification of a woman’s body on her body image. The main purpose of the present research was to explore how a specific religious affiliation (Catholic, Muslim, No Religious Affiliation), and degree of religiosity, affected body surveillance, body shame and control beliefs on the Objectified Body Consciousness Scale (OBC; Mckinley & Hyde, 1996). Previous research has shown that religiosity can be associated with better body image (e.g., Dunkel, Davidson, & Quraishi, 2010; Homan & Boyatzis, 2009), although the mechanisms for this effect are not well understood. 334 women (18 - 71 years) participated: Catholic (N = 178), Muslim (N = 75), or Nonreligious (N = 81). Measures included the OBC, which is comprised of three subscales: body surveillance, body shame, and...
control beliefs, the Appearance Schemas Inventory-Revised (Cash, 2004), the Photographic Figure Rating Scale (Swami et al., 2008), and a personal inventory (e.g., age, height, weight, education, etc.). Results showed that religious women (Catholic, Muslim) scored lower on body surveillance than non-religious women. No differences were found between all groups on endorsement of body shame or control beliefs. For both religious and non-religious women, a higher level of body shame was related to a lower level of religiosity and a greater degree of body dissatisfaction and self-evaluative salience. For Muslim women, style of dress (Western or Non-Western) affected their responses on the OBC. Muslim women who reported greater frequency of wearing Non-Western dress endorsed fewer body surveillance items than Muslim women wearing Western dress. In all women, increased body surveillance was related to an increase in self-evaluative salience, or the belief that their appearance influences their worth. These results suggest that the role of religion on body image, particularly vis-a-vis the objectification processes, is complex.

F085: "Not Just Right" Experiences Account for Unique Variance in Eating Pathology

Grace Kennedy, BA, Florida State University, Tallahassee, Florida
Katherine McDermott, BA, Florida State University, Tallahassee, Florida
Brittany Mathes, BA, Florida State University, Tallahassee, Florida
Berta Summers, MS, Florida State University, Tallahassee, Florida
Jesse Cougle, PhD, Florida State University, Tallahassee, Florida

Previous research suggests that not just right experiences (NJREs), or uncomfortable sensations of incompleteness resulting from the mismatch between one's desired state/environment and actual state/ environment, may be associated with eating pathology. The current study sought to examine the association between NJREs with disordered eating behaviors and attitudes in a sample of unselected undergraduate students. Participants (n=248) completed the Eating Disorder Inventory Bulimia and Drive for Thinness subscales, the NJRE Questionnaire Revised, and two in vivo measures of NJREs. In separate linear regression models controlling for obsessive-compulsive symptoms and negative affect, self-report NJRE frequency ($\beta = 0.22, p=0.02$, $R^2=0.04$) and NJRE severity ($\beta = 0.16, p=0.03$, $R^2=0.02$) accounted for unique variance in drive for thinness. Similar associations were found between NJRE frequency ($\beta = 0.14, p=0.049$, $R^2=0.01$) and NJRE severity ($\beta = 0.25, p=0.001$, $R^2=0.04$) with bulimic symptoms. Further, discomfort elicited by the in vivo visual NJRE task ($\beta = 0.31, p<0.001$, $R^2=0.07$) was uniquely related to drive for thinness, but not bulimic symptoms. Auditory NJRE response was unrelated to symptoms of bulimia and drive for thinness. The present study provides initial evidence for the association between eating disorders and NJREs, a unique construct not previously examined in relation to eating disorder symptoms. This represents a promising first step in exploring how these experiences may contribute to the development and maintenance of eating disorders.

F086: On the (Mis)Measurement of Thin-Ideal Internalization: Implications for Interpretation of Risk Factors and Treatment Outcome in Eating Disorders Research

J. Kevin Thompson, PhD, University of South Florida, Tampa, Florida
Lauren Schaefer, MA, University of South Florida, Tampa, Florida

Internalization of the thin ideal is a theorized risk factor for disordered eating and a meaningful target of prevention and intervention work. Although two primary measures – the Sociocultural Attitudes Towards Appearance Questionnaire (SATAQ) and Ideal Body Stereotype Scale (IBSS) – are used interchangeably to assess internalization, limited work has examined the assumption that the two measures index the same underlying construct. The SATAQ-4R-Internalization: Thin/Low Body Fat subscale, IBSS-Revised, and Eating Disorder Examination Questionnaire were administered to 1,114 college females. Exploratory factor analysis indicated that the SATAQ-4R and IBSS-R assess separate constructs, reflecting internalization or personal acceptance of the thin ideal and awareness of the thin ideal, respectively. Social psychological theories suggest that internalization of social norms engender more psychological distress than awareness. Consistent with theory, internalization assessed via the SATAQ-4R was more strongly related to disordered eating ($r = 0.54$, large correlation) than awareness assessed via the IBSS-R ($r = 0.45$, medium correlation). Moreover, hierarchical multiple regression analyses indicated that the SATAQ-4R ($\beta = 0.44$) was a stronger predictor of disordered eating than the IBSS-R ($\beta = 0.21$). Results suggest that the two most commonly used measures of thin ideal internalization may actually capture two distinct constructs representing different levels of engagement with the thin ideal. Moreover, internalization may be a more potent risk factor for disordered eating than awareness. Extant literature utilizing the SATAQ and IBSS must be interpreted in light of the current findings. Future work examining thin ideal internalization or awareness as a risk factor or treatment target should seek to utilize measures that most accurately reflect the intended construct.

F087: Comparing Eating Disorder Psychopathology, Clinical Impairment, and Comorbid Symptoms in Minority and Non-Minority College Women with Eating Disorders

Grace Monterubio, BA, Student, Washington University in St. Louis, St. Louis, Missouri
Ellen Fitzsimmons-Craft, PhD, Washington University School of Medicine, St. Louis, Missouri

This study sought to compare eating disorder psychopathology, clinical impairment, and comorbid symptoms among minority and non-minority college women. Participants completed the Eating Disorder Examination Questionnaire were administered to 1,114 college females. Exploratory factor analysis indicated that the SATAQ-4R and IBSS-R assess separate constructs, reflecting internalization or personal acceptance of the thin ideal and awareness of the thin ideal, respectively. Social psychological theories suggest that internalization of social norms engender more psychological distress than awareness. Consistent with theory, internalization assessed via the SATAQ-4R was more strongly related to disordered eating ($r = 0.54$, large correlation) than awareness assessed via the IBSS-R ($r = 0.45$, medium correlation). Moreover, hierarchical multiple regression analyses indicated that the SATAQ-4R ($\beta = 0.44$) was a stronger predictor of disordered eating than the IBSS-R ($\beta = 0.21$). Results suggest that the two most commonly used measures of thin ideal internalization may actually capture two distinct constructs representing different levels of engagement with the thin ideal. Moreover, internalization may be a more potent risk factor for disordered eating than awareness. Extant literature utilizing the SATAQ and IBSS must be interpreted in light of the current findings. Future work examining thin ideal internalization or awareness as a risk factor or treatment target should seek to utilize measures that most accurately reflect the intended construct.
Though eating disorders (EDs) affect individuals across all racial and ethnic groups, more information is needed regarding the similarities and differences in ED presentation between minority and non-minority individuals. Participants were 686 college women across 27 universities in the US who screened positive for an ED, with the exception of anorexia nervosa. Levels of ED psychopathology (i.e., EDE-Q Global and subscales), ED behaviors (i.e., binge eating, vomiting, laxatives, exercise), ED-related clinical impairment, and comorbid psychopathology (i.e., depression, anxiety, sleep problems) were compared between the minority and non-minority students. Participants were classified as non-minority (n=359) if they identified themselves as Caucasian and non-Hispanic, and minority (n=327) if they identified themselves as African American, Asian, Native Hawaiian or Pacific Islander, American Indian or Alaska Native, more than one race, and/or Hispanic. Significant differences were found between the groups only in frequency of binges (p = .004) and sleep problems (p = .045), such that minority students reported more frequent binge eating and greater sleep problems. No other significant differences emerged between the groups (ps > .176). These findings suggest that minority and non-minority college women with EDs display comparable levels of ED psychopathology, behaviors, clinical impairment, and comorbid psychopathology, with the exceptions of binge eating and sleep problems being elevated in minority women compared to their non-minority counterparts. The comparable severity of psychopathology across groups demonstrates the importance of increasing access to care for this population who has historically been less likely than their non-minority counterparts to receive care or even be screened for ED symptoms. Future research should also work to develop tailored interventions that address the particular needs of this population.

F088: A Survey on Attitudes Toward Treatment Refusal for Eating Disorders in Members of the Psychiatric Review Board

Yoshiyuki Takimoto, PhD, Department of Biomedical Ethics, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan

F089: What Changes in Illness and Recovery in Anorexia Nervosa?

Yukari Yamamoto, MA, Department of Biomedical Ethics, Graduate School of Medicine, The University of Tokyo, Tokyo, Japan

Background: Individuals suffering from an eating disorder, especially those with anorexia nervosa (AN), have been reported to refuse treatment frequently despite being in mortal danger from malnutrition. Two types of non-voluntary hospitalizations are implemented for a person with a mental illness, such as schizophrenia, according to the law in Japan: “Involuntary Hospitalization” and “Hospitalization for Medical Care and Protection (HMCP).” The HMCP is applicable for a person who needs hospitalization for medical care and protection, and is not likely to hurt himself/herself or others because of the mental illness. He/she can be hospitalized as long as person responsible for his/her protection consent. In our previous work, 65–95% of the physicians selected the HMCP for a patient with AN, who is in mortal danger. However, there is little consensus on whether AN is a mental illness and whether a patient with AN is competent. Aim: We investigated the thoughts of members who engage in the review of an application for non-voluntary hospitalization. Methods: A self-administered questionnaire was sent to 180 members of the Psychiatric Review Board who consented to participate in the study. Results: The response rate was 42.8% (77/180). In cases where the patient had a short or long history and his/her family members agreed with inpatient treatment, 92.2% or 90.9% of the respondents thought that the HMCP was applicable. Further, 89.6% thought that AN was a mental illness. Additionally, 10.4% believed that patients with AN in mortal danger were fully competent, 51.9% thought they were partly competent, and the remaining 32.5% thought that they were incompetent. Conclusions: Most of the respondents thought that the HMCP was applicable to cases of treatment refusal by a patient with AN and that AN was a mental illness. On the other hand, some respondents considered the patients full or partly competent. A further discussion would be needed to resolve ethical challenges.

F089: What Changes in Illness and Recovery in Anorexia Nervosa?

Brooks Brodrick, MD, PhD, University of Texas Southwestern Medical Center, Dallas, Texas
Jessica Harper, BA, University of Texas Southwestern Medical Center, Dallas, Texas
Erin VanEnkevort, PhD, University of Texas Southwestern Medical Center, Dallas, Texas
Carrie McAdams, MD, PhD, University of Texas Southwestern Medical Center, Dallas, Texas

We were interested in understanding how clinical and cognitive symptoms differ for adult women with and recovered from anorexia nervosa, and how those
symptoms change over time. In 2011-2014, we obtained cognitive and clinical data from 38 women recently with anorexia nervosa (AN-C, met DSM IV criteria for anorexia nervosa during prior 6 months). In 2015 and 2016, clinical symptoms and numerous cognitive assessments were re-assessed for 28 of these women. The women were then divided into those that had achieved recovery, defined by using only outpatient psychiatric providers during the preceding 12 months in concert with maintenance of a BMI > 19 for at least six months (AN-C, n = 11), and those who relapsed or continued to have an eating disorder (AN-CC, n = 17), defined by having a BMI less than 19 during the preceding six months or requiring a higher level of care (inpatient, residential, partial hospital or intensive outpatient) in the preceding twelve months. We then compared whether the measures obtained initially or at follow-up differed for these two groups. The only factors that differed at baseline for the AN-CC and AN-CR groups were related to executive function, including slower times on both the Trails A and B (Trails A, mean AN-CC 45 s, AN-CR 35 s, p = 0.01) and more errors on the Wisconsin Card Sort (errors, mean AN-CC, 13, AN-CR 9, p = 0.01). Importantly, the scores on the eating disorder assessments (Eating Attitudes Test, Eating Disorder Questionnaire, and Body Shape Questionnaire) did not differ for these two groups at either baseline or at follow-up. However, differences in depression (QIDS, AN-CC 7, AN-CR 3, p = 0.002), anxiety (SIGH-A, AN-CC 9, AN-CR 5, p = 0.06), and self-esteem (Self-Competence, mean AN-CC 20, AN-CR 25, p = 0.08; Self-Liking, mean AN-CC 18, AN-CR 24, p = 0.04) were observed in the recovered group compared to the ill group at follow-up. These data suggest that improvements in comorbid neuropsychological function may be a predictor of recovery to the ill group at follow-up. These findings suggest that targeting weak central coherence may be a useful prevention and intervention strategy for decreasing eating disorder symptomatology. Cognitive Remediation Training, which has shown some success in clinical populations, could be adapted and applied for those deemed at risk for eating disorders.

F091: Examining Lean Ideal Internalization and Its Association with Eating Pathology in Men and Women

Lauren Schaefer, MA, University of South Florida, Tampa, Florida
Diana Rancourt, PhD, University of South Florida, Tampa, Florida
Brittany Lang, BA, University of South Florida, Tampa, Florida
Natasha Burke, PhD, Uniformed Services University of the Health Sciences, Bethesda, Maryland
David Frederick, PhD, Chapman University, Orange, California
Mackenzie Kelly, PhD, Rush University Medical Center, Chicago, Illinois
Drew Anderson, PhD, State University of New York, Albany, New York
Katherine Schaumberg, PhD, University of North Carolina, Chapel Hill, North Carolina
Kelly Klump, PhD, Michigan State University, East Lansing, Michigan
Allison Vercellone, MA, Saint Louis University, St. Louis, Missouri
J. Kevin Thompson, PhD, University of South Florida, Tampa, Florida

Drive for leanness (DL) is conceptualized as a desire for “low body fat and toned, physically fit muscles,” which may increase risk for disordered eating. DL is associated with negative body image; however, direct relationships with disordered eating have not been explored. Moreover, current measures of DL focus largely on having “well-toned” muscles and do not explicitly address a concurrent desire for lower body fat. As thin and muscular ideal internalization are implicated in the etiology of maladaptive eating behaviors, it is possible that their additive effects—internalization of a lean ideal (i.e., high thin and high muscular ideal internalization)—may confer greater risk for disordered eating. To examine this, 271 male and 810 female undergraduates were divided into four internalization categories using the Sociocultural Attitudes Towards Appearance
Questionnaire-4 Internalization: Thin/Low Body Fat and Internalization: Muscular/Athletic subscales. Median splits were used to represent individuals reporting only high thin ideal internalization (HT), only high muscular ideal internalization (HM), high lean ideal internalization (HL; i.e., both HT and HM), and low appearance ideal internalization (LA; i.e., low levels of thin and muscular ideal internalization). ANOVAs within gender revealed significant differences between internalization groups’ Eating Disorder Examination-Questionnaire global scores. Post-hoc analyses among women indicated that eating disorder risk was highest within the HT and HL groups relative to those in the HM and LA groups. Men who endorsed HT and HL reported significantly higher disordered eating risk relative to peers in the LA group; however, levels of disordered eating risk did not significantly differ between men with HM and other internalization groups. Overall, the hypothesis of additive effects was not confirmed, with the majority of eating disorder risk conferred by a desire for thinness, particularly among women.

F092: The Moderating Role of Sleep Duration in the Relationship between Evenness and Disinhibition

Taylor Perry, Student, University of North Dakota, Grand Forks, North Dakota
Terra Towne, MA, University of North Dakota, Grand Forks, North Dakota
Kyle De Young, PhD, University of Wyoming, Laramie, Wyoming

Disinhibited eating is eating in an unrestrained, opportunistic manner. Some evidence suggests that dim lighting in the evening facilitates disinhibition by undermining self-regulation. Indeed, individuals who report increased alertness and greater activity in the evening (i.e., those high in eveningness) report higher levels of disinhibition than morning-oriented people. It is unknown how sleep duration may affect this relationship. Short sleep duration predicts weight gain among individuals high in disinhibition and is associated with changes (i.e., increased hunger hormones, decreased dietary restraint, and sensitivity to food-related rewards) that may catalyze disinhibition. This study examined sleep duration as a moderator of the relationship between evenness and disinhibition. We hypothesized that this relationship would be strongest among individuals who sleep less. Undergraduate men (n=34) and women (n=109) reported their height and weight and completed the Three Factor Eating Questionnaire, Pittsburgh Sleep Quality Index, Eating Disorder Examination-Questionnaire, and Morningness-Eveningness Questionnaire. Multiple linear regression tested the relationship between disinhibition, eveningness, and past-month sleep duration. The overall model was significant (F(5,137) = 12.65, p<.001) and explained 29.1% of variance in disinhibition. After adjusting for BMI and weight/shape concerns, there was a significant eveningness by sleep duration interaction effect. As hypothesized, individuals high on eveningness who reported shorter sleep experienced the highest levels of disinhibition. Among longer sleepers, there was no relationship between eveningness and disinhibition. These findings suggest that evening-oriented people are more likely to experience disinhibition when sleep is restricted. As such, experimental research should test whether increasing sleep duration reduces disinhibition in evening-oriented people, identifying it as a potential treatment target.

F093: Exercise Addiction: Exploring the Contribution of Exercise Dependence to Eating Disorder Symptoms

Leigh Brossof, BA, Student, University of Louisville, Louisville, Kentucky
Cheri Levinson, PhD, University of Louisville, Louisville, Kentucky
Laura Fewell, BA, University of Louisville, Louisville, Kentucky

Exercise dependence is a set of cognitive and behavioral symptoms that constitute a reliance on exercise, possibly in response to negative emotions, and is related to eating disorder (ED) symptoms. There are seven components of exercise dependence: tolerance (increased exercise needed for same effects), withdrawal (withdrawal symptoms present with reduced exercise), continuance (continued exercise despite psychological or physical problems), lack of control (inability to exercise less), reduction in other activities (activities given up for exercise), time (excessive time exercising), and intention effects (exercise for longer than intended). It is not known which components of exercise dependence contribute to ED symptoms. The current study (N = 147 individuals diagnosed with an ED) investigated 1) which components of exercise dependence relate to ED symptoms, and 2) if exercise dependence relates to ED symptoms when accounting for negative affect. Participants completed self-report measures of ED symptoms, exercise dependence, and negative affect. We first tested a model including all components of exercise dependence predicting ED symptoms: continuance, withdrawal, tolerance, and time predicted (ps ≤ .038) ED symptoms, whereas lack of control, reduction in other activities, and intention effects did not (ps ≥ .104). We then tested continuance, withdrawal, tolerance, and time in a model predicting ED symptoms, controlling for negative affect. We found that only tolerance (b' = .31, p = .003) positively predicted ED symptoms above and beyond negative affect (b' = .61, p < .001). In the presentation, we will test if these findings hold across one month. Tolerance was the component of exercise dependence that predicted ED symptoms, even when controlling for negative affect. If future research supports these findings, treatment centers may consider gradually reducing exercise, rather than abruptly halting exercise, which may prevent sudden increases in ED symptoms.

F094: Variability in Approach to Inpatient Medical Stabilization of Patients with Avoidant/Restrictive Food Intake Disorder

Sara Forman, MD, Boston Children’s Hospital, Boston, Massachusetts
Carly Guss, MD, Boston Children’s Hospital, Boston, Massachusetts
tracers with ED cohorts, display significant divergence. It is well recognized that clinicians in general, based approaches, and clinicians’ manual guiding FBT. An important next step is to test the efficacy due to the limited evidence-base for treatment of this illness. An anonymous survey was conducted, identifying 17 studies meeting inclusion criteria. A fidelity checklist was constructed containing fundamental tenets guiding FBT and studies examined against this and grouped into 50%, 75% and 100% fidelity. Papers used various outcome measures including weight restoration, return of menses, and psychological symptom improvement. FBT reported success in all 17 studies examined. Although 16 studies referenced the treatment manual, no study provided sufficient information to conclude 100% fidelity, the majority (15) having scores below <50%, with no link between outcomes and fidelity. The existing literature does not provide enough data on adherence to FBT in AN treatment to allow readers to determine whether FBT was delivered as intended, or what elements of FBT might be crucial to successful outcomes. Identifying essential FBT elements that community delivery maintain these features. Evaluation of clinicians’ adherence to the model is also essential to ensure that young people are being offered best practice. Despite frequent use of FBT, few studies reported model adherence. Routine fidelity checklist use in clinical practice and publications would improve confidence in treatment delivery and study results and help in ascertaining essential model ingredients.

**F096: Brief CBT for Non-Underweight Eating Disorders: Findings From Two Case Series**

Glenn Waller, BA, MPhil, DPhil, FAED, University of Sheffield, Sheffield, Yorkshire
Hannah Turner, BSc, PhD, DClinPsy, Southern Counties Eating Disorders Service, Southampton, Hampshire
Madeleine Tatham, BSc, DClinPsy, Norfolk Eating Disorders Service, Norwich, Norfolk
Victoria Mountford, BSc, DClinPsy, South London and Maudsley Eating Disorders Service, London, UK

Brief, 10-session cognitive-behavioural therapy (CBT) can be as effective as longer versions in treating depression and anxiety, even when delivered by clinicians with lower levels of qualifications. Recent evidence from a case series has demonstrated similar outcomes in non-underweight eating disorders, with positive results from a 10-session intensive CBT, delivered by graduate clinicians. However, that finding needs to be supported by follow-up data, and replication. The aim of this paper is to address these two gaps. In the first of two case series, follow-up data are presented from a study that began with over 100 eating-disordered patients. The follow-up data indicate that the original remission levels are well maintained into the longer term (three months), using both complete and intention to treat analyses. The second study reports a replication of the original case series, showing that outcomes by the end of treatment were very similar to those of the first case series. These findings require comparison...
of this intensive version of CBT with other therapies, including full length CBT for eating disorders, and to be replicated in other settings. However, they indicate that an intensive CBT over 10 sessions is a viable option for effective and less costly treatment of non-underweight eating disorders.

**F097: Body Checking in Non-Clinical Women: A Real Life Experimental Study of Negative Impact on Eating Pathology**

**Glenn Waller,** BA, MPhil, DPhil, FAED, University of Sheffield, Sheffield, Yorkshire  
**Natalie Bailey,** BSc, University of Sheffield, Sheffield, Yorkshire

Body checking is a safety behaviour that is correlated with negative eating attitudes in clinical and non-clinical samples. However, there is little evidence of a causal link between the two. One lab-based experimental study has supported the proposed link, but there is a need for more ecologically valid experimental studies to demonstrate the effects of body checking. This study aimed to determine whether body checking results in negative eating attitudes in a real life setting. Fifty non-clinical women completed initial measures of body checking and eating pathology, then completed a body checking task on one day (checking their wrist every 15 minutes for 8 hours) and refrained from body checking on the other day (order counterbalanced). Measures of eating attitudes and body dissatisfaction were completed each day, two hours after the manipulation. Body dissatisfaction did not increase significantly after body checking. In contrast, a specific central eating disorder cognition—fear of uncontrollable weight gain in response to eating—significantly increased after body checking. That increase was greater in individuals with higher trait disordered eating attitudes. Though they need to be replicated and extended in a clinical sample, these findings suggest that body checking has a specific impact on fear of uncontrollable weight gain—a key element in understanding the behaviours that underpin eating disorders. Therefore, it can be suggested that interventions that address body checking should be a routine part of treatment where that behaviour is present, to reduce the level of such cognitions.

**F098: The Prevalence of ADHD and Binge Eating among Patients at a Bariatric Surgery Clinic**

**Jennifer Bleck,** MPH, PhD, University of South Florida, Tampa, Florida  
**Rita DeBate,** MPH, PhD, of South Florida, Tampa, Florida  
**Marilyn Stern,** PhD, University of South Florida, Tampa, Florida

ADHD is associated with both binge eating and obesity. Moreover, ADHD may impact both weight loss success and maintenance among patients seeking obesity treatment. Despite the potential impact on the patient’s success, surgical obesity treatment centers do not routinely evaluate for ADHD as part of standard patient intake assessments, limiting the current literature on the effects of the ADHD/obesity comorbidity. This study aimed to explore the prevalence of ADHD and binge eating among bariatric surgery patients. Data was collected through both medical chart reviews and survey collection at a bariatric surgery clinic. ADHD was evaluated using the Wender Utah Rating Scale for self-reported childhood ADHD symptoms and the self-report Conners Adult ADHD Rating Scale for current symptoms. Binge eating was assessed via self-report during an initial psychology assessment. Data was obtained from 50 patients (39 females, 11 males). Age ranged from 23 to 65 (mean=46.52), and body mass index ranged from 33.68 to 76.46 (mean=47.90). Elevated prevalence of clinically concerning ADHD symptomology was noted. 11.5% reported a history of childhood symptoms, and 46.2% reported current ADHD symptoms. Moreover, 15.4% of patients reported a history of binge eating behavior, one patient reported a diagnosis of Bulimia and another reported purging behavior. Findings suggest an increased prevalence of ADHD and binge eating among obese patients seeking bariatric surgery and provide evidence for the need of standard screening policies. Continued investigation is needed to determine the prevalence of diagnosable cases vs. subclinical behaviors as well as the impact of these co-occurrences on treatment success.

**F099: An Exploration of Binge Eating Disorder Patient Rationale for Seeking Eating Disorder Treatment: Is the Rationale Itself Eating Disordered?**

**Caitlin Martin-Wagar,** BA, MA, The University of Akron, Akron, Ohio  
**Kelly Bhatnagar,** PhD, The Emily Program, Beachwood, Ohio

While Binge Eating Disorder (BED) is the most commonly occurring eating disorder, affecting approximately 2.6% of the general population in the United States, little is known about why individuals with BED seek treatment. An understanding of what factors influence motivation for treatment in treatment seeking BED clients is needed to better prepare clients for change and to support them in achieving recovery. Additionally, addressing any motivation rooted in eating disorder cognitions (such as desire to lose weight or ‘look better’) is important to prevent relapse. Understanding clients’ values can enhance motivation within treatment and the treatment team can use the clients’ own goals and value system to increase and sustain motivation for change. Patients upon admission to a BED-IOP (N=24) completed open-ended questionnaires regarding their motivation for seeking treatment. Through thematic analysis, several main themes emerged, such as wanting change from persistent negative mood, thought patterns, and unhealthy behaviors; feeling that weight loss attempts have not addressed deeper issues; having tried multiple weight loss attempts with no long-term success; and wanting to look better. Taken together, many of the explanations patients provided regarding their treatment seeking motivations were mental and physical health-based. However, the appearance-related theme emerged for the majority of patients, even if they also indicated health-related motivation for treatment.
Research findings can help treatment providers investigate and target eating disordered motivations for seeking treatment early in the treatment process. Additionally, loved ones, mental health practitioners, and medical providers can capitalize on these health-related motivations to encourage and engage individuals with BED into treatment.

**F100: Drives for Muscularity and Thinness: Associations with Age and Gender**

**Erica Ahlich**, BA, University of South Florida, Tampa, Florida

**Brittany Lang**, MA, University of South Florida, Tampa, Florida

**Diana Rancourt**, PhD, University of South Florida, Tampa, Florida

Notions about the ideal body, and perceptions about how one’s own body differs from this ideal, may differ between men and women, as well as between younger and older adults. Research examining body dissatisfaction across the lifespan has primarily focused on females and a desire for thinness; however, males are increasingly reporting body dissatisfaction, and consistent with an increased cultural emphasis on leanness, both males and females may be motivated to achieve both thinness and muscularity. Men’s and women’s desire to be thin or muscular and whether these desires vary across the lifespan remains unexplored. The current study examined these associations in a sample of 1068 adults recruited from Amazon’s Mechanical Turk. Participants were 59.7% female, ranging in age from 18 to 66 years old, with 53.5% of participants aged 35 or younger. Controlling for participant BMI (M = 27.18, SD = 6.69), multiple linear regression analysis indicated that age and gender were both significant predictors of drive for thinness (DT). On average, females reported a higher DT than men, and DT showed a decline across age for both genders. Although no age by gender interaction emerged for DT, the association between age and drive for muscularity (DM) did differ by gender. Among men, age was a significant predictor of drive for muscularity, such that levels were higher in younger adults and decreased with age. For women, DM was low regardless of age. Overall, the findings suggest that concerns about muscularity and thinness appear to be less salient in middle to older adulthood than in younger adulthood; however, gender is an important consideration. Men reported concern with both thinness and muscularity in young adulthood, both of which decreased over time, whereas women were primarily concerned with thinness.

**F101: The Long Road to Recovery: Treatment and Costs of Adolescent Anorexia Nervosa in Specialized Care**

**Yasmina Silén**, MD, University of Helsinki, Helsinki, Uusimaa

The aim of the current study was to evaluate the treatment and costs in a specialized eating disorder unit for adolescents. All patients with ICD-10 anorexia nervosa (n = 34) or atypical anorexia nervosa (n = 13) whose treatment at the Eating Disorder Unit for Adolescent at Helsinki University Central Hospital was completed within one year (12.3.2012-30.4.2013) were included in the study. A systematic retrospective review of adolescents’ medical records and hospital administrative data was conducted, and treatment costs, the number of outpatient visits and length of in-patient treatment were obtained. Treatment outcome was defined using Morgan-Russell criteria. We observed vast individual differences in the need and the cost of treatment. Overall, 60% of patients recovered. More than quarter of patients needed treatment at multiple wards. The majority of the costs (76%) arose from the treatment of a minority (29%) of patients. Psychiatric comorbidity was associated with longer and more expensive treatments. Adolescents with long and costly treatments did not significantly differ in their outcome from other patients. To conclude, treatment for severe anorexia nervosa is expensive, but with intensive treatment many recover. Future studies should focus how improve the care of adolescents with psychiatric comorbidity.

**F102: Confirmatory Factor Analysis of an Instrument Assessing the Obesogenic Environment Among Families in Spain**

**Melissa Parks**, MSc, PhD Autonomous University of Madrid, Madrid, Spain

**Miriam Blanco**, MSc, PhD, Autonomous University of Madrid, Madrid, Spain

**Santos Salano**, MSc, Autonomous University of Madrid, Madrid, Spain

**Tatiana Larcz**, MSc, Autonomous University of Madrid, Madrid, Spain

**Francisco Javier Roman**, PhD, University of Illinois, Urbana-Champaign, Urbana-Champaign

**Melissa Parks**, PhD, Autonomous University of Madrid, Madrid, Spain

**Montserrat Graell**, PhD, Hospital Universato Niño Jesus, Madrid, Spain

**Ana Rosa Sepulveda**, PhD, Autonomous University of Madrid, Madrid, Spain

At present, childhood obesity is an issue of great relevance. In Spain in particular, it is estimated that 26.3% of children present some degree of overweight. Physical activity and diet are crucial variables influencing nutritional status and energy balance and largely depend on the environment in which the child is raised. The aim of this study was to employ a confirmatory factor analysis (CFA) to validate the Spanish version of the Home Environment Survey (HES-S) among a sample of 145 parents of preadolescents and compare it to the conceptual model of the home obesogenic environment, composed of eating and physical activity components, proposed by the authors of the original HES study (Gattshall et al., 2008). The original HES was composed of four subscales concerning physical activity and six subscales assessing eating habits. However, no CFA was carried out in the validation of the original.
F103: Changes in the Clinical Characteristics of Eating Disorders: A Cross-Sectional Comparative Study across Turkish Eating Disorder Patients from Two Distinct Time Frames

Basak Yucel, MD, Prof, Istanbul University, Istanbul Faculty of Medicine, Psychiatry Department, Istanbul, Istanbul, Turkey
Hanife Ozlem Sertel Berk, Associate Professor, Istanbul University, Faculty of Letters, Department of Psychology, Istanbul, Istanbul, Turkey
Ezgi Deveci, PhD Candidate, Işık University, Faculty of Arts and Sciences, Department of Psychology, Istanbul, Istanbul, Turkey
Basak Ince, Student, Arel University, Faculty of Arts and Sciences, Department of Psychology, Istanbul, Istanbul, Turkey

Literature has suggested the influence of different time trends on the clinical characteristics of eating disorders (EDs). Although demographic and clinical characteristics of Turkish ED patients have recently been reported, there is a lack of knowledge about the effect of time trends on these patients. Thus, this research conducted as a consecutive study following to this report aimed to examine how the prevalence, age onset, body mass index (BMI), duration of illness, and comorbid psychiatric problems differed between two samples of Turkish participants diagnosed with eating disorders from two different time frames. A further aim was to investigate how these factors changed among subtypes of EDs based on DSM – IV, namely anorexia nervosa (AN), bulimia nervosa (BN), and eating disorders otherwise diagnosed (EDNOS). Patients with EDs were recruited from a university hospital and a private practice clinic in Istanbul, Turkey. 110 patients aged between 12-40 from the period of 2002 to 2009 (Time1) and 106 patients aged between 12-42 from the period of 2010 to 2015 (Time2) participated to this study. A diagnostic interview was conducted with the patients, and patients were asked to fill out questionnaires measuring EDs pathology, body satisfaction, self-esteem, depression, anxiety and alexithymia. Results of main analysis revealed a main effect of time on mean BMI and depression scores indicating increase from Time 1 to Time 2, but not on mean duration of illness and frequency of ED diagnosis. With respect to analysis conducted within each ED subtype, although BMI scores were slightly higher in Time 2 for all ED types, these differences were not significant. Under the light of these findings, it will be worth discussing the effect of changing patterns of socio-cultural factors and media on increased depression and BMI levels of EDs patients.

Keywords: eating disorders, time effect, depression, body mass index, age onset.

F104: An Investigation of Demographic and Clinical Characteristics of Turkish Eating Disorders Patients

Basak Yucel, MD, Professor, Istanbul University, Istanbul Faculty of Medicine, Psychiatry Department, Istanbul, Istanbul, Turkey
Basak Ince, Student, Arel University, Department of Psychology, Istanbul, Istanbul Turkey
Ezgi Deveci, PhD Candidate, Işık University, Faculty of Arts and Sciences, Department of Psychology, Istanbul, Istanbul, Turkey

A growing literature has demonstrated that Eating Disorders (EDs) are not Western specific illnesses, and the prevalence rates of EDs in non-Western countries are increasing. Besides increased awareness, there is still a limited knowledge about the demographic and clinical representations of EDs in non-Western societies. In this regard, the current study aimed to investigate demographic and clinical characteristics of EDs based on DSM - IV criteria, anorexia nervosa (AN), bulimia nervosa (BN), and eating disorders not otherwise diagnosed (EDNOS), in Turkish society. A sample of 106 patients (102 female, 4 male) with the mean age of 21.85 (SD = 5.95) participated to this study. Patients were recruited from a university hospital and a private practice clinic in Istanbul, Turkey. Following a diagnostic interview, patients completed a questionnaire package consisting measures of eating pathology, alexithymia, body dissatisfaction, depression, anxiety and self-esteem. Analysis showed that age onset of AN patients was significantly lower than other patients while there was no significant difference between the age onset of BN and EDNOS patients. Regarding body mass index (BMI) of the patients, as expected, mean BMI of the AN patients were found to be significantly lower than other patients. Furthermore, there was only a significant difference between AN, BN and EDNOS patients for their BDI scores where EDNOS patients had the highest depression levels. In terms of demographic characteristics, it was found that there was no significant difference between subtypes of EDs about referral type, education and working status since most of the patients were high school and university students. Based on the current findings, it will be worth discussing the possible factors (e.g., lack of male patients, definition of beauty and accessibility to health care) that trigger differences between Western and non-Western countries regarding demographic and clinical features of EDs patients.

Keywords: eating disorders, depression, age onset, body mass index, anorexia, bulimia
F105: Boys and Eating Disorders: Patient’s Profile from an Eating Disorders Center of Sao Paulo, Brazil

Alicia Cobelo, MS, FAED, Institute of Psychiatry, University of Sao Paulo School of Medicine, Sao Paulo, Brazil
Felipe Alckmin-Carvalho, MS, Institute of Psychiatry, University of Sao Paulo School of Medicine, Sao Paulo, Brazil
Juliana Vega, MS, FAED, Institute of Psychiatry, University of Sao Paulo School of Medicine, Sao Paulo, Brazil
Alessandra Fabbri, MS, Institute of Psychiatry, University of Sao Paulo School of Medicine, Sao Paulo, Brazil
Vanessa Pinzon, MS, FAED, Institute of Psychiatry, University of Sao Paulo School of Medicine, Sao Paulo, Brazil

The prevalence of eating disorders (ED) in males has increased in recent years. Investigate this population is critical to improve the specialized treatment. The aim of this research is describe clinical and socioeconomic variables of outpatients younger than 18 years and their caregivers assisted at PROTAD, an ED center in Brazil. We conducted a cross-sectional study based on data analysis of medical records related at the start of the treatment. A descriptive analysis was performed, including mean, standard deviation and minimum and maximum values (SD/min-max) expressed as numerical variables and percentages for categorical variables. From 2001 to 2015, 188 patients were admitted at PROTAD, and 20 (10.6%) were boys. The mean age at onset of ED was 14 years old (2.0, 8.00-16.42), and the age at the beginning of treatment was 15.1 years (1.38: 12.73-17.16). Mean Body Mass Index (BMI) was 17.17 kg/m² (3.93: 12.86-26.86), and half of the patients had a BMI <-2 z-score. Most patients (68.4%) had received a diagnosis of anorexia nervosa (restricting subtype); 31.6% had prior treatment for ED, and 47.4% had obesity history, 30% with psychiatric comorbidities, especially mood disorders and anxiety. As for the caregivers, 90% were mothers, 89.5% belonged to the social classes A and B (upper middle class and middle class) according to the criteria of the Brazilian Association of Research Companies (ABEP), and 50% had completed high school or had entered college. The high frequency of patients with obesity history, previous treatments and presence of psychiatric comorbidities seen at the boys assisted at PROTAD is in agreement with the literature. Further studies to compare boys and girls characteristics, as well as boys with ED and nonclinical controls, are needed to support more effective interventions and improve treatment adherence.

F106: Underlying Trait or Transient State? An Exploration of Autism Spectrum Disorder in Adolescent Females with Anorexia Nervosa

Heather Westwood, BSc, Student, King's College London, London, UK
Mima Simic, MSc; MD: MRCPsyCh, South London and Maudsley NHS Foundation Trust, London, UK

The aim of this study was to use standardised, clinical assessment tools to explore the presence of ASD symptoms in a sample of adolescent females with AN and to determine whether any such symptoms were present during the developmental period, a requirement for ASD diagnosis. Using a cross-sectional design, 40 females aged between 12 and 18 were recruited from inpatient and day patient eating disorder services. All participants had a diagnosis of AN and were assessed for symptoms of ASD using the Autism Diagnostic Observation Schedule, 2nd edition (ADOS-2). If participants scored above clinical cut-off on the ADOS-2, their parents were also asked to complete the Developmental, dimensional and diagnostic interview, short version (3Di-sv). Of the 40 participants assessed, half scored above cut-off on the ADOS-2. However, when developmental history was obtained, only four scored above cut-off on the 3Di-sv, suggesting a developmental history of ASD, despite not being previously diagnosed. The results of this study suggest that 10% of adolescents diagnosed with AN may have diagnosable ASD, while a further 40% may show symptoms of ASD, representing an epiphrenomenon which arises from the ill-state of AN.

F107: Assessing Alexithymia in Females with Anorexia Nervosa Using a New Observation-Based Coding Schedule: A Case-Control Study

Heather Westwood, BSc, Student, King's College London, London, UK
Fiona McEwen, PhD, Queen Mary University of London, London, UK
Kate Tchanturia, DClinPsy, PhD, FAED, King's College London, London, UK

The aim of this study was to develop a new observation-based measure of alexithymia, namely the Alexithymia Coding Schedule (ACS) with a sample of females with Anorexia Nervosa (AN) and a comparison group of healthy female university students and staff. The ACS was developed to provide a brief, observation based, objective measure of alexithymia in clinical populations, for use as an addition to self-report measures, which may be influenced by the insight of the patient. The ACS is a clinician-led interview consisting of ten questions focusing on recognising and describing various emotions. The questions were taken directly from Module 4 of the Autism Diagnostic Observation Schedule, 2nd Edition (ADOS-2) but specific scoring for alexithymia has been developed so that it may also be used as a stand-alone assessment. Sixty adult females with AN and 50 healthy females completed the ACS and the Toronto Alexithymia Scale (TAS-20). The AN group scored significantly higher on the ACS, in both recognising and describing emotions, suggesting higher levels of alexithymia. This scores on the ACS were corroborated by the TAS-20, on which the AN group also scored significantly higher than controls, suggesting that the ACS may be a viable addition to self-report measures of alexithymia in AN.
F108: Social Comparison and Objectification Theories: Interracial Comparisons of an Integrated Model

Brittany Lang, MA, University of South Florida, Tampa, Florida
Diana Rancourt, PhD, University of South Florida, Tampa, Florida
Lauren Schaefer, PhD, University of South Florida, Tampa, Florida
Jennifer Bosson, PhD, University of South Florida, Tampa, Florida
Kevin Thompson, PhD, University of South Florida, Tampa, Florida

Social Comparison and Objectification Theories of disordered eating have received strong empirical support in primarily White samples, with some evidence suggesting that these models may operate somewhat differently in individuals of diverse racial/ethnic backgrounds. Recent work supports an integration of Social Comparison and Objectification frameworks; however, research has not yet examined potential ethnic differences in this integrated model. This study explored the extent to which an integrated model of Objectification and Social Comparison Theories similarly predicted body image and eating disturbance across racially/ethnically diverse young adult women. African American (N=66), Asian (N=27), Hispanic (N=73), and White (N=343) women (age M=20.9, SD=4.6; BMI M=23.8, SD=5.2) completed validated measures of self-surveillance (Policing of Appearance Scale), appearance comparisons (Physical Appearance Comparison Scale—Revised), body shame (Objectified Body Consciousness Scale—Body Shame subscale), body image disturbance (Multidimensional Body-Self Relations Questionnaire—Appearance Evaluation subscale), and eating disturbance (Eating Disorder Examination Questionnaire global scores). A multiple group structure equation model was estimated using full information maximum likelihood in MPlus to test whether the model differed across racial/ethnic groups. The final model demonstrated a good fit to the data, (X2(80) = 99.47, p = .069, CFI = .98, RMSEA = .04), and supported an integrated model of Objectification and Social Comparison Theories. Contrary to previous work demonstrating racial/ethnic differences in appearance comparison and objectification processes, the integrated model fit similarly across all four racial/ethnic groups. Only the strength of the association between appearance comparisons and body shame varied across groups. This association was strongest among Asian women and weakest among Black women. Findings suggest that when combined, self-surveillance and social comparison processes may similarly predict eating disorder risk among diverse women.

F109: Using the Electronic Medical Record (EMR) to Identify Quality Improvement Targets for Patients with Eating Disorders

Kim Lazare, MD, University of Toronto, Toronto, Ontario

The purpose of this study is to review Electronic Medical Record (EMR) data of Eating Disorder (ED) patients in a primary care setting to assess whether they are receiving appropriate medical management, and to identify targets for Quality Improvement (QI) of care. The study took place at a Family Health Organization (FHO) located within a suburban teaching hospital in Toronto, Ontario, comprised of four female family physicians caring for 2,916 patients. An EMR search for patients with an active ED diagnosis (Anorexia Nervosa (AN), Bulimia Nervosa (BN), Binge Eating Disorder (BED), or Eating Disorder Not Otherwise Specified (ED-NOS)) identified twenty-five patients. Five patients were excluded due to the patient only being seen once, having no data pertaining to their ED on the chart, or an error in documentation i.e. past history of ED documented inappropriately as active ED on the chart. Then, a chart review of the twenty patients was conducted, looking to see whether the following metrics were recorded on the chart in the past twelve months: weight, Body Mass Index (BMI), orthostatic vital signs, electrocardiogram (ECG), Bone Mineral Density (BMD), laboratory investigations including extended electrolytes, comorbid diagnoses, and medications. Fifteen (75%) of patients had a weight and BMI documented on the chart. Thirteen (65%) had orthostatic vital signs documented. Thirteen (65%) had labs including electrolytes documented on the chart. Of the patients with BN, all six patients (100%) had labs done. Five (71%) of AN patients had labs done. Fifteen (75%) patients had an ECG documented on the chart. Of the AN cohort, five (86%) had an ECG documented on the chart. None of the patients were on a medication that is absolutely or relatively contraindicated in ED. Only three (15%) of patients had a BMD documented on their chart. Charts of those patients without the aforementioned metrics completed were flagged for their Family Physician (FP) to organize any incomplete investigations to ensure all patients were receiving the same standard of care pertaining to medical management of their ED. This study details a simple and effective way to use the EMR to identify ED patients and ensure that they are receiving appropriate and high quality medical management in a primary care setting.

F110: How Do You Recruit College Students to Complete an Online Screen for Eating Disorder Intervention and Prevention Programs?

Neha Goel, BA, Stanford University, School of Medicine & Palo Alto University, Stanford & Palo Alto, California
Rachael Flatt, BS, Stanford University, School of Medicine & Palo Alto University, Stanford & Palo Alto, California
Shiri Sadeh-Sharvit, PhD, Stanford University, School of Medicine, Stanford, California
Ellen Fitzsimmons-Craft, PhD, Washington University in St. Louis, School of Medicine, St. Louis, Missouri
Katherine Balantein, PhD, RD, Washington University in St. Louis, School of Medicine, St. Louis, Missouri
Grace Monterubio, BA, Washington University in St. Louis, School of Medicine, St. Louis, Missouri
Mickey Trockel, MD, PhD, Stanford University, School of Medicine, Stanford, California
Denise Wilfley, PhD, Washington University in St. Louis, School of Medicine, St. Louis, Missouri
Although eating disorders (EDs) prevalence among college students is high, less than 20% receive treatment. To improve health care utilization and reduce health complications of EDs, more effective practices may be needed to reach this population. This study explored the recruitment strategies that yielded greatest participation in an online screen for the Healthy Body Image (HBI) program. HBI offers a suite of mobile interventions for individuals across the ED risk and diagnostic spectrum. Participants were 4566 college students from 27 campuses across the United States and were on average 22.3 years old, 86.8% female, and 68.0% Caucasian, 17.5% Asian and 8.4% African American. This program was implemented via a variety of recruitment methods including email outreach, partnerships with local student health centers (LSHC), flyer distribution and more. The distribution of these categories for each group is as follows: potential anorexia nervosa (n=154), 43.7% selected email outreach that included a link to the screen. 16.7% received a referral from LSHC, 10.9% saw a flyer, females who met the DSM-V criteria for sub-clinical and clinical EDs (n=807), 41.3% selected email. Low-risk group (n=154), 12.4% saw a flyer; 10% received a referral, and 6.8% were referred by LSHC, and 9.7% saw a flyer. Findings suggest that email outreach was the most effective method of recruitment for college students. However, those who are at a greater risk for developing an ED or already exhibit increased symptoms tend to be recruited in higher proportions through LSHC relative to low-risk groups. Given its cost, universal screening methods should be implemented through systematic email distribution. Targeted prevention and treatment efforts should also be supplemented by partnerships with LSHC.

**F11: Pro-Ana Websites and its Impact on the Quality of Life of Anorexic Patients**

**Fernanda Bastos.** MA, PhD, University of Lisbon, Lisbon, Lisbon  
**Daniel Sampaio.** PhD, University of Lisbon, Lisbon, Lisbon  
**Ana Vaz.** PhD, University of Minho, Braga, Braga

Pro-anorexia (pro-ana) websites have been growing in number and popularity. These websites promote anorexia nervosa as a lifestyle rather than a disease. Consequently, it tends to negatively affect the quality of life of visitors. Aiming to better understand the associations between pro-anorexia website usage and the quality of life of anorexic patients, the goal of this study was to identify a path of influence between pro-ana website usage and the quality of life of visitors. Hence, this study proposed the following model (Pro-Ana Website Usage → Dietary Restraint & Body Dissatisfaction → Self-Esteem → Quality of Life). Another goal of this study was to compare patients who visit pro-ana websites to patients who do not visit it, regarding different psychological variables as quality of life, eating disordered behaviors, body dissatisfaction, psychosocial impairment and self-esteem. Fifty Portuguese female anorexic patients participated in this study. In order to collect data, it was used a demographic and clinical questionnaire and 5 other scales (WHOQOL-BREF, RSES, BSQ, CIA and EDE-Q). Our results showed that the use of pro-ana websites is related to higher levels of body dissatisfaction, psychosocial impairment and eating disordered behaviors, and to lower levels of quality of life. Furthermore, the hypothesized model was supported by our findings, which shows that the use of pro-ana websites is positively associated with dietary restraint, which is positively associated with body dissatisfaction, which in turn is negatively associated with self-esteem, which is positively associated with quality of life. Perhaps, the most significant contribution of this study is the proposition of a new significant model that shows a path of influence that helps us to understand the negative effect related to the use of these websites.

**F112: On the Ground: Translating Eating Disorder Training into Practice: A 4 Month National Evaluation of Clinician Experience in Enacting FBT and CBT in the Irish National Clinical Programme for Eating Disorders: Reflection, Barriers, and Opportunities**

**Sara McDevitt.** MB, MD, MEd, MRCPsych, Health Service Executive, Ireland, University College Cork, Cork, County, Ireland  
**Aileen Whyte.** BA, MA, PhD, Health Service Executive, Cork, Cork  
**Rhona Jennings.** BSc, MBA, Health Service Executive, Dublin, Ireland

The purpose of this study was to evaluate the effectiveness of two national training initiatives for FBT and CBT- E which were rolled out to clinicians working in adult and child community mental health services across Ireland in 2014 /2015. The subject sample included a clinician from each of the community mental health teams across the country. In total, 72 clinicians participated in the FBT training, and 62 in the CBT- E, each from a single team. Each clinician completed a pre -training baseline questionnaire and 5 other scales (WHOQOL-BREF, RSES, BSQ, CIA and EDE-Q). Our results showed that the use of pro-ana websites is positively associated with dietary restraint, which is positively associated with body dissatisfaction, which in turn is negatively associated with self-esteem, which is positively associated with quality of life. Perhaps, the most significant contribution of this study is the proposition of a new significant model that shows a path of influence that helps us to understand the negative effect related to the use of these websites.
though confidence increased, fidelity to the models were variable with only 19 (41.3%) always completing the family meal. For CBT-E, 20 (62.5%) were achieving real time recording in all cases, with 25 (78%) introducing regular eating in all cases. Participants indicated that barriers to translation into clinical practice included inadequate caseload referrals (1/3), other clinical demands (27.9%), comorbidity (36.9%) and lack of dedicated time. Significant protective factors included being named as having an ED role on their community team, being part of an ED hub and supervision. The findings support the view that single clinicians in generic mental health services will encounter significantly more barriers to deliver on their ED training compared with those in specialist ED services.

**F113: Interaction Between Orexin-A and Sleep Quality in Females in Extreme Weight Conditions**

Sarah Sauchelli Toran, BSc, MSc, Department of Psychiatry, University Hospital of Bellvitge-Idibell, Ciberobn, Barcelona, Spain

Susana Jiménez-Murcia, PhD, Department of Psychiatry, University Hospital of Bellvitge-Idibell, Ciberobn, Barcelona, Spain

Francisco J. Tínahones, PhD. Hospital Clínico Universitario Virgen de Victoria, Málaga, Provincia de Málaga

Felipe F. Casanueva, PhD, Santiago de Compostela University, Complex Hospitalario Universitario, Santiago de Compostela, La Corunya

Cristina Botella, PhD, University Jaume I, Castellón, Provincia de Castellón

Rafael de la Torre, PhD, IMIM-Hospital del Mar Research Institute, Parc de Salut Mar, Barcelona, Spain

Jose M. Fernández-Real, PhD, d’Investigació, Biomèdica de Girona (IdiBGI), Hospital Dr Josep Trueta, Gerona, Provincia de Gerona

Gema Fröhbeck, PhD, University of Navarre-IdiSNA, Pamplona, Provincia de Navarra

Roser Granero, PhD, Autonomous University of Barcelona, Barcelona, Provincia de Barcelona

Stephan Zipfel, MD, PhD, University of Tübingen, Tübingen, Baden-Württemberg

Katrin E Giel, PhD, University of Tübingen, Tübingen, Baden-Württemberg

José M. Menchón, MD, University Hospital of Bellvitge-Idibell, Barcelona, Spain

Fernando Fernández-Aranda, PhD, University Hospital of Bellvitge-Idibell, Ciberobn, Barcelona, Spain

Objectives: Due to the increasing prevalence of obesity, understanding its underlying mechanisms is a pressing issue. The current study aimed to explore how an interaction between orexin-A and sleep quality might be related to weight status (from healthy weight to morbid obesity). Method: Plasma orexin-A concentrations and sleep were evaluated in 26 obese, 40 morbid obese and 32 lean control participants in a case-control design. The sleep monitor Actiwatch 7 and the Pittsburgh Sleep Quality Index were used to evaluate sleep. In addition, depression, anxiety and somatization symptoms were evaluated with the Symptom Checklist-90 Revised. Results: A higher weight status was associated with elevated plasma orexin-A concentrations (p = .050), as well as greater anxiety (p < .001), depression (p < .001) and somatization symptoms (p < .001). Both obese and morbid obese groups reported poorer sleep quality compared to the control group (both: p < .001) and a quadratic trend was found in objective sleep time, being of longer duration in the obese group (p = .031). Structural equation modeling showed plasma orexin-A to be related to poor total sleep quality, which in turn was associated with elevated body mass index. Conclusions: Our data therefore confirms a complex relationship between orexin-A, sleep and obesity. The significant interaction between altered plasma orexin-A concentrations and poor sleep quality contributes to fluctuations in body mass index. This should be taken under consideration when tackling the problem of obesity.

**F114: Mediators of the Relationship between Perceived Discrimination and Disordered Eating in Bariatric Surgery Patients**

Aliza Friedman, MA, PhD Student, Department of Psychology, Ryerson University, Toronto, Ontario

Susan Wnuk, PhD, Toronto Western Hospital, Bariatric Surgery Program, Toronto, Ontario

Sanjeev Sockalingam, MD, Toronto Western Hospital, Bariatric Surgery Program, Toronto, Ontario

Stephanie Cassin, PhD, Department of Psychology, Ryerson University, Toronto, Ontario

The association between perceived discrimination and disordered eating in overweight and obese populations has garnered a great deal of recent research attention; however, there remains a dearth of research examining the specific mechanisms underlying these associations. The purpose of this study was to examine psychological distress mechanisms (body shape concerns, general psychological distress) as potential mediators in the relations between perceived discrimination and disordered eating (binge eating and emotional eating) in pre-operative bariatric surgery patients. Adult bariatric surgery patients (N = 103, Mage = 42.32, MBMI = 49.31 kg/m2) completed a series of questionnaires assessing perceived discrimination, psychological distress, body shape concerns, binge eating, and emotional eating (eating in response to anger/frustration, anxiety, and depression) as part of an ongoing research study at the Toronto Western Hospital, Bariatric Surgery Program. Results revealed that bariatric surgery patients who reported perceiving discrimination on the basis of their weight/shape were at an elevated risk for both binge eating and emotional eating in response to anger/frustration and anxiety; however, the association between perceived discrimination and emotional eating in response to depression was nonsignificant. Using nonparametric bootstrapping analyses, body shape concerns emerged as a significant mediator in the relation between perceived discrimination and all three facets of emotional eating (anger/frustration, anxiety, and depression); however, a suppression effect emerged.
in the relation between perceived discrimination and binge eating. These results highlight body shape concerns as the most relevant explanatory mechanism in the relation between perceived discrimination and emotional eating, suggesting that improving body shape concerns may help to reduce emotional eating among pre-operative bariatric surgery patients.

**F115: Cholesterol, Homocysteine and Suicidal Ideations in Female Patients with Anorexia Nervosa**

Andrés Gomez del Barrio, DClinPsy, Hospital Universitario Marqués de Valdecilla, Santander, Cantabria

Elsa Rodríguez, Student, San Juan Bautista School of Medicine, Puerto Rico, Puerto Rico

Jana González, DClinPsy, Hospital Universitario Marqués de Valdecilla, Santander, Cantabria

Ines Madrazo, DClinPsy, Hospital Universitario Marqués de Valdecilla, Santander, Cantabria

Ruth Landera, DPsysch, Hospital Universitario Marqués de Valdecilla, Santander, Cantabria

Laura Carral, DPsysch, Hospital Universitario Marqués de Valdecilla, Santander, Cantabria

Pilar Benito, DClinPsy, Hospital Universitario Marqués de Valdecilla, Santander, Cantabria

Gabriel Calcedo, DClinPsy, Hospital Universitario Marqués de Valdecilla, Santander, Cantabria

Hypothesis: In a group of patients diagnosed with anorexia nervosa, there is a relationship between analytical parameters, especially those of cholesterol, suicidal ideations, and impulsive conduct. Forty-five patients from Hospital Universitario Marqués de Valdecilla’s psychiatric eating disorders program (UTCA) were selected in a consecutive manner for this study. Forty-eight control patients were chosen from the community on a voluntary basis. Plasma levels of cholesterol, ions, homocysteine, vitamins and other biochemical parameters were evaluated on admission prior to the initiation of treatment. The impulsivity score of EDI was used to measure impulsive traits of each subject. Suicidal ideation was measured as “item” using a dichotomized BECK scale. Autolytic intentions and auto-lesions were analyzed and coded as 0 for absent and 1 for present. Descriptive, comparative, and correlational analysis were performed. Fourteen patients presented suicidal ideation. Total cholesterol (high) and homocysteine (high) levels were significantly associated with suicidal ideation. The rest of analytical and psychological parameters were normal. Past studies suggest that there could be a relationship between low levels of cholesterol and suicide. Our study shows opposite results: high cholesterol correlated with increased suicidal ideations. In recent investigation (Frieling et al 2008, J Psychiatr Res 42:83–86), self-rated depressive symptoms were significantly associated with elevated homocysteine serum levels in patients with eating disorders. However, in our study, we found an association with suicidal ideations. The difference between our study and the previously published studies is that our study had a control group, whereas the other ones did not. Our study differs from others in that patient and control group blood work was obtained and analyzed in the same week, as the patients filled out questionnaires that measured suicidal ideation, depressive symptomatology, and impulsive conduct.

**F116: Body Dissatisfaction, Body Change and Self-Esteem In Adolescent**

Georgina Álvarez Rayón, PsyD, Facultad de Estudios Superiores Iztacala, UNAM, México, Mexico

Brenda Sarahi Cervantes Luna, PsyD, Centro Universitario UAEM Ecatpe, UAEM, México, Mexico

María del Consuelo Escoto Ponce de León, PsyD, Centro Universitario UAEM Ecatpe, UAEM, México, Mexico

Adolescents are especially susceptible to internalizing of the body ideals and the development of body dissatisfaction (BD). These conditions have an effect on the adolescents’ self-esteem, so that, they could adopting body change strategies (BCS). The purposes of this study were: 1) evaluate if women and men differ in the directionality of body dissatisfaction and body change behavior (pro-thinness vs. pro-muscularity); 2) explore whether there is a differential association between aspects related to thinness and muscularity in women and men; y 3) explore whether the association of these variables (BD and BCS) with self-esteem differs, or not, between males and females. Method. It is a study with a non-experimental cross-sectional research design. The sample consisted of 285 adolescents of both sexes, and their age ranged between 11 and 16 years. Results. Women showed a higher degree of pro-thinness BD than men, but we did not find differences in pro-muscularity body dissatisfaction between both sexes. Contrary to this, the drive to increase muscularity was higher in men. With regard to BCS, women scored higher on those aimed at thinness and men on those aimed at increased muscle mass. Both men and women, pro-thinness BD was related with higher pro-muscularity BD and BCS; nevertheless, we identified other association patterns differentiated by sex. Finally, in women and men, the self-esteem negatively correlated with the variables relating to thinness or muscularity; these correlation coefficients were greater in men. Conclusions. The results are discussed in light of the transformations of body ideals over time, emphasizing on the changes during the last decade. This work was partially funded by UNAM PAPIIT-IN306615.

**F117: Self-Compassion and Drive for Muscularity: An Examination of Gender and Self-Compassion as Predictors of Drive for Muscularity**

Rachel Kramer, BA, MA, University of North Dakota, Grand Forks, North Dakota

Nicole M. Della Longa, BS, MA, University of North Dakota, Grand Forks, North Dakota

Taylor Perry, Student, University of North Dakota, Grand Forks, North Dakota

F. Richard Ferraro, PhD, University of North Dakota, Grand Forks, North Dakota
Self-compassion (SC) is defined by three factors: self-kindness, mindfulness, and common humanity (the ability to perceive one’s flaws or distress as universally experienced). Prior research suggests that SC negatively relates to body dissatisfaction. For instance, SC has been noted to moderate the relationship between thin ideal internalization and weight concern and between BMI and disordered eating. This study aimed to further evaluate the protective merits of SC on drive for masculinity. It was hypothesized that higher levels of SC would predict lower levels of drive for masculinity. Exploratory analyses were also conducted to examine whether SC would predict drive for masculinity differently among men and women. Participants, who were undergraduate men (n = 49) and women (n = 216) from a Midwestern university, completed a battery of measures. Multiple regression analyses were used to evaluate the aims of the study, including the exploratory analyses. In order to evaluate whether SC predicts drive for masculinity differently among males and females, interaction effects were assessed. At Step 1, gender was entered, at Step 2, SC was entered, and at Step 3, the interaction between gender and SC was entered. SC was a significant predictor of drive for masculinity as hypothesized (p < .001). Additionally, all steps of the model were significant and explained 21.7% of the variance in drive for masculinity (p < .001). After controlling for gender and SC, there was a significant interaction among gender and SC (p < .01). Males and females who reported higher levels of SC endorsed similarly lower levels of drive for masculinity. However, males who reported lower levels of SC reported significantly higher levels of drive for masculinity than women who reported lower SC. This interaction suggests that SC predicts drive for masculinity differently among women and men. SC appears to be an important trait to continue to evaluate, as it may be a protective factor against drive for masculinity, especially among males.

**FT18: Drunkorexia Prevalence in a College Sample and Associations with Eating Disturbance**

**Emily Choquette**, BA; Student, University of South Florida, Tampa, Florida

**J. Kevin Thompson**, PhD, University of South Florida, Tampa, Florida

“Drunkorexia” is a term that is used to describe a range of behaviors designed to increase the intoxicating effects of alcohol consumption through food restriction or negate the caloric gain from alcohol consumption by restriction and/or purging. The current study looked at gender differences in prevalence and associations with eating disturbance, using Thompson and colleagues’ Compansatory Eating and Behaviors in Response to Alcohol Consumption Scale (CEBRACS). The sample was 852 participants (193 males, 658 females) from a large Southeastern university, mean (SD) age = 20.7 (4.23), mean (SD) BMI = 24.19(5.34). There were no gender differences on the CEBRACS total score. Among the four subscales of the CEBRACS, there was only one significant gender difference - women reported higher scores on the “restriction in relation to alcohol” subscale (M = 2.29, SD .98) than men (M = 2.17, SD .59), t (524.55) = 2.02, p = .04. For women the CEBRACS total score was correlated with drive for thinness (r = .35, p <.001) and eating disorder symptoms (r = .40, p <.001). Men’s CEBRACS score was not significantly correlated with drive for thinness; however, it was correlated with eating disorder symptoms (r = .33, p <.001). This is the first large scale prevalence study of drunkorexia. Evidence of significant associations with eating disturbance suggest the phenomenon may be a risk factor with clinical implications.

**FT19: Multivariate Analyses of DTI, fMRI, and Questionnaire Data Significantly Distinguish Anorexia Nervosa from Body Dysmorphic Order**

**Don Vaughn**, BA, BS, UCLA, Los Angeles, California

**Teena Moody**, PhD, UCLA, Los Angeles, California

**Gigi Cheng**, Student, UCLA, Los Angeles, California

**Aifeng Zhang**, PhD, University of Illinois at Chicago, Chicago, Illinois

**Alex Leow**, PhD, University of Illinois at Chicago, Chicago, Illinois

**Michael Strober**, PhD, UCLA, Los Angeles, California

**Jamie Feusner**, MD, UCLA, Los Angeles, California

Anorexia nervosa (AN) and body dysmorphic disorder (BDD) share distorted perception of appearance, obsessive and compulsive tendencies, and poor insight, and are frequently comorbid with each other. In some cases, correctly distinguishing AN from BDD can prove difficult. This may be of particular clinical relevance in early stages of the illness. To aid in diagnosis, we here used neuroimaging and questionnaire data to predict diagnoses for eighty four medication-free, normal-weight participants (twenty four with DSM-IV AN, twenty nine with DSM-IV BDD, and thirty one healthy controls (CTL)). The multi-modal data consists of blood oxygen level-dependent signal changes (BOLD) from task-based functional magnetic resonance imaging (fMRI) using face, body, and house visual stimuli; pathlength metrics from diffusor tensor imaging (DTI); and responses from the BDD Yale-Brown Obsessive Compulsive Scale (YBOCS) or Yale-Brown-Cornell Eating disorder scale (YBC), and Brown Assessment of Beliefs Scale (BABS). The fMRI data was averaged by regions, according to the Glasser 2016 Human Connectome Project 1.0 parcellation, and then decomposed into fewer features using independent components analysis. Randomly selecting equal numbers of participants from each group, a two-class support vector machine correctly distinguished AN vs BDD participants with an accuracy of 70% [66,73] (p<.001). Controlling for multiple comparisons, the top 3 independent components from the fMRI task data and the normalized mean pathlength from the DTI results were the most significant features in making the prediction. Because classification accuracy is significantly reduced using the questionnaire data alone, we suggest that the fMRI and DTI data contain unique information in distinguishing AN and BDD.
F120: Environmental Correlates of Patients with Eating Disorders: An Exploratory Chart Review

Jennifer Henretty, PhD, Center For Discovery, Los Alamitos, California
Shelbi Cox, BS, Center For Discovery, Los Alamitos, California

The evidence pointing toward hereditary causes of eating disorders is irrefutable; however, twin studies suggest that environmental factors are also likely at play. Identifying environmental correlates of eating disorders could allow for more effective risk assessment and prevention efforts. Comparing chart review data from approximately 2500 patients who received treatment in an IOP, PHP, or RTC setting for eating disorders to census and other forms of government-collected data when applicable, this exploratory study was able to identify correlates that may warrant further examination. Results suggest that type of parental occupation, among other correlates, may be relevant for early identification of youth at risk for eating disorders.

F121: Evaluation of a Day-Hospital Program Following an Inpatient Stay for Teens with Eating Disorders: Adolescents’, Parents’, Clinicians’ and Administrators’ Perspectives

Marie-Claude Fortin, PhD, Centre Hospitalier Universitaire Sainte-Justine, Montréal, Québec
Louis Picard, PhD, Centre Hospitalier Universitaire Sainte-Justine, Montréal, Québec
Danielle Taddeo, MD, Centre Hospitalier Universitaire Sainte-Justine, Montréal, Québec
Nadeau Pierre-Olivier, MD, Centre Hospitalier Universitaire Sainte-Justine, Montréal, Québec
Olivier Jamoule, MD, Centre Hospitalier Universitaire Sainte-Justine, Montréal, Québec
Valérie Simard, M.Ps., Centre Hospitalier Universitaire Sainte-Justine, Montréal, Québec
Chantal Stheneur, MD, PhD, Centre Hospitalier Universitaire Sainte-Justine, Montréal, Québec

Despite methodological difficulties, literature shows positive effects of day-hospital programs (DHP) on teens with eating disorders. As we started our own DHP, we conducted a study to (1) evaluate adolescents and parents’ opinions concerning the contribution of DHP in the treatment, (2) compile clinicians’ views about the integration of DHP to the existing hospitalisation program (HP), and (3) compare costs and benefits between DHP and HP. Adolescents and one of their parents were asked to complete a self-administered anonymous questionnaire on their first day of DHP and at discharge. The survey included: motivation, perception of physical and mental health, stress concerning health, willingness to change, goals, satisfaction, perceived impacts of the treatment, family and social relationships, and mood. Clinical team members were asked to give their opinion about relevance, coherence, efficacy, and interdisciplinary collaboration. Administrators compared daily financial costs of treatment with HP only or HP then DHP.

Adolescents perceived principally a better occupation of free time with reduction of excessive exercise and an improvement in family conflicts. Parents reported better mood in their adolescent, better quality of family life and a decrease in parental stress. In fact, parents perceived themselves as more ready to help their teen than teens to quit the reassuring environment of the inpatient unit. Team members reported that DHP upgraded services to families and increased the efficacy of interdisciplinary work. They also suggested offering more in vivo normalizing experiences during treatment. As expected, replacing HP by DHP after health rehabilitation in HP was cost-effective. This 360-degrees study demonstrates that DHP is relevant as it supports transition to outpatient services. Future research must include standardized measures to help understand how DHP promotes change and motivation in teens with ED compared to outpatient and inpatient experiences.

F122: Outpatient Treatment for Adolescents with Anorexia Nervosa: Predictors of 12 Month BMI Trajectories

John Hodsoll, PhD, Institute of Psychiatry, Psychology and Neuroscience, King’s College London, London, UK
Janet Treasure, OBE, MD, FRCP, FAED, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, UK
Charlotte Rhind, PhD, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, UK
Nadia Micali, PhD, Institute of Child Health, University College London, London, UK
Jon Arcelus, PhD, University of Nottingham, Nottingham, East Midlands
Ulrike Schmidt, PhD, Institute of Psychiatry, Psychology and Neuroscience, London, UK
Sabine Landau, PhD, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, UK

The aim of this study was to examine the predictors of 12 month BMI trajectories in a multicentre study of outpatients with anorexia nervosa. Data were collected at monthly intervals during the ECHO randomised controlled trial (N=149) with the addition/or not of an intervention in the first 6 months to improve carer skills. We used longitudinal non-parametric k-means cluster analysis to identify potential classes of 12 month trajectories in BMI. Key baseline predictors of cluster membership were then investigated. Participants were only included if they had at least 2 observations (N = 145). A 3 cluster solution was chosen as the best partition quality according to Calinski & Harabasz criterion, clinical interest and minimal group size of 10% of total sample. In the first cluster, participants (N = 27, mean baseline BMI = 19.6) showed a pronounced 2 point increase in BMI over the first 2 months, rising to 22.1 by end of treatment (6 months) and maintained at 12 months follow-up. For the second group (N = 85 (59%), mean baseline BMI = 16.9) there was a slower 1.4 increase in BMI by 6 months, rising to 18.7 at 12 months. In the third group, (N = 31 (21.7%), baseline BMI =15.2)
showed little change in BMI over 6 months (0.08) and 12 month follow-up (15.8). Using logistic regression, being in a responder group (1 or 2) vs non-response (3) was associated with shorter duration of illness (OR: 0.71, 95%CI: 0.51, 0.96) and higher lowest-ever BMI (OR: 2.2, 95% CI: 1.41, 3.37). Carer treatment group was not associated with clusters. The effectiveness of outpatient therapy may be limited for patients of low weight and / or extended illness duration.

**F123: “Stressed” is “Desserts” Spelled Backwards: The Influence of Negative Affectivity and Physiological Reactivity on Emotional Eating**

Tara Ohrt, BA. Arizona State University, Tempe, Arizona
Marisol Perez, PhD, Arizona State University, Tempe, Arizona
Jeffrey Liew, PhD, Texas A&M University, College Station, Texas

Emotional eating is a maladaptive coping response to stress that contributes to overweight status among children and adults. Coping with stress likely involves dealing with emotional and physiological processes. Yet research has neglected to examine emotional eating through this dual-process theory lens (i.e., behavior is determined by the interplay of automatic and controlled processes). Using a multi-method assessment (i.e., behavioral lab tasks, parent report, genetic make-up), the current study sought to test a theoretical model that predicts emotional eating, in the absence of hunger, in 247 young children aged 4 to 6. Emotional eating was characterized by rate of food consumption and observed affect during a free access eating laboratory task following a stressor. A 3-path mediation model was tested with the relationship between negative affectivity (a controlled process) and the lab-defined emotional eating episode as well as parent-reported emotional eating mediated through physiological reactivity (an automatic process) to a stressor. Results from this study will tease apart the relationship between these factors and determine for which combination of factors emotional eating (and therefore obesity risk) increases. The findings may provide a platform for intervention and prevention programs that can be utilized to prevent emotional eating in this group. Furthermore, people with increased negative affectivity and physiological reactivity may struggle academically, with social skills, and / or behavioral problems (e.g., aggressiveness, impulsivity) in addition to being overweight. Thus, these results stand to inform a more global prevention effort that targets the dual-process model of coping.

**F124: Gender Differences in Body Image, Dietary Habit and Metabolic Profile in a Group of Overweight Subjects**

Emilia Manzato, MD, psychiatrist, University of Ferrara, SISDCA, Ferrara, APO AE, Ferrara
Veronica Grifoni, Student, Dietitian, University of Ferrara, Ferrara, APO AE, Ferrara
Roberta Mungari, MD, Section of Endocrinology, University of Ferrara, Ferrara, APO AE, Ferrara

Mariella Celico, MD, Section of Endocrinology, University of Ferrara, Ferrara, APO AE, Ferrara
Maria Rosaria Ambrosio, MD, Section of Endocrinology, University of Ferrara, Ferrara, APO AE, Ferrara

The aim of our study is to evaluate the presence of gender differences concerning image perception, dietary attitude and metabolic profile in a group of 19 overweight people (10 women and 9 men) referred to Endocrinology clinics. We used psychological tests (Beck’s Depression Inventory, Body Uneasiness Test, Eating Attitude Test-26, Binge Eating Scale), dietary surveys and metabolic parameters (oral glucose tolerance test and lipid profile). Results show that only 44.4% of men against 90% of women consider themselves overweight; otherwise only 22.2% of men against 60% of women weigh themselves once a week. 33.3% of men and 60% of women have objective binge eating episodes and this is associated with a higher Body Mass Index, whereas 33.3% of men and 70% of women have subject binge eating. Women have higher scores than men in psychological tests; this difference is statistically significant (p<0.02) in two scale: Eating Attitude Test-26 (28.06 vs 27.17) and Body Image Concern (16.8 vs 6.67) of Body Uneasiness Test. Three subjects are positive to Binge Eating Scale and Beck's Depression Inventory. Women have a worse lipidic profile than men (LDL cholesterol: 142,1±47,8 vs 119.2±29.9). Our study suggests the presence of gender differences in overweight patients in terms of image perception, dietary attitude and metabolic profile and confirms the importance of a multidisciplinary approach to overweight and obesity.

**F125: Body Image and Weight Gain During Pregnancy**

Emilia Manzato, PhD, Psychiatrist, University of Ferrara, Ferrara, APO AE, Ferrara
Giada Gregoratti, Student, Dietitian, Ferrara, APO AE, Ferrara
Eleonora Roncarati, Dietitian, Private Hospital “Salus” Ferrara, Ferrara, APO AE, Ferrara

Pregnancy induces deep and quick changes in female body and in psychological functions: it is an interesting moment to study the changes in body image and weight (Body Mass Index). The aim of our study is to investigate some possible correlations between body image and BMI before pregnancy and weight gain during pregnancy. 33 women in the last three months of pregnancy were recruited in two public hospitals (Ferrara and Udine). A structured interview and some tests (such as Eating Disorders Inventory and Body Uneasiness Test) were administered. BMI was examined before pregnancy and during the pregnancy till the childbirth. The body perception before pregnancy has been investigated by means of following question: “how did you see yourself: underweight, normalweight or overweight?”; the answers have been correlated with BMI. The study showed a strong correlation between body image and weight gain: in fact a disturbed body perception before pregnancy is correlated with an altered weight gain during pregnancy. Also the BMI before pregnancy is correlated with weight gain in pregnancy, particularly...
the most women with an pre gravidic overweight/obese gained more weight during the pregnancy than what suggested by the OMS line guides; furthermore, pre-pregnancy underweight or overweight are correlated with higher body dissatisfaction during pregnancy (high scores in BUT and EDI-I subscale Body Dissatisfaction). The study highlights the role of body image and BMI before pregnancy and their influence on weight gain during pregnancy. It also suggests the importance of a multidisciplinary approach to pregnancy and the need to investigate body disperception and unhealthy weight (underweight, overweight, obesity) prior to pregnancy.

**F126: Food Addiction in Behavioral Addictions: Frequency and Clinical Outcomes**

Susana Jiménez-Murcia, PhD, University Hospital of Bellvitge-Idibell, Ciberobn, Hospital de Llobregat, Barcelona

Susana Jiménez-Murcia, PhD, University Hospital of Bellvitge-Idibell, Ciberobn, Hospital de Llobregat, Barcelona

Roser Granero, PhD, Universitat Autònoma de Barcelona, Barcelona, Barcelona

Ines Wolz, PhD, University Hospital of Bellvitge-Idibell, Ciberobn, Hospital de Llobregat, Barcelona

Marta Baño, MSc, University Hospital of Bellvitge-Idibell, Hospital de Llobregat, Barcelona

Gemma Mestre-Bach, PhD, University Hospital of Bellvitge-Idibell, Ciberobn, Hospital de Llobregat, Barcelona

Trevor Steward, MSc, University Hospital of Bellvitge-Idibell, Ciberobn, Hospital de Llobregat, Barcelona

Zaida Águera, PhD, University Hospital of Bellvitge-Idibell, Ciberobn, Hospital de Llobregat, Barcelona

Anke Hinney, PhD, Universitätsklinikum Essen, Essen, Essen

Carlos Dieguez, PhD, University of Santiago de Compostela-Instituto de Investigación Sanitaria, Santiago de Compostela, A Coruña

Felipe F Casanueva, MD, PhD, Complejo Hospitalario Universitario de Santiago de Compostela, Coberobn, Santiago de Compostela, A Coruña

Ashley Gearhardt, PhD, University of Michigan Ann Arbor, Michigan

Anders Hakansson, PhD, Lund University, Lund, Lund

The food addiction (FA) model is receiving increasing interest from the scientific community. Available empirical evidence suggests that this condition may play an important role in the development and course of physical and mental health conditions such as obesity, eating disorders and other addictive behaviors. However, no epidemiological data exist on the comorbidity of FA and gambling disorder (GD), or on the phenotype for the co-occurrence of GD+FA. The main objectives were threefold: to determine the frequency of the comorbid condition GD+FA, to assess whether this comorbidity features a unique clinical profile compared to GD without FA, and to generate predictive models for the presence of FA in a GD sample. Data correspond to 458 treatment-seeking patients who met criteria for GD in a hospital unit specialized in behavioral addictions. Point prevalence for FA diagnosis was 9.2%. A higher ratio of FA was found in women (30.5%) compared to men (6.0%). Lower FA prevalence was associated with older age. Patients with high FA scores were characterized by worse psychological state, and the risk of a FA diagnosis was increased in patients with high scores in the personality traits harm avoidance and self-transcendence, and low scores in cooperativeness. In conclusion, the co-occurrence of FA in treatment-seeking GD patients is related to poorer emotional and psychological states. GD treatment interventions and related behavioral addictions should consider potential associations with problematic eating behavior and aim to include techniques that aid patients in better managing this behavior.

**F127: Convergent Validity of the Restructured Version of the Eating Disorder Examination Questionnaire in Japanese Adolescents**

Tomoyo Mitsui, PhD, Kobe Shinwa Women’s University, Kobe, Hyogo

Toshiyuki Yoshida, MA, International University of Health & Welfare, Fukuoka, Fukuoka

Gen Komaki, PhD, International University of Health & Welfare, Fukuoka, Fukuoka

This study aims to examine the convergent validity of the Japanese version of Eating Disorder Examination Questionnaire version 6.0 (EDE-Q) with other eating questionnaire measures. Eating Attitudes Test (EAT-26) and Eating Disorders Inventory-II (EDI-II) for Japanese adolescents. Participants were undergraduate students (N = 558) to examined with EAT-26 and EDE-Q. Mean age was 20.11 years (SD = 2.52). Additionally, to examined with EDI-II and EDE-Q, we recruited 111 undergraduate students, the mean age was 18.52 years (SD = 0.77). Participants also provided written consent to participate prior to completing the questionnaire. Pearson’s correlation coefficients were used to evaluate the relation between EDE-Q scores and scores of EAT-26 and EDI-II. Our previous exploratory factor analysis of the EDE-Q for university students yielded four significant factors, two of which are different from those of the original questionnaire: “Fear of obesity” and “Influence of weight and shape on self-esteem” are different from “Weight Concern” and “Shape Concern” of the original, whereas “Restriction” and “Eating concern” were the same. The convergent validity of the original and restructured EDE-Q was examined whether the subscales scores correlate with measures of similar constructs, the EAT-26 and the EDI-II, respectively. Like the original subscales, the restructured EDE-Q subscales were similarly and moderately correlated with the EAT and EDI-II subscales. The subscales, “Fear of Obesity” and “Self-Esteem based on Shape and Weight” in the restructured EDE-Q were strong and moderately correlated with the EDI-II subscale of body image such as Drive for Thinness and Body Dissatisfaction. Additional research is required to extend and replicate these findings.
**F128: The Positive Impact of Putting Patients' and Carers’ Perspectives at the Centre of Service Improvement and Development**

**David Viljoen**, MSc, MSS Couns.Psych, Oxford and Buckinghamshire Eating Disorders Service (Cotswold House), Oxford, Oxfordshire, UK

**Sharon Ryan**, DipHE MH Nursing, Oxford and Buckinghamshire Eating Disorders Service, Oxford, Oxfordshire, UK

The purpose of this presentation is to share experiences of placing patient and carer involvement at the centre of care in a UK adult eating disorders service. Perspectives and undertakings of patients, carers and staff contributed to shared goals of enhancing patient safety, satisfaction and experience. Patients and carers offer unique voices and must work with staff, health care providers, commissioners and regulators to develop services and improve quality. Benefits of patient and carer involvement typically include: Access to unique insights of experts by experience who offer different perspectives to staff, tailoring quality healthcare services according to needs, improved confidence and self-esteem of patients; and better outcomes for patients, carers and staff. Different theoretical models of levels of patient and carer involvement will be described. Examples will be given of various service improvements based on surveys, consultations, collaborations and patient/carer-led projects. Initiatives to improve the inpatient experience included the introduction of preadmission planning meetings to identify shared goals; a pre-admission patient-to-patient information leaflet; patient redesign of the day- and inpatient information booklet and the routine allocation at admission of an outreach nurse for family liaison and support. A carer’s forum produced a ‘carer-to-carer’ admission leaflet and is exploring peer support initiatives for carers. As active stakeholders in service development, patients developed a training video for staff on how (and how not) to best support them in the dining room. Patients presented at a staff away day on how they would ‘reimagine eating disorders services’ highlighting for example the need to embrace technology in service delivery. Improvements in the experience of psychological therapy included allocation of therapists at admission and the named therapist offering seamless therapy to their patients across out-, day and inpatient services. The participants will be encouraged to challenge established organisational cultures where care “is done to people and not with people” and to routinely consider the views of patients and carers for the benefits of all stakeholders.

**F129: Attitudes Towards Orthorexia Nervosa Relative to DSM-5 Eating Disorders**

**Courtney Simpson**, MS, Virginia Commonwealth University, Richmond, Virginia

**Suzanne Mazzeo**, PhD, FAED, Virginia Commonwealth University, Richmond, Virginia

Stigmatization of individuals with clinical eating disorders (EDs) is concerning, as it inhibits treatment seeking and appears to exacerbate symptomaticity. A pattern of disordered eating involving a pathological fixation with healthy food consumption, labeled orthorexia nervosa (ON), has recently generated attention; however, research has not investigated perceptions of ON-related behaviors. This study examined potential stigmatization of ON, compared with ED diagnoses included in the DSM-5. Participants (n = 505) were randomly assigned to read a vignette depicting a woman with anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED), or ON. Participants then answered questions about the individual depicted in their vignette. A series of MANOVAs investigated whether ED type depicted was related to opinions and beliefs about the target disorder and perceptions of etiological influences. Individuals with BED were considered better able to “pull themselves together” than individuals with ON (p < .05), and individuals with AN and ON were perceived as “harder to talk to” and more of “a danger to others” than individuals with BED (all ps < .01). ON was viewed as less “distressing,” less “likely to evoke sympathy,” and more “desirable” than the other disorders (all ps < .05). “Poor living choices” were perceived as contributing more to ON than to AN, BN, and BED (all ps < .05). Results suggest that ON is viewed as less severe, more desirable, and more often the result personal life choices. Findings from this study imply that ON is associated with stigma, similar to other DSM-5 EDs, and these negative attitudes might reduce the likelihood of treatment-seeking in affected individuals.

**F130: Weight Bias: People-First Language in Self-Report Questionnaires**

**Emilie Lacroix**, BA, Student, University of Calgary, Calgary, Alberta

**Angela Alberga**, BSc, PhD, University of Calgary, Calgary, Alberta

**Shelly Russell-Mayhew**, BSc, MSc, PhD, University of Calgary, Calgary, Alberta

**Lindsay McLaren**, BA, MA, PhD, University of Calgary, Calgary, Alberta

**Kristin von Ranson**, BA, MSc, PhD, University of Calgary, Calgary, Alberta

The purpose of the present systematic review was to examine the use of “people-first” language in self-report questionnaires designed to assess weight bias. Weight bias, defined as negative attitudes about people with overweight or obesity, is pervasive, and is associated with adverse health outcomes. Using stigmatizing language to describe people with obesity may perpetuate weight bias. People-first language respectfully addresses people with chronic disease, rather than labeling them by their illness, and has been affirmed by the American Psychological Association and by the Obesity Society as a standard for publications and programs. Many self-report questionnaires are available to assess weight bias, but it is unclear to what extent these questionnaires employ people-first language. To identify self-report questionnaires that assess weight bias, we searched the electronic databases CINAHL, Embase, Medline, PsycINFO, and Pubmed. For each questionnaire, sample items were coded based on whether they used postmodified...
nouns (e.g., “people with obesity”) or premodified nouns (e.g., “obese people,” “fat people”) to describe the target of the attitudes being assessed. We identified 40 original self-report weight bias questionnaires. People-first language was exceedingly rare in the items administered to participants: 36 of 40 questionnaires (90.0%) employed premodified nouns in the items administered to participants, with the adjectives “obese,” “overweight,” or “fat” appearing first. Two self-stigma questionnaires (5.0%) referred instead to “my weight,” and the other self-stigma questionnaire employed the phrase “being overweight.” Only a single questionnaire (2.5%) employed postmodified nouns. To uphold current standards, people-first language should be employed wherever possible to convey respect for people with chronic issues such as obesity. We recommend that developers and users of weight bias questionnaires create or modify measures accordingly.

**F131: The Application of Flow Theory in the Prevention and Treatment of Anorexia Nervosa**

Sara Aslan, BA, MA, The University of Missouri, Kansas City, Kansas City, Missouri

Ashleigh Pona, BS, MA, The University of Missouri, Kansas City, Kansas City, Missouri

Jacob Marszalek, PhD, The University of Missouri, Kansas City, Kansas City, Missouri

The purpose of this study is to utilize Flow Theory as a model to explain the recurring and rewarding behaviors exhibited by individuals suffering from Anorexia Nervosa (AN). The construct being measured is the experience of flow while individuals who are recovered from and/or active in restrictive behaviors associated with AN are engaged in the skill of caloric restriction and/or dietary restraint (the objective of restricting their food intake). The target population is females, ages 18 and older, with a current and/or past diagnosis of AN. Restrictive behaviors were conceptualized as a skill explained through the lens of Flow Theory. To accurately measure this skill, the following sub-domains explained by Flow Theory were utilized: challenge-skill balance, action-awareness merging, clear goals, unambiguous feedback, concentration on task at hand, sense of control, loss of self-consciousness, and autotelic experience. Our study measured a typical performance: participants were asked about their experiences during restriction that pertain to Flow Theory. Flow Theory was then used to conceptualize the participant’s motivational states when engaging in restricting behaviors. The findings of this study help to explain that when individuals with AN experience flow (i.e., optimal experience) during restricting, there is an increased chance that they will strive to experience flow in the future, by engaging in disordered eating behaviors. Thus, with elimination of the flow sub-domains, the experience of flow cannot be achieved, and the rewarding feeling of restricting may diminish.

**F132: Calorie Counting and Fitness Tracking Technology: Helpful or Harmful?**

Courtney Simpson, MS, Virginia Commonwealth University, Richmond, Virginia

Suzanne Mazzeo, PhD, FAED, Virginia Commonwealth University, Richmond, Virginia

The use of online calorie tracking applications and activity monitors is increasing exponentially. Anecdotal reports document the potential for these trackers to trigger, maintain, or exacerbate eating disorder symptomatology. Yet, research has not examined the relation between use of these devices and eating disorder-related attitudes and behaviors. This study explored associations between the use of calorie counting and fitness tracking devices and eating disorder symptomatology. Participants (n=500) were college students (30.0% male, 70.0% female, 51.0% White, 22.6% African American, 18.6% Asian) who reported their use of tracking technology and completed measures of eating disorder symptomatology. Nearly one-fifth (19.6%) of the sample currently used a fitness tracking device, and 13.6% currently used a calorie tracking device. Individuals who reported using calorie trackers manifested higher levels of shape concern, weight concern, eating concern, and dietary restraint, controlling for BMI (all ps<.05). Individuals using a calorie tracking device also reported greater knowledge of healthy eating, more problems associated with healthy eating (e.g., social, occupational, and psychological impairment), and stronger positive feelings related to healthy eating (all ps<.05). Further, individuals who reported using a fitness tracking device exhibited higher levels of shape concern, weight concern, and dietary restraint, when controlling for BMI (all ps<.05). Eating concern did not differ between groups. Individuals using fitness trackers also reported greater knowledge of healthy eating, more problems associated with healthy eating, and stronger positive feelings related to healthy eating (all ps<.05). Findings highlight the positive relation between use of calorie and fitness trackers and eating disorder symptomatology. For some individuals, these devices might do more harm than good.

**F133: Exploring Determinants of Disordered Eating Behavior and Eating Disorder Diagnosis through a Developmental Assets Framework**

Marilyn Stern, PhD, University of South Florida, Tampa, Florida

Jennifer Bleck, PhD, University of South Florida, Tampa, Florida

Rita DeBate, MPH, PhD, University of South Florida, Tampa, Florida

The Developmental Assets Framework proposes a combination of internal and external assets, which serve as the building blocks to healthy development. Secondary analysis of the National Longitudinal Study of Adolescent Health was employed to assess associations between developmental assets in adolescents and subsequent disordered eating behaviors and diagnosed
eating disorders in adulthood. A self-reported positive developmental assets scale was created to assess five external assets including support, encouragement, and bonding with family and neighborhood and five internal assets including self-esteem, sense of purpose, and interpersonal competence. Among females, more self-reported internal assets were associated with lower levels of engagement in disordered eating behaviors (OR: 0.86; 95% CI: 0.82-0.90) and prevalence of diagnosed eating disorders (OR: 0.74; 95% CI: 0.67-0.81). While greater external assets were not associated with disordered eating behaviors, it was associated with increased prevalence of diagnosis (OR: 1.18; 95% CI: 1.06-1.32) among females. No significant associations were observed among males. Results provide additional evidence supporting both internal and external developmental asset based primary prevention and external focused secondary prevention with families.

**F134: Associations Between Nonmedical Prescription Stimulant Use for Appetite/Weight-loss Purposes and Eating Disorder Psychopathology**

Danielle Beyer, BA, University of North Dakota, Grand Forks, North Dakota
Erica Goodman, BA, University of North Dakota, Grand Forks, North Dakota
Alexandra Thiel, BA, University of Wyoming, Laramie, Wyoming
Taylor Perry, Student, University of North Dakota, Grand Forks, North Dakota, Author, Not Presenting
Alison Looby, PhD, University of Wyoming, Laramie, Wyoming, Author, Not Presenting
Kyle De Young, PhD, University of Wyoming, Laramie, Wyoming

Engagement in nonmedical prescription stimulant use (NPS) for appetite suppression/weight-loss (A/W) is associated with higher levels of eating disorder (ED) psychopathology than NPS solely for cognitive enhancement (CE). This study sought to replicate and extend findings that ED psychopathology is higher in individuals who engage in NPS for A/W compared to NPS for CE. and non-users. Undergraduate participants (N = 451) completed an online survey which included measures of: demographics, lifetime NPS, motives to engage in NPS. Eating Disorder Examination Questionnaire, and the Purgative Behavior Subscale of the Multifactorial Assessment of Eating Disorders Symptoms. A one-way analysis of variance and Tukey HSD tests indicated that individuals who engaged in NPS for A/W reported significantly more ED pathology than non-users: dietary restraint (F(2, 461)=9.639, p<0.001), eating concern (F(2, 460)=9.856, p<0.001), and purging pathology (F(3, 463)=11.505, p<0.001). Individuals who engaged in NPS for A/W reported significantly more ED pathology than those engaging in NPS for CE, and non-users. In a separate comparison, both the NPS for A/W and CE groups engaged in compulsive exercise more frequently than non-users (F(3, 443)=4.780, p=.014; F(3, 443)=7.480, p=.040). These results suggest that there may be a common factor (e.g., personality) that uniquely links NPS and compulsive exercise. Assessing for A/W motives among NPS users may be a useful variable for identifying individuals with ED psychopathology.

**F135: Do Individuals with and without Binge Eating Differentially Benefit from Emotion Regulation Strategies used to Buffer the effects of Interpersonal Stress? An Experimental Study**

Akanksha Srivastav, MS, Ohio University, Athens, Ohio
Sarah Racine, PhD, Ohio University, Athens, Ohio

Binge eating (BE) is a core symptom of eating disorders that often occurs in response to increases in negative affect. Recent data suggest that negative affect arising from interpersonal stressors is particularly potent at triggering BE. Given that BE is conceptualized as a maladaptive strategy for regulating emotions in individuals who have pre-existing deficits in this domain, training in emotion regulation may help persons susceptible to BE to better manage negative affect from interpersonal stress, thereby reducing their vulnerability to BE. The current study examined whether use of emotion regulation strategies (i.e., cognitive reappraisal versus expressive suppression) while being ostracized via Cyberball differentially impacts subsequent emotions and eating behaviors during a taste test. Females with BE (n = 25) and without BE (n = 23) have been recruited; additional data are being collected. The interaction between group and emotion regulation strategy in predicting positive affect levels post-cyberball was significant, indicating that the mood state of the two groups was differentially impacted by the emotion regulation strategies. Despite non-significant differences in baseline positive affect, BE participants using suppression endorsed significantly lower levels of positive affect compared to control participants using suppression (p = .03). There were no significant differences between positive affect levels for use of reappraisal by BE participants and control participants. Other results trending towards significance included group differences, such that BE participants had higher levels of negative mood post-Cyberball as well as greater liking for food and greater loss of control during the taste test, compared to control participants (ps = .05-.08). Findings extend previous research on the interpersonal model of BE and suggest that cognitive reappraisal may be effective at maintaining positive interpersonal affect and managing BE symptoms.

**F136: Linking Purgung Pathology and Suicidal Ideation: The Role of Perceived Burdensomeness**

Alexandra Thiel, BA, MA, University of Wyoming, Laramie, Wyoming
Danielle Beyer, BA, University of North Dakota, Grand Forks, North Dakota
Eating disorders (ED) are associated with high mortality rates from suicide. In particular, purging-type EDs are associated with an increased risk for suicide compared to non-purging-type EDs. The interpersonal-psychological theory on suicidal behavior proposes that active suicidal ideation is formed when an individual experiences high perceived burdensomeness, high thwarted belongingness, and hopelessness. Therefore, this study used a multiple mediation analysis to test the hypothesis that perceived burdensomeness, thwarted belongingness, and hopelessness would mediate the relationship between purging pathology and suicidal ideation in an undergraduate sample (N = 451; 73.7% female) when controlling for past suicidality, current depressive symptoms, current ED symptom severity, and negative urgency. Participants completed online self-report measures on a single occasion. Results indicated a significant indirect effect (95% CI [.02, .06], p < .001) for perceived burdensomeness, suggesting that perceived burdensomeness may be a mechanism that accounts for the relationship between purging pathology and suicidal ideation. Thus, engaging in purging behaviors and/or holding positive attitudes toward purging may lead to suicidal ideation by causing individuals to perceive themselves to be a burden on their friends and family members. Clinically, these results suggest that when determining risk for suicide among individuals endorsing purging pathology, assessing for perceptions of burdensomeness may be a particularly useful variable. Future empirical directions include rigorous replication in longitudinal designs and may further operationalize of perceived burdensomeness for individuals with eating psychopathology.

F138: Experiential Avoidance, Eating Expectancies, and Binge Eating in University Students: A Preliminary Test of an Adaptation of the AP Model of Eating Disorder Risk

Nicole M. Della Longa, BS, MA, University of North Dakota, Grand Forks, North Dakota
Rachel Kramer, BA, MA, University of North Dakota, Grand Forks, North Dakota
Alexandra Thiel, BA, MA, University of Wyoming, Laramie, Wyoming
Kyle P. De Young, BA, BS, MA, LP, PhD, University of Wyoming, Laramie, Wyoming
Juan Manuel Mancilla Díaz, PsyD, Facultad de Estudios Superiores Iztacala, UNAM, Mexico, Mexico

F137: Confirmatory Factor Analysis of the Eating Disorder Examination—Questionnaire (EDE-Q) Among Male University Students in Argentina

Emilio J. Compte, BS, MSc, PhD, Universidad Favaloro, Buenos Aires, Ciudad de Buenos Aires
Ana R. Sepulveda, BS, PhD, Autonomous University of Madrid, Madrid, Comunidad Autónoma de Madrid
M. Yolanda de Pellegrín Llorente, BSc, MSc, Universidad Complutense de Madrid, Madrid, Comunidad Autónoma de Madrid

The present study 1) investigated a potential mechanism through which maladaptive avoidant strategies relate to binge eating and 2) examined experiential avoidance as another factor in the Acquired Preparedness (AP) model of eating disorder risk, which posits that individuals with negative urgency are likely to binge eat due to their belief that eating will alleviate negative emotions. Undergraduate men and women (N = 244) completed questionnaires online, measuring experiential avoidance, negative affect eating expectancies, negative urgency, and binge eating. Bootstrapping mediation analyses and structural equation modeling 1) tested the hypothesis that negative affect eating expectancies mediate the relationship between experiential avoidance and binge eating and 2) examined whether experiential avoidance is a unique predictor of binge eating within the AP model of eating disorder risk. Results revealed a significant indirect effect of experiential avoidance on binge eating (95% CI = [1.67, 3.33], p < .001) with negative affect eating expectancies as a partial mediator. Examining experiential avoidance within the AP model of eating disorder risk again revealed an indirect effect of experiential avoidance on binge eating (95% CI = [1.55, 3.20], p = .001) through negative affect eating expectancies. In this combined model, negative urgency was not associated with negative affect eating expectancies (p = .151) or binge eating (p = .175). These findings demonstrate that experientially avoidant students are at risk for binge eating at least partly due to their expectation that eating will diminish negative affect. Not only is experiential avoidance a unique predictor of binge eating in the AP model of eating disorder risk, but it may also represent a more adequate predictor of binge eating than negative urgency. These findings require replication in longitudinal designs and may further our understanding of the most pertinent dispositional influences of binge eating.

Nicole Della Longa, MA, University of North Dakota, Grand Forks, North Dakota
Kyle De Young, PhD, University of Wyoming, Laramie, Wyoming

The Eating Disorder Examination Questionnaire (EDE-Q) is a self-report questionnaire for assessing the key features of an eating disorder based on a clinical interview whose factor structure requires further investigation among males. This study aims to evaluate the original factor structure and to establish normative data for the EDE-Q among university male students in Argentina. To assess the proposed 4-factor structure, a Confirmatory Factor Analysis (CFA) was performed on 464 students. The internal consistency and convergent validity, using a male-oriented tool (Male Body Attitudes Scale; MBAS), were also assessed. CFA analyses resulted in good fit indexes. Satisfactory levels of internal consistency were obtained (Cronbach’s β .70 to .93). Strong correlations with the MBAS are presented as evidence of convergent validity. The data for males replicated the original factor structure of the EDE-Q and the calculated rank allows to assess more adequately EDs in Argentinean males.
**FI19: A Double-Blind Randomized Trial of Omega-3 Fatty Acid Supplementation for Treatment of Anxiety in Adolescents with Eating Disorders**

Brittny Manos, BA, The Research Institute at Nationwide Children's Hospital, Columbus, Ohio
Terrill Bravender, MD, The University of Michigan, Ann Arbor, Michigan
Hannah Lange, MPH, The Research Institute at Nationwide Children’s Hospital, Columbus, Ohio
Casey Cottrill, MD, MPH, Nationwide Children’s Hospital, Columbus, Ohio
Andrea Bonny, MD, Nationwide Children’s Hospital, Columbus, Ohio

The objective of this study was to evaluate the association between omega-3 polyunsaturated fatty acid (PUFA) supplementation and trait anxiety among adolescent females with restrictive eating disorders. Adolescents were recruited from the Nationwide Children’s Hospital Partial Hospitalization Program from 1/2015-2/2016. Subjects received standard clinical care and were randomized to 4 daily PUFA (1200mg eicosapentaenoic acid/600mg docosohexaenoic acid) or placebo capsules for 12 weeks. The main outcome variable was trait anxiety, assessed by the Beck Anxiety Inventory-Trait (BAIT) at baseline, 6, and 12 weeks. Secondary outcomes included the Center for Epidemiologic Studies Depression Scale (CES-D), the Eating Attitudes Test (EAT-26), and Medication Tolerability (a 9-item questionnaire addressing frequency of potential side effects). Linear mixed models evaluated associations between randomization group and study outcomes. Of the 24 subjects enrolled (mean age 14.7±1.51; 92% White/Non-Hispanic), 22 and 18 completed 6 and 12 weeks of data collection respectively. Randomization group was not associated with significant differences in BMI (p=.37), medication tolerability (p=.29), CES-D scores (p=.47), or EAT-26 scores (p=.83). Randomization group was significantly associated with trait anxiety (p=.04). All subjects had lower BAIT scores at 12 weeks compared to baseline. Although the rate of change did not differ between groups, the placebo group had significantly lower BAIT scores at 6 and 12 weeks (6-week p-value = 0.01; 12-week p-value = 0.04). BAIT least squares means by group were as follows: baseline PUFA 24.9 ± 3.01 vs. Placebo 22.3 ± 3.09; 6 weeks PUFA 21.2 ± 2.74 vs. Placebo 10.1 ± 3.16; 12 weeks PUFA 14.8 ± 3.14 vs. Placebo 4.8 ± 3.71. PUFA supplementation resulted in diminished improvement in trait anxiety over the course of treatment. Our data do not support a role for PUFA in the treatment of anxiety in adolescents with restrictive eating disorders.

**FI40: A Change in Attitude towards Life after Interactions with a Medical Clown during Eating Disorders /Hospitalization**

Shikma Keller, MD, Hadassah Hebrew University Medical center, Jerusalem, Israel
Sofia Laufer Ben Ari, MD, Hadassah Hebrew University Medical Center, Jerusalem, Israel
Karen Racket, MPH, RD, Hadassah Hebrew University Medical Center, Jerusalem, Israel
Talia Safra, MA, Hakibutzim Seminar Collage, Tel-Aviv, Israel
Adi Lavi, RN, Hadassah Hebrew University Medical Center, Jerusalem, Israel
Yael Noy-Cohen, RN, Hadassah Hebrew University Medical Center, Jerusalem, Israel
Laura Canetti, PhD, Hadassah Hebrew University Medical Center, Jerusalem, Israel
Inbar Sharav-Ifergan, MD, Hadassah Hebrew University Medical Center, Jerusalem, Israel

Medical clowning was developed to ease the suffering of children in hospital. It has become an accepted therapeutic figure in many non psychiatric hospital departments. However, the potential role of a medical clown in the inpatient unit of our adult ED has not been evaluated yet. We present a part of our ongoing research in evaluating the benefits of integrating a medical clown into the multidisciplinary team of our adult ED inpatient unit. Anorexia Nervosa patient tend to starve themselves to death. However, studies that examined attitudes towards life and death showed increased tendency to reject life rather than be attracted to death. This tendency for rejection of life indicates self guilt. Guilt of promoting her self interests, guilt for existing, eating and enjoying life. The clown is a figure that allows himself to be ridiculous, and not ashamed of expressing his needs and joy. The interaction of ED patients with such a figure can be powerful. The Multiattitude Suicidal Tendency Scale (MASS) provides independent scores of attraction and repulsion to life/death. The purpose of this pilot study was to explore whether a regular interactions with a medical clown during hospitalization can reduce anxiety and depression and influence the attitude toward life and death. Patients hospitalized in our ED unit were administered the Depression, anxiety and stress scale (DASS), The State-Trait Anxiety Inventory (STAI), Beck Depression Inventory (BDI), and MASS at the beginning of hospitalization and 8 weeks later. While the control group received treatment as usual, the study group received meal supervision and post meal interventions with a medical clown twice a week for eight weeks. We present preliminary results that might suggest a trend toward reduction in the DASS anxiety scale, an increase in attraction to life and rejection of death in patients exposed to medical clown, compared to patients who did not. These results will be followed in the forthcoming research.
PAPER PRESENTATIONS SESSION I

Topic: Treatment of Eating Disorders (Adult) I

Club A, First Floor

Co-Chairs:
Kate Tchanturia, PhD, FAED & Tracey Wade, PhD, FAED

1.1: Trajectory of Weight Change Over the First 12 Sessions of Outpatient Therapy for Anorexia Nervosa and Relationship to Outcome

Tracey Wade, PhD, Flinders University, Adelaide, South Australia
Karina Allen, PhD, University of Western Australia, Perth
Ross Crosby, PhD, University of North Dakota School of Medicine and Health Sciences, Fargo, North Dakota
Christopher Fairburn, MRCPsych, Oxford University, Oxford, United Kingdom
Anthea Fursland, PhD, Centre for Clinical Interventions, Perth, Western Australia
Phillipa Hay, DPhil, FAED, School of Medicine & Centre for Health Research, Western Sydney University, Sydney, New South Wales
Gini McIntosh, PhD, University of Otago, Christchurch, New Zealand
Stephen Touyz, PhD, University of Sydney, Sydney, New South Wales
Ulrike Schmidt, PhD, King's College London, UK
Janet Treasure, OBE, MD, FRCP, FAED, King's College London, London, London
Susan Byrne, PhD, DPhil, University of Western Australia, Perth, Western Australia

The purpose of the study was to identify latent classes of trajectory of change in body mass index (BMI) between assessment and the twelfth session of outpatient treatment for adult anorexia nervosa. The relationship between class and outcome was then examined, and predictors of class membership were also examined. Participants were 120 people with anorexia nervosa who were randomised to one of three outpatient therapies.

Four latent classes were identified: two classes had a baseline BMI around 17.5, but one group (N=19, 16%) showed a significantly greater increase in BMI over the first 12 sessions of therapy than the other (N=39, 32%). The third and fourth classes had a baseline BMI of 16.34 and 15.26 respectively, and neither gained weight over the first 12 sessions. With respect to outcomes, there was no differences between the classes in terms of therapy completion, but the class who had the greatest initial increase in BMI had significantly higher levels of remission (i.e., attaining a global Eating Disorder Examination Questionnaire score within one standard deviation of the community mean, a BMI > 18.5, and absence of binge eating/purging) at end of treatment and at 12-month follow-up than the other three classes. Treatment condition did not predict class membership. The only variables to predict class membership were approach coping style and lowest weight, where the class with the best outcome has higher levels of approach coping and a higher lowest weight. The extremely low levels of remission in the third and fourth class poses the question of whether outpatient therapies for anorexia nervosa should only include people with a BMI > 16.5.

1.2: Relapse Rates and Predictors of Relapse at One Year Follow-up After Outpatient Psychological Treatment for Anorexia Nervosa: Results from a Randomized Controlled Trial

Anthea Fursland, PhD, Centre for Clinical Interventions, Perth, Western Australia
Tracey Wade, PhD, School of Psychology, Flinders University, Adelaide, New South Wales
Phillipa Hay, DPhil, FAED, School of Medicine & Centre for Health Research, Western Sydney University, Sydney, New South Wales
Stephen Touyz, PhD, School of Psychology, Sydney University, Sydney, New South Wales
Christopher Fairburn, MD, PhD, Department of Psychiatry, Oxford University, Oxford, Oxfordshire
Janet Treasure, OBE, MD, FRCP, FAED, Department of Psychological Medicine, King's College London, London, London
Relapse rates following treatment for anorexia nervosa (AN) are reported as being notoriously high. This study examined relapse rates, and predictors of relapse, at 1 year post-treatment for adults (N=120) who participated in an Australian multicentre randomised controlled trial (RCT) comparing three outpatient treatments for AN (Specialist Supportive Clinical Management [SSCM], Maudsley Anorexia Nervosa Treatment for Adults [MANTRA] and Enhanced Cognitive Behaviour Therapy [CBT-E]). Treatment involved 25-40 individual sessions over a 10 month period. At the end of treatment full remission was defined as (1) having a BMI > 18.5 kg/m2; and (2) having a Global Eating Disorder Examination (EDE) score within one standard deviation of community norms. Participants were assessed, using a broad range of measures, at pre, mid and post treatment and at 6 and 12 month follow-up. At the end of treatment, 22% of participants (26/120) were in full remission (SSCM 9/40 [22.5%]; MANTRA 9/41 [22%]; CBT-E 8/38 [21%]). Of these participants, 20 (77%) were still in full remission at 1 year follow-up (SSCM 9/9 [100%], MANTRA 5/9 [55.6%], CBT-E 6/8 [75%]) and the remaining six were in partial remission (MANTRA 4/9, CBT-E 2/8). Another six participants (SSCM=1, MANTRA =1, CBT-E=4) who had not achieved full remission by end of treatment, continued to improve over time and did so by 12 month follow-up. Binary logistic regression analyses showed that higher BMI and lower EDE scores (albeit still not reaching normal levels) at end of treatment significantly predicted this positive trajectory. No significant predictors of relapse were identified. These results suggest that, with the treatments provided in this RCT, relapse rates for AN were remarkably low compared to previous studies. A good outcome (with regard to weight regain and normalization of core eating disorder psychopathology) by end of treatment indicates that these improvements are highly likely to be maintained.

1.3: An Examination of the Interpersonal Model of Binge Eating over the Course of Treatment

Anna Karam, MA, Washington University in St. Louis, St. Louis, Missouri
Dawn M. Eichen, PhD, University of California San Diego, San Diego, California
Ellen Fitzsimmons-Craft, PhD, Washington University in St. Louis, St. Louis, Missouri
Rick Stein, PhD, Washington University in St. Louis, St. Louis, Missouri

This study evaluated the interpersonal model of binge eating and related eating disorder (ED) psychopathology over the course of two treatments (Interpersonal Psychotherapy and Cognitive Behavioral Therapy) in participants with binge eating disorder (N=159). Investigating treatment mediators is needed to better understand why and how evidence-based treatments are efficacious. The interpersonal model of binge eating posits that interpersonal problems increase negative affect, which triggers binge eating and ED psychopathology. Preliminary support for the model exists; however, the model has yet to be tested over the course of treatment. Thus, this study aims to fill an important gap and details how treatment achieves its effects. Change scores from pre-to post-treatment were calculated for the following variables: interpersonal problems (independent variable), negative affect (mediator), and ED psychopathology (dependent variables measured by the Eating Disorder Examination: objective bulimic episode (OBE), subjective bulimic episodes (SBE), eating restraint, eating concern, shape concern, weight concern, global). Bootstrapped mediation analyses, controlling for treatment group, were used and biased-corrected 95% confidence intervals (CIs) were computed. All variables decreased from pre- to post-treatment (ps<.05). In line with the model, over the course of treatment reductions in negative affect mediated the relation between decreases in interpersonal problems and reductions in OBEs (95% CI [0.41, 5.80]), shape concern (95% CI [0.11, 0.67]), weight concern (95% CI [0.03, 0.66]), and global (95% CI [0.07, 0.41]), regardless of treatment. Findings support that psychotherapy produces changes in the mechanisms of the interpersonal model of binge eating as theoretically proposed. Results preliminarily demonstrate how individuals improve through psychotherapy, which could lead to enhanced ED treatment by strengthening the identified active therapeutic components.

1.4: Guided Self-Help For Binge Eating: A Randomized Controlled Trial Comparing Two Forms of Support

Paul Jenkins, BSc, CPsychol; DClinPsy, Oxford Health NHS Foundation Trust, Oxford, Oxfordshire
Amy Luck, DClinPsy, Oxford Health NHS Foundation Trust, Oxford, Oxfordshire

Guided self-help (GSH) is often recommended as a first step for individuals presenting for treatment of bulimia nervosa (BN) or binge-eating disorder (BED). The optimal means of delivering guidance is, however, uncertain. Conventionally guidance is provided face-to-face in a limited number of brief sessions given by a non-specialist practitioner. A more scalable alternative is to provide guidance via asynchronous emails. The purpose of this study was to compare GSH delivered in person or via email with a waiting list control condition.

160
The study recruited patients from routine referrals to two UK National Health Service eating disorder clinics. 180 adults (92.8% female, 81.7% White – British) were randomly allocated to a waiting list condition, face-to-face GSH, or email GSH (60 per group). The diagnostic distribution was as follows: BN 106 (58.9%); BED 39 (21.7%); and OSFED 35 (19.3%). Eating disorder psychopathology, psychosocial impairment, general psychological distress, and self-esteem were assessed at baseline and post-intervention. Both forms of GSH were associated with clinically significant change whereas there was little change in the waiting list condition. The attrition rate was higher in the email condition than in the face-to-face condition. These finding provide further support for GSH as a treatment for BN and BED. The study is one of the first to directly compare these two methods of delivering support in GSH although further work is needed to explore the optimal method for delivering guidance. This needs to take account of scalability and cost-effectiveness.

1.5: Can Weight Regain Account for Improvements in Core Eating Disorder Psychopathology and Comorbid Psychopathology in Anorexia Nervosa? Association Between BMI Change and Change in Eating Disorder Specific and General Psychopathology in the SWAN Study

Susan Byrne. MPsych, DPhil, PhD, School of Psychology, University of Western Australia, Perth, Western Australia
Tracey Wade. MPsych, PhD, Flinders University, Adelaide, South Australia
Phillippa Hay. DPhil, FAED, School of Medicine & Centre for Health Research, Western Sydney University, Sydney, New South Wales
Stephen Touyz. PhD, School of Psychology, Sydney University, Sydney, New South Wales
Christopher Fairburn. MD, Department of Psychiatry, Oxford University, Oxford, Oxfordshire
Janet Treasure. OBE, MD, FRCP, FAED, Department of Psychological Medicine, Kings College London, London, London
Gini McIntosh. PhD, Department of Psychological Medicine, University of Otago, Christchurch, New Zealand
Ulrike Schmidt. PhD, Department of Psychological Medicine, Kings College London, London, London
Karina Allen. MPsych, PhD, Eating Disorders Service, Maudsley Hospital, South London, London, London
Anthea Fursland. PhD, Centre for Clinical Interventions, Perth, Perth, Western Australia
Ross Crosby. PhD, Neuropsychiatric Research Institute, Fargo, Fargo, North Dakota

The aim of this study was to examine the relationship between weight regain and change in eating disorder psychopathology and broader psychopathology in patients receiving treatment for anorexia nervosa (AN). We used data from an Australian multicentre randomised controlled trial (the SWAN Study) in which 120 adults with AN were randomised to one of three outpatient psychological treatments (Specialist Supportive Clinical Management, Maudsley Anorexia Nervosa Treatment for Adults and Enhanced Cognitive Behaviour Therapy). Body Mass Index (BMI), core eating disorder psychopathology (measured using the Global Eating Disorder Examination [EDE] score) and levels of depression, anxiety, stress, perfectionism, obsessionality, interpersonal difficulties, self-esteem and clinical impairment were measured at pre-treatment, mid-treatment, post-treatment and at six and twelve month follow-up. Linear mixed models were used to examine whether improvement in BMI was associated with corresponding improvements in eating disorder psychopathology and the other more general psychopathology. The results showed, firstly, that weight regain was not significantly associated with an improvement in EDE scores. Secondly, while weight gain was accompanied by improvements on some of the secondary measures (clinical impairment, depression, self-esteem, obsessionality and interpersonal difficulties) it was not associated with improvements in anxiety, stress or perfectionism. Improvement in Global EDE score over time, however, was associated with improvement on these variables. Treatment condition did not affect any of these relationships. These results underscore the need for both weight regain and improvement in eating disorder psychopathology in recovery from AN.

1.6: A Comprehensive Nutrition Education Guide for Eating Disorder Clinicians with their Patients

Caitlin McMaster. BSc, Royal Prince Alfred Hospital, Sydney, New South Wales
Susan Hart. BSc, MSc, PhD, Royal Prince Alfred Hospital, Sydney, New South Wales

Nutrition intervention is a core element eating disorder (ED) treatment. However, there is a lack of evidence based, ED specific material to support clinicians in the nutrition education process. Dietitians at the Peter Beumont Day Program developed the Eating Disorder Healthy Eating (EDHE) Guide for adult ED patients consisting of EDHE Pyramid, Dietary Guidelines for ED Patients and patient meal plans To evaluate patients' impressions of the EDHE Guide, 20 adult female ED patients (mean age=26.6 years) attending Royal Prince Alfred Hospital for treatment as a day program patient (n=8) or an outpatient (n=12) for a range of ED diagnoses (mean BMI = 23.7) were given 10 minute oral presentations of the EDHE Pyramid and a non-ED specific nutrition tool, the Australian Guide to Healthy Eating. Guided discussion sessions were used to examine which of the nutrition tools best addressed common ED nutrition beliefs. Qualitative data was assessed using thematic analysis. To assess nutritional adequacy of constructed meal plans, seven days of weight gain and weight maintenance meal plans were modelled using nutritional analysis programs. 19 out of 20 patients reported the EDHE Pyramid to be more helpful for working through an ED than the ACHE. Key reasons included relevance to treatment; reassurance; and clearer explanation about food groups. Modelled meal plans met Australian macronutrient distribution ranges for carbohydrate, protein and fat to reduce chronic disease risk and Australian Nutrient Reference values for fibre, calcium, iron, zinc, vitamin D, sodium, potassium and fluid intake with the exception of vegan meal plans which were not adequate in vitamin D.
study suggests that a specialist nutrition education tool is more effective than a generalist nutrition education tool at addressing common ED nutrition beliefs and attitudes. Additionally, the EDHE Guide includes nutritionally complete meal plans suitable for patients with a range of nutritional requirements.

**Topic: Child and Adolescence I**

**Panorama, Second Floor**

Co-Chairs:

**Kamryn Eddy**, PhD, FAED

& **Nadia Micali**, MD, PhD, FAED

**2.1: Dynamic Interplay Among Eating Disorder Symptoms in a Transdiagnostic Sample of Treatment-Seeking Youth: Further Evidence for the Importance of Shape- and Weight-Related Concerns**

**Andrea B. Goldschmidt**, PhD, Brown Medical School/ The Miriam Hospital, Providence, Rhode Island

**Ross D. Crosby**, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota

**Li Cao**, MS, Neuropsychiatric Research Institute, Fargo, North Dakota

**Markus Moessner**, DiplPsych, University Hospital Heidelberg, Heidelberg, Heidelberg

**Kelsie T. Forbush**, PhD, University of Kansas, Lawrence, Kansas

**Erin C. Accurso**, PhD, University of California, San Francisco, San Francisco, California

**Daniel Le Grange**, PhD, University of California, San Francisco, San Francisco, California

Classifying eating disorders (EDs) in children and adolescents is challenging. In light of developmental considerations and high rates of diagnostic crossover, it is possible that the diagnostic boundaries between specific types of EDs are arbitrary. Understanding the dynamic interplay among ED symptoms within and between diagnostic categories may be useful for clarifying which core ED symptoms contribute to, and maintain, ED psychopathology in youth. Network analysis is an innovative statistical approach that has recently been used to understand which symptoms contribute most strongly to psychopathological disorders by identifying interrelationships among symptoms. We utilized network analysis to investigate associations among ED symptoms in a transdiagnostic sample of 629 treatment-seeking children and adolescents (90.3% female), aged 6-18 years (M age=15.4±2.2 years). An undirected, weighted network of ED symptoms was created using behavioral and attitudinal items from the Eating Disorder Examination (EDE) and the R package ggraph. Symptoms that reflected dissatisfaction with shape and weight were most strongly associated with other symptoms in the network. Empty stomach emerged as an important “bridge” between symptoms, and had close connections to all other ED symptoms in the network. Importantly, binge eating and compensatory behaviors were strongly connected to one anbut not with other symptoms in the network, which is consistent with previous research in adults. Taken together, results suggested that among children and adolescents presenting for ED treatment, shape- and weight-related concerns play a key role in the psychopathology of EDs, which supports cognitive-behavioral theories of ED onset and maintenance. Clinical interventions should target these symptoms early in treatment so as to achieve the greatest impact on other ED features.

**2.2: “I put my trust in them.” How Adolescents and their Parents Respond and Change During Family Based Treatment—A Grounded Theory**

**Andrew Wallis**, MFT, Eating Disorder Service, The Children's Hospital, Westmead, Westmead, New South Wales

**Paul Rhodes**, MSW, School of Psychology, University of Sydney, Sydney, New South Wales

**Sloane Madden**, PhD, FAED, Eating Disorder Service, The Children's Hospital, Westmead, Westmead, New South Wales

**Jane Miskovic-Wheatley**, DPsych, Eating Disorder Service, The Children's Hospital, Westmead, Westmead, New South Wales

**Stephen Touyz**, PhD, FAED, School of Psychology, University of Sydney, Westmead, New South Wales

The aim of this study was to understand the impact of Family Based Treatment (FBT) on interpersonal and intrapersonal relationships, and investigate the process of relational change during FBT. Participants were 16 adolescents and their parents who had participated in a larger randomised control trial where manualised FBT was provided after medical stabilisation in a specialist inpatient eating disorder program. All participants had DSMIV diagnosed Anorexia Nervosa. This qualitative study used constructivist grounded theory to analyse data. Adolescents and their parents were interviewed separately at least 6 months after their 20th session of FBT. Results indicated that interpersonal and intrapersonal change occurred for both adolescents and their parents across the course of treatment. The core theme that emerged from the data was relational containment indicating that a combination of treatment system therapy process and FBT tenets contained the parents, allowing them to interact with their adolescent in a more attuned and confident way, leading the adolescents to ultimately feel more secure due to increased trust and communication. Both adolescents and parents described improved interpersonal relationships after treatment for the family as a whole with adolescents also describing an improved sense of self. These results provide an important framework for understanding some of the relational processes that may underpin FBT working effectively. The findings of this study are synonymous with how parents provide a secure base in any time of crisis for their child, and indicate that FBT’s initial focus and treatment sequence can not only restore physical health but reestablish and improve normal developmental processes after the crisis of being unwell with Anorexia Nervosa. Future directions for research are discussed and implications for treatment development suggested.
2.3: The Impact of an Intensive FBT Intervention on Caregiver Variables in Medically Hospitalized Youth with Restrictive Eating Disorders

Abigail Matthews, PhD, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio
Claire Peterson, PhD, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio
Laurie Mitani, MD, Cincinnati Children's Hospital Medical Center, Cincinnati, Ohio

The efficacy of family-based treatment (FBT) interventions for medically hospitalized youth with restrictive eating disorders (ED) has not been evaluated. This pilot study examined the impact of a brief FBT protocol on variables associated with a caregiver's ability to implement FBT. Furthermore, it presented a unique opportunity to assess the characteristics of newly diagnosed youth requiring medical stabilization secondary to their ED, as well as 3- and 6-month follow-up weight data. The goals of this study were to: 1) assess parental self-efficacy and understanding about ED, pre- and post- an intensive FBT intervention; 2) examine the characteristics of medically hospitalized youth with newly diagnosed restrictive ED; and 3) assess 3- and 6-month weight gain following discharge. Forty-three adolescents with newly diagnosed AN (65.1%), atypical AN (30.2%), and ARFID (4.7%), and their primary caregivers, completed a 4-session FBT intervention. Mean admitting BMI was 16.94 (SD=1.7) and low heart rate was 38.6 (SD=6.8). Average length of stay was 13.22 days (SD = 7.4), with 17.1% requiring an admission greater than 20 days. Following our intervention, parental understanding about ED and caregiver self-efficacy related to caring for their child improved significantly (t=7.031, p<.001; t=-5.95, p<.001). When examining pre-intervention parental self-efficacy, admitting BMI, age, EDE-Q Global scores, and parental understanding about the illness, parental understanding of the illness was the only predictor to contribute significant, unique variance to post-intervention parental self-efficacy ($R^2 = .31$, $p < .05$; $\beta = .39$, $p < .05$). Mean BMI significantly increased from baseline to 3-month follow up ($t$ from m = 16.88 to m = 19.03; $t = 8.82$, $p < .001$) and from 3- to 6-month follow up ($t$ from m = 19.12 to m = 20.06; $t = 4.36$, $p < .001$). Moreover, at 6-month follow-up, 36.7% of our sample had been readmitted for a medical admission or had received inpatient or partial psychiatric hospitalization for ED symptoms. Preliminary findings from this ongoing study have implications for the use of an intensive FBT intervention during medical hospitalizations for restrictive ED and provide valuable information about presenting characteristics and trajectories for newly diagnosed youth with medical complications.

2.4: The Relative Importance of Peer Network and School Environments for Weight Perception and Dieting Behaviors in Youth

Tracy Richmond, MD, MPH, Boston Children's Hospital, Boston, Massachusetts
Carly Milliren, MPH, Boston Children's Hospital, Boston, Massachusetts
Kendrin Sonneville, PsyD, RD, University of Michigan School of Public Health, Ann Arbor, Michigan
Clare Rosenfeld Evans, ScD, University of Oregon, Eugene, Oregon

We aimed to determine the relative importance longitudinally of peer networks and the school environment on weight perception and dieting behaviors in young adulthood. Using data from Waves I and III of the National Longitudinal Study of Adolescent to Adult Health (Add Health), our outcome was reporting dieting to lose weight or keep from gaining weight in the past 7 days and accuracy of weight perception (self-reported weight perception compared to objective weight categories) at Wave III. We applied a multilevel modularity maximization algorithm for social network community detection in sociocentric networks constructed from self-reported friendship nominations resulting in 16,735 participants in 1,503 distinct network communities nested within 125 schools. We used multilevel logistic regression to examine clustering of Wave III weight perception and dieting behavior by school and network communities in null models (no predictors) as well as models adjusting for individual demographics. The average age in the sample at Wave I was 16.2 (SD 1.7) years; 51% of participants were female, 52% non-Hispanic White, and 25% had overweight/obesity. Thirteen percent of participants reported dieting behaviors in the past week; 48% were inaccurate in their weight perception with 42% underestimating their weight. In null models, the peer network contributed substantially more than school networks contributed substantially more than four times as much to the variance in Wave III dieting as the school environment ($\sigma^2_{\text{sch}}=0.10$; $\sigma^2_{\text{network}}=0.45$); similar patterns were seen in weight perception ($\sigma^2_{\text{sch}}=0.01$; $\sigma^2_{\text{network}}=0.05$). This pattern held in models adjusting for age, sex, and race/ethnicity/dieting ($\sigma^2_{\text{sch}}=0.07$; $\sigma^2_{\text{network}}=0.35$; weight perception: $\sigma^2_{\text{sch}}=0.01$; $\sigma^2_{\text{network}}=0.05$). Peer networks had large and sustained contributions to variability in weight perception and dieting behaviors; peer networks contributed substantially more than school environments. Interventions targeted at preventing weight misperception and adoption of dieting behaviors should include peer-focused components.
2.5: Do Disordered Eating Behaviours in Girls Vary with Different School Characteristics? A UK Cohort Study

Helen Bould, BA, MA, MRCPsych; BM BCh, University of Oxford, Oxford, Oxfordshire
Bianca De Stavola, PhD, London School of Hygiene and Tropical Medicine, London, UK
Glyn Lewis, MRCPsych, PhD, UCL, London, UK
Nadia Micali, MRCPsych, PhD, UCL, London, UK

We hypothesise that rates of disordered eating behaviours will vary between schools in a large UK birth cohort. Previous work on eating disorders, disordered eating behaviours and schools has produced inconsistent results. A population study from the US found that differences in disordered eating behaviours between schools do not withstand adjustment for individual characteristics. In contrast, our previous work using Swedish record-linkage data found that rates of diagnosed eating disorders vary between schools, with higher proportions of girls and higher proportions of highly educated parents within a school being associated with greater numbers of diagnosed eating disorders. We used data from the Avon Longitudinal Study of Parents and Children (ALSPAC) to test the hypothesis that rates of self- and parent-reported disordered eating behaviours, and body dissatisfaction would cluster by school. We had complete data on disordered eating behaviours, school attended, and explanatory variables on 2146 girls at 263 schools at 14 years old; and 1769 girls in 273 schools at 16 years old. We used multilevel modelling to assess whether rates varied between schools and logistic regression to investigate the association between school characteristics and rates of disordered eating behaviours. At age 14, there was no evidence for clustering of body dissatisfaction by school, or for school characteristics being associated with body dissatisfaction. At age 16, again there was no evidence for clustering of disordered eating behaviours, but all girls schools had higher rates of disordered eating behaviours, whilst schools with higher academic results had lower rates of self-reported fasting and disordered eating behaviours. We found no evidence to support our hypothesis that levels of eating disorder symptoms vary between individual schools in England. However, there was evidence that rates of disordered eating behaviours may be higher in all girls schools, and in schools with lower academic performance.

2.6: Leave Me Alone, Help Me Recover: Adolescent Impressions of Family Therapy

Erin Parks, PhD, UC San Diego, San Diego, California
Anne Cusack, PsyD, UC San Diego, San Diego, California

While Family Based Therapy (FBT) remains the gold-standard treatment for adolescent eating disorders, one barrier to parents initiating FBT is their child’s objection to parental involvement and the parents’ subsequent fear of harming parent-child relationships. This mixed-method study examined adolescents’ impressions of parental involvement and parent-child relationships throughout FBT. Participants were 29 adolescents who had participated in family-based partial hospitalization (PHP) and intensive outpatient (IOP) eating disorder treatment. All participants completed a Likert scale survey and answered open-ended writing prompts on their impressions of family involvement in their eating disorder treatment. Analyses demonstrated that adolescents have significantly (p < .001) more positive impressions of family involvement post-treatment when compared to pre-treatment. This small, preliminary study showed that although adolescents are typically resistant to family involvement at the beginning of treatment, they generally view family involvement more favorably at treatment completion.

Topic: Neuroscience I
Club E, First Floor
Co-Chairs: Laura Berner, PhD & Stefan Ehrlich, MD, PhD

3.1: Novel and Ultra-Rare Damaging Variants in Neuropeptide Signalling are Associated with Disordered Eating Behaviors

Michael Lutter, MD, PhD, Eating Recovery Center, Plano, Texas

Eating disorders develop through a combination of genetic vulnerability and environmental stress, however the genetic basis of this risk is unknown. To understand the genetic basis of this risk, we performed whole exome sequencing on 95 unrelated individuals with eating disorders (39 restricted-eating and 56 binge-eating) to identify novel damaging variants. Candidate genes with an excessive burden of predicted damaging variants were then prioritized based upon an unbiased, data-driven bioinformatic analysis. One top candidate pathway was empirically tested for therapeutic potential in a mouse model of binge-like eating. An excessive burden of novel damaging variants was identified in 157 genes in the restricted-eating group and 243 genes in the binge-eating group. This list is significantly enriched (OR=4.6, p<0.0001) for genes involved in neuropeptide/neurotrophic pathways implicated in appetite regulation, including neuropeptide Y, glucagon-like peptide 1- and BDNF-signaling. Administration of the glucagon-like peptide 1 receptor agonist exendin-4 significantly reduced food intake in a mouse model of binge-like eating. These findings implicate ultra-rare and novel damaging variants in neuropeptide/neurotrophic factor signaling pathways in the development of eating disorder behaviors and identify glucagon-like peptide 1 receptor agonists as a potential treatment for binge eating.
3.2: White Matter Alterations in Eating Disorders: Evidence from Voxel-Based Meta-Analysis and Systematic Review

Manuela Barona, BSc, MSc, University College London, UK

Identification of white matter differences in anorexia nervosa (AN) is a necessary step in order to better understand the underlying brain abnormalities in AN and target more effective treatments. However, little research has been done in this area and it has not yet yielded robust conclusions. The aim of this meta-analysis is to report white matter differences in women with AN compared to healthy controls. A comprehensive literature search was conducted in 2016 in order to identify studies comparing fractional anisotropy (FA) (the most widely used measure of white matter integrity) between patients with AN and controls. Results from the identified studies were combined to identify white matter differences using effect size-scaled differential mapping (AES_SDM) meta-analysis in patients with AN (N = 138) compared to healthy controls (N = 141). A significant decrease in FA was identified in two posterior areas of the corpus callosum (CC) and one area in the pons. One area of increase FA was also found in the right cortico-spinal projections. Subgroup analyses revealed two specific areas in which we found decreased FA in adults with AN (right caudate nucleus and CC) as well as three specific areas in those with an active disorder (CC, pons, cortico-spinal projections and right anterior-thalamic projections). The areas identified have been found to be relevant for image perception and emotion and reward processing, thus might be playing an important role in the development and/or maintenance of AN.

3.3: Positron Emission Tomography Correlates of Outcome at 1 Year Follow up in Deep Brain Stimulation for Anorexia Nervosa

D. Blake Woodside, MD, Toronto General Hospital, Toronto, Ontario
Nir Lipman, MD, Toronto Western Hospital, Toronto, Ontario
Eileen Lam, BSc, Toronto General Hospital, Toronto, Ontario
Andres Lozano, MD, Toronto Western Hospital, Toronto, Ontario

This presentation presents 1 year follow up data on Positron Emission Tomography (PET) in a sample of 16 subjects who underwent Deep Brain Stimulation (DBS) for severe Anorexia Nervosa (AN). Clinical and psychometric data on this sample have been presented previously. Subjects enrolled in our DBS trial underwent metabolic brain imaging using FDG-PET at baseline, 6 and 12 months. Changes in cerebral glucose metabolism was compared from baseline to 6 to 12 months. Findings reported are significant at a t-threshold greater than 3.51(z>2.98, p<0.0029). Comparisons of 12 months to baseline showed decreases in metabolism in the superior frontal gyrus, left middle frontal gyrus, right anterior cingulate gyrus, subcallosal gyrus left caudate, bilateral putamen, bilateral thalamus (pulvinar), right medial globus pallidus and cerebellum (bilateral culmen, tuber and inferior semi-lunar lobule and left tonsil). Increases in metabolism were observed in posterior cortical regions including the right parahippocampal gyrus and middle temporal gyrus, and left inferior parietal lobule. The comparison of twelve months to six months showed greater decreases in metabolism over the course of DBS in left medial frontal gyrus, left anterior cingulate gyrus, and left globus pallidus. Greater increases in metabolism over time were observed in left superior temporal gyrus, and left inferior parietal lobule. Our current results extend our original findings. Activity within and immediately adjacent to the DBS target, the subcallosal and anterior cingulate, was significantly reduced with chronic stimulation, and parietal structures including the supramarginal gyrus and cuneous showed significant hyperactivity with stimulation. Both the cingulate and the parietal lobe have been repeatedly implicated in AN circuit models. The cingulate is known to play a role in affective processing and the assignment of reward value to external stimuli, both processes known to be affected in AN patients. There are further direct anatomic projections from the SCC, along the anterior and dorsal cingulate, to the parietal lobe, suggesting in our study that a highly focal intervention can have a broad influence on neural circuits downstream from the DBS target in key AN-relevant structures.

3.4: White Matter Connectivity Strength in Adolescents with Anorexia Nervosa Across Taste Reward Pathways and During Weight Recovery

Brogan Rossi, BS, University of Colorado Denver, Aurora, Colorado
Megan Shott, BS, University of Colorado Denver, Aurora, Colorado
Marisa DeGuzman, BA, BS, Student, University of Colorado Denver, Aurora, Colorado
Tamara Pryor, PhD, FAED, Eating Disorder Center of Denver, Denver, Colorado
Guido Frank, MD, University of Colorado Denver, Aurora, Colorado

Anorexia nervosa (AN) is characterized by food restriction and severe underweight, and altered brain reward pathways could contribute to those behaviors. Here we tested whether white matter connectivity in adolescent AN is altered and whether weight recovery is associated with normalization of those fibers. We recruited 34 adolescents with AN and 33 healthy control adolescents (HC) who completed one diffusion weighted brain scan at beginning of treatment. Sixteen adolescents in each group completed two imaging sessions. Probabilistic fiber tractography was computed for fiber paths between brain reward circuit regions. A repeated measures ANOVA (multivariate Wilks lambda<0.001, p<0.012) indicated a significant connection strength interaction for brain scan by group for the right sided pathways basolateral amygdala
to anterior cingulate (p<0.038), posterior insula to prefrontal cortex (p<0.027) and on the left from posterior insula to prefrontal cortex (p<0.003), medial orbitofrontal cortex (p<0.042) and middle orbitofrontal cortex (p<0.008), from anteroverentral insula to caudate body (p<0.038) and orbitofrontal cortex gyrus rectus to caudate head (p<0.05). Post hoc analyses indicated that at scan 2 connection strength was smaller in the AN group compared to controls for the pathway left anteroverentral insula to caudate body, but greater in AN compared to controls from left gyrus rectus to the caudate head. These results indicate that white matter connectivity changes during weight restoration in adolescent AN differently compared to healthy controls in a comparable time frame, with both connection strength increases and decreases in the AN group. These are preliminary results and we are currently collecting a larger sample. Nevertheless, the results indicate dynamic changes during recovery from AN in WM connectivity. Larger samples will test relationships with behavioral variables and whether connectivity strength is related to functional or effective connectivity.

3.5: Subliminal and Supraliminal Processing of Reward-Related Stimuli in Anorexia Nervosa

Ilka Boehm, DiplPsych, Technische Universität Dresden, Dresden, Saxony
Joseph A. King, PhD, Technische Universität Dresden, Dresden, Saxony
Fabio Bernardoni, PhD, Technische Universität Dresden, Dresden, Saxony
Daniel Geisler, Dipl.-Inf, Technische Universität Dresden, Dresden, Saxony
Maria Seidel, MSc, Technische Universität Dresden, Dresden, Saxony
Franziska Ritschel, DiplPsych, Technische Universität Dresden, Dresden, Saxony
Thomas Goschke, PhD, Technische Universität Dresden, Dresden, Saxony
John-Dylan Haynes, PhD, Charité Universitäts-Medizin, Berlin, Saxony
Veit Roessner, MD, Technische Universität Dresden, Dresden, Saxony
Stefan Ehrlich, MD, Technische Universität Dresden, Dresden, Saxony

Previous studies have highlighted the role of the brain reward and cognitive control systems in the etiology of anorexia nervosa (AN). In attempt to disentangle the relative contribution of these systems to the disorder, we used functional magnetic resonance imaging (fMRI) to investigate hemodynamic responses to reward-related stimuli presented both subliminally and supraliminarily in acutely underweight AN patients and age-matched healthy controls (HC). fMRI data were collected from a total of 35 AN patients and 35 HC while they passively viewed subliminally and supraliminarily presented streams of food, positive social and neutral stimuli. Activation patterns of the group * stimulation condition * stimulus type interaction effect were interrogated to invest potential group differences in processing different stimulus types under the two stimulation conditions. Moreover, changes in functional connectivity were investigated using the generalized psychophysiological interaction approach. AN patients showed a generally increased response to supraliminarily presented stimuli in a region of lateral prefrontal cortex, the inferior frontal junction (IFJ), but no alterations within the reward system. Increased activation during supraliminal stimulation for food stimuli was observed in the AN group in the cuneus and the fusiform gyrus/parahippocampal gyrus. No group difference was found in respect of the subliminal stimulation condition and functional network connectivity. Increased IFJ activation in AN during supraliminal stimulation may indicate hyperactive cognitive control, which resonates with clinical presentation of excessive self-control in AN patients. Increased activation to food stimuli in visual regions may be interpreted in light of an attentional food bias in AN.

3.6: Macronutrient Intake Associated with Weight Gain in Adolescent Girls with Anorexia Nervosa

Traci Carson, BA, MPH, MPH (expected May 2017), University of Michigan, Ann Arbor, Michigan
Charumathi Baskaran, MD, Neuroendocrine Unit, Massachusetts General Hospital, Boston, Massachusetts

Adolescents and women with anorexia nervosa (AN) are known to severely restrict fat intake and consume high amounts of fiber. However, data are limited regarding nutrition parameters that are associated with weight gain in AN. The objective was to prospectively investigate the macronutrient composition of diet associated with weight gain in adolescent girls with anorexia nervosa. This was a prospective study of 90 girls 12-18 years old. 45 with AN and 45 healthy normal-weight controls over a 6-12-month period. Subjects completed four-day food diaries and underwent body composition assessment using dual energy x-ray absorptiometry. Weight gain was defined as a ≥10% increase in BMI from baseline. Baseline clinical characteristics did not differ between girls with AN who did not gain weight (AN-0) versus those who did (AN-1) over the following 6-12 month period with the exception of percentage of calories from proteins (p=0.02). Total caloric intake did not differ between AN-0 and AN-1 at baseline or follow up. At follow up, compared to AN-0, AN-1 consumed a lower percentage of total calories from protein (p=0.001), and a higher percentage of total calories from fat (p=0.02). Compared to AN-0, between baseline and follow up, AN-1 had a significant increase in the percentage of total calories obtained from PUFA (p=0.01). Within the AN group, BMI at follow-up was associated positively with the percentage of total calories obtained from total fat (r=0.41, p=0.005), MUFA (r=0.33, p=0.02), and PUFA (r=0.33, p=0.03) at 6/12 months, and inversely with the percentage of total calories obtained from carbohydrates (r=0.32, p=0.03) and proteins (r=0.33, p=0.03). In conclusion, consuming a greater proportion of total calories from fat may assist in weight gain in adolescent girls with AN.
Drive for muscularity (DM) is the desire individuals have to develop a muscular physique. Cross-sectional studies indicate that DM may be associated with depression, muscle dysmorphia, disordered eating and muscle-building supplement consumption, but limited research to date has examined the psychosocial and health correlates of DM in the context of large scale epidemiologic cohort data. Using data from 3,255 males (ages 18-32 years) from the 2013 and 2014 waves of a nationally representative longitudinal Growing Up Today Study, generalized estimating equations estimated correlates of DM measured in 2013, and health outcomes (depressive symptoms, overeating, binge eating, purging and dieting, binge drinking, and muscle building product use (e.g., creatine, steroids)) measured in 2014. DM was measured using the Drive for Muscularity Scale (DMS), which measures the degree of the respondents’ preoccupation with increasing their muscularity with higher scores indicating higher DM. DMS scores were entered continuously and we estimated how the odds of each outcome increased for each one unit increase of DM on the DMS. Models examining health outcomes adjusted for age, sexual orientation, weight status, education, and baseline (2013) health outcomes. DM decreased with age (β= -.0.03, 95% CI= -.03, -.02, p<0.0001). Gay and bisexual males presented with higher DM compared to heterosexual males (β=0.18, 95% CI=0.17,0.43, p<0.0001). Higher DM was associated with increased odds of exhibiting elevated depressive symptoms (OR=1.23, 95% CI= 1.05, 1.45, p<0.001), binge drinking (OR=1.21, 95% CI= 1.01, 1.44, p<0.05), dieting (OR= 1.24; 95% CI=1.07,1.44; p<.0001) and use of muscle building products (OR= 4.51; 95% CI= 3.76, 5.43; p<0.0001). Health care providers should be made aware that DM may carry adverse health risks among young adult males.

4.2: Evaluating Brief Mindfulness and Cognitive Dissonance Intervention Strategies for Increasing Resilience to the Adverse Effects of Thin-Ideal Media Exposure on Body Image and Eating Disorder Risk Factors

Melissa Atkinson, PhD, University of the West of England, Bristol, Avon, UK
Phillippa Diedrichs, PhD, University of the West of England, Bristol, Avon, UK

Media images that promote an unrealistic thin appearance ideal have a well-established negative effect on body satisfaction and other risk factors for eating disorders. Traditionally, interventions have focused on evaluating negative risk factors and have neglected a parallel goal of assessing positive factors which may promote a resilient body image. This study assessed whether brief training and practice of a cognitive technique could result in improved body appreciation and body-related psychological flexibility (Aim 1), and buffer against the effects of later media exposure (Aim 2). Undergraduate women (N= 202, Mage = 19.90, SD = 2.75) completed baseline trait and state measures of eating disorder risk and protective factors and then watched a randomly allocated 15-min training video (mindfulness, cognitive dissonance, documentary control). One week after training, participants completed a second set of trait measures, then underwent a media exposure exercise before completing a final set of state measures. After 1 week, participants in mindfulness and dissonance conditions reported higher body appreciation (d = .45 and d = .51, respectively), and lower internalisation (d = .43 and d = .44, respectively) compared to control (Aim 1). Following media exposure, mindfulness and dissonance participants reported higher state weight satisfaction (d = .43 and d = .60, respectively), and lower appearance internalisation (d = .48 and d = .62, respectively) and perceived pressures (d = .54 and d = .67, respectively) compared to control (Aim 2). Brief portable body image and eating disorder prevention interventions using both mindfulness and cognitive dissonance have the potential to produce resilience to the negative effects of idealised media images and aid in reducing serious body image concerns and eating disorders. Future research is necessary to test mediation of proposed protective factors, and to assess the potential for longer-term resilience.

4.3: Acceptability and Feasibility of a Dissonance-Based Body Image Intervention for Girl Guides and Girl Scouts: Qualitative Results from a Dissemination and Implementation Study Across Nineteen Countries.

Nadia Craddock, BSc, EdM, Centre for Appearance Research, University of the West of England, Bristol, Bristol
Phillippa Diedrichs, PhD, Centre for Appearance Research, University of the West of England, Bristol, Avon, UK
The World Association of Girl Guides and Girl Scouts (WAGGGS), the largest youth organization globally for girls, partnered with the Dove Self-Esteem Project to implement a positive body image intervention. Free Being Me (FBM), globally. FBM was adapted from the dissonance-based eating disorder (ED) prevention intervention, The Body Project. Since 2013, FBM has been disseminated in over 120 countries to 3 million young people. This study explored key stakeholders’ views on the adoption and implementation of Free Being Me, to inform future efforts to broadly implement body image and ED prevention interventions. National team members and local group leaders (N= 40) from nineteen countries took part in semi-structured interviews. Respondents shared their views on the acceptability, appropriateness and feasibility of implementing the intervention on a local and national scale. Interviews were audio-recorded, transcribed verbatim, and analyzed thematically. FBM was perceived as a valuable, timely, and effective intervention to improve girls’ body image. The intervention reportedly had a positive impact on girls, staff and leaders, and the wider community. Leaders mostly found it easy and enjoyable to deliver. The length and mode of delivery however, were challenging for some member organizations. Consequently, leaders often adapted the programme to suit the needs of their girl guides, culture, and organizational infrastructure. WAGGGS’s global co-ordination of financial, training, and organizational support was beneficial to implementation. However, the scale of delivery required from WAGGGS was a challenge for some member organizations, and a lack of infrastructure, future funding, and workforce capacity were seen as obstacles for sustainable long-term delivery. To ensure the effectiveness and sustainability of broadly implementing evidence-based body image and ED prevention interventions, solutions for organizational and funding challenges will be essential.

4.4: Profiles of Muscularity Concerns and Muscularity-Oriented Behaviors Among French Young Women

Marilou Girard, MA, University of Toulouse, Toulouse, France
Henri Chabrol, MD, PhD, University of Toulouse, Toulouse, France
Rachel Rodgers, PhD, Northeastern University, Boston, Massachusetts

In recent years, the female appearance ideal has become increasingly toned, firm and muscular, and there is a growing evidence of the importance of muscularity in women’s body image. In addition, it has been suggested that the internalization of this female athletic ideal might be associated with a range of deleterious eating and exercising behaviors. The aim of the present study was therefore to contribute to the emerging literature on muscularity concerns by exploring the different patterns of muscularity concerns and muscularity-oriented behaviors among French young women. A sample of 492 French female college student, of mean age 20.88 (SD = 2.72), completed a questionnaire assessing sociocultural influences, internalization of appearance ideals, appearance comparison, body dissatisfaction, disordered eating symptoms, drive for muscularity and psychological functioning. A cluster analysis revealed three groups: A group with “no interest in muscularity” (59%; n = 285), a group characterized by “muscularity concerns and behaviors” (10%; n = 49) and finally, a group characterized by “muscularity concerns only” (31%; n = 152). The three cluster groups differed from each other in terms of partner pressure, interest in the media, internalization of the thin and muscular ideal, and drive for thinness, with the “muscularity concerns and behaviors” group displaying the highest means. Furthermore, perfectionism scores were higher in this cluster group compared to the two other clusters. These findings confirm that muscularity is an increasingly important dimension of women’s body image in Western contexts, and suggest that partner and media influences might contribute to the development of muscularity-oriented behaviors among young women that may be detrimental to their health. Increasing our understanding of muscularity concerns is critical with a view to informing prevention programs for body image disorders and eating disorders among young women.

4.5: Mediators of a Change in Bulimic & Muscle Dysmorphia Symptoms in The Body Project: More than Muscles

Tiffany Brown, PhD, University of California, San Diego, San Diego, California
K. Jean Forney, MS, Florida State University, Tallahassee, Florida
Dennis Pinner, BS, Florida State University, Tallahassee, Florida
Pamela Keel, PhD, Florida State University, Tallahassee, Florida

The Body Project: More than Muscles (MTM), a dissonance-based (DB) intervention, has demonstrated efficacy in reducing eating disorder risk factors (e.g., bulimic symptoms) and more male-specific risk factors for muscle dysmorphia. The present study tested whether reductions in body-ideal internalization and drive for muscularity mediated intervention effects for these outcomes. Data were drawn from a randomized controlled trial in which 99 males were randomized to either a 2-session DB intervention (n=52) or a waitlist control condition (n=47). Mediation models were conducted using bias-corrected bootstrapped confidence intervals (CIs) to test the indirect effects of condition via the posited mediating variables (change in mediator from baseline to post-intervention) on the dependent variables of interest (change in bulimic/muscle dysmorphia symptoms from baseline to 4-week follow-up). Replicating results from previous trials, body-ideal internalization partially mediated intervention effects on bulimic symptoms (CI: -0.27 to -0.28) among males. Extending these results, body-ideal internalization also partially mediated the effect of condition on muscle dysmorphia symptoms (CI: -0.37). Examining the male-specific target of drive for
muscularity, results support that drive for muscularity fully mediated condition effects on both bulimic symptoms (CI: -2.49 to -0.19) and muscle dysmorphia symptoms (CI: -12.19 to -0.46). Results are the first to demonstrate that targeting internalization of the male-specific muscular ideal causes reductions in both bulimic symptoms and muscle dysmorphia symptoms. Results provide preliminary support for body-ideal internalization and drive for muscularity as causal risk factors for bulimic and muscle dysmorphia symptoms among males and support male-specific theoretical models of risk for both eating and appearance-related disorders.

4.6: Challenging Fat Talk: An Experimental Investigation of Reactions to Body-Disparaging Conversations.

Suman Ambwani, PhD, Dickinson College, Carlisle, Pennsylvania
Megan Baumgardner, BA, Vanderbilt University, Nashville, Tennessee
Cai Guo, BA, Stanford University, Stanford, California
Lea Simms, BA, Dickinson College, Carlisle, Pennsylvania
Emily Abromowitz, Student, Dickinson College, Carlisle, Pennsylvania

The ‘Fat Talk Free Week’ eating disorder prevention campaign posits that ‘fat talk’ (i.e., body-disparaging/objectifying conversations) contributes to myriad negative health outcomes, a premise that has been corroborated by several experimental and correlational studies. However, two important questions remain: 1) why do people engage in these harmful conversations, and 2) could we use feminist theory to develop a feasible conversation alternative to break the cycle of fat talk? The current experimental study examined women’s responses to fat talk and feminist-based challenging fat talk scenarios through a vignette paradigm. The experimental vignettes were developed and pilot-tested with a sample of undergraduate women (N=32). Undergraduate women (N=266) at a small liberal arts college in the Northeastern United States then participated in a two-part study: In Part I, they completed online questionnaires assessing demographics, body dissatisfaction, baseline/typical fat talk engagement, feminist identification, and socially desirable responding, and in Part II (individual experimental sessions completed one week later), they viewed either the ‘fat talk’ or ‘challenging fat talk’ vignettes and then completed self-report measures assessing fat talk engagement, perceived acceptability of the vignette, social likeability of the target character, and mood. Results indicated that participants rated the ‘challenging fat talk’ scenario as more socially attractive, the target character as more likeable, and this condition yielded less negative affect and fat talk engagement. Moreover, baseline body dissatisfaction, baseline fat talk tendencies, negative affect, and low levels of feminist identification all predicted post-exposure fat talk engagement. Present findings raise important questions about social conformity and women’s fat talk engagement, and offer possibilities for attending to feminist-based conversation as complements for extant fat talk prevention efforts.

Topic: Personality and Cognition
Meeting Hall 1A, First Floor

Co-Chairs:
Melanie Brown, PhD & Joanna Steinglass, MD

5.1: Stability and Change in Personality Following Treatment

Johanna Levallius, BSc, MSc, Karolinska Institute, Stockholm
Claes Norring, PhD, Karolinska Institute, Stockholm
David Clinton, PhD, Karolinska Institute, Stockholm, Stockholm
Brent Roberts, PhD, University of Illinois, Urbana-Champaign, Illinois

There’s a growing body of evidence of the close relationship between personality and mental illness, and personality can be said to represent a transdiagnostic perspective. Little is known of the long-term relationship between eating disorder and personality as measured by the five-factor model. The aim of this study was to measure stability and change in personality following two different psychotherapies. 209 adults with eating disorder (ED) enrolled either in a four-month intensive, multimodal psychodynamic group-therapy (DAY) or four-six month internet-based supported cognitive behavioral therapy (iCBT). ED diagnosis, symptoms and personality (NEO PI-R) were assessed at baseline, termination and at 6-month follow up. Structural equation modeling was used to analyze overall change. Recovery rate was 71% in DAY and 55% in iCBT. Neuroticism decreased significantly while Extraversion, Openness and Conscientiousness increased. The two predictors, treatment and outcome, had little influence on pattern of change. At the facet-level, there was a high degree of rank-order stability (rmean = .69). Still, on average, 28% reliably changed in any given facet; and there were differences in change based on treatment and outcome. This study lends support for the possibility of personality change, emphasizes the relevance of facet-level study and that personality change play a role in recovery.

5.2: The Uncertainty Principle: A Review of Intolerance of Uncertainty in Eating Disorders

Melanie Brown, MA, PhD, Icahn School of Medicine at Mount Sinai, New York, New York, USA
Lauren Robinson, BSc, MPhil, Institute of Child Health, University College, London, UK
Giovanna Cristina Campione, PhD, Child Psychopathology Unit, Scientific Institute, IRCCS Eugenio Medea, Bosisio Parini, Milano, Italy
Kelsey Wuensch, BA, Icahn School of Medicine at Mount Sinai, New York, New York, USA
Nadia Micali, MD, PhD, Icahn School of Medicine at Mount Sinai, New York, New York, USA
Tom Hildebrandt, PsyD, Icahn School of Medicine at Mount Sinai, New York, New York, USA
Intolerance of uncertainty is a dimensional construct studied extensively in anxiety disorders that may have relevance in eating disorders as a vulnerability and underlying neurobiological mechanism. This systematic review and meta-analysis aims to synthesize the evidence of intolerance of uncertainty in eating disorders. A search of electronic databases was conducted, and manuscripts were selected. Meta-analysis utilizing the Intolerance of Uncertainty Scale (IUS) revealed that intolerance of uncertainty was significantly elevated in women with eating disorders when compared to healthy controls (SMD = 2.07, 95% CI 1.24 to 2.79, p<0.0001). Significant differences were also found when comparing women with anorexia nervosa to controls (SMD = 2.16, 95% CI 1.14 to 3.18; p < 0.0001) and women with bulimia nervosa to controls (SMD = 2.03, 95% CI 1.31 to 2.80; p < 0.0001). Findings suggest that intolerance of uncertainty might be a transdiagnostic feature of eating disorders, with particular importance in anorexia nervosa. A maladaptive cognitive style characterized by intolerance of uncertainty may represent a risk and maintenance factor for eating disorders. Evidence of a neurobiological basis for intolerance of uncertainty, assessment of the construct, and the clinical impact of intolerance of uncertainty in developing novel, targeted interventions for eating disorders will be discussed.

5.3: Exploring the Clinical and Neuropsychological Profile of a Non-Clinical Sample of ADHD Comorbid with Eating Disorders

Bruno Nazar, MSc, MD, PhD, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil

Sergeant, MSc, CPsychol, PhD, Professor, Vrije University, Amsterdam, Netherlands

Janet Treasure, OBE, MD, FRCP, FAED, Professor, King’s College London, London, UK

Paulo Mattos, MSc, MD, PhD, Professor, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil

The comorbidity of Attention Deficit/Hyperactivity Disorder (ADHD) comorbid with Eating Disorders (ED) is of interest to define a subset of patients that might have different prognosis and treatment response. Previous studies revealed that these patients present higher frequencies of other comorbid disorders and higher levels of disordered eating behaviours when compared to patients with either ED or ADHD alone. The association of ADHD with obesity has also been largely demonstrated but reasons for this association need further investigation with the presence of an ED being a possible candidate. We have investigated if subjects with ADHD+ED (n=16) differed from ADHD only (n=35) and from Controls (n = 39) in demographic measures (BMI, socioeconomical level), self report questionnaires for depression, anxiety, impulsivity and in neuropsychological tasks exploring vigilance (continuos performance test (CPT)), executive functioning (Visual and Digit Span) and decision making (Iowa Gambling Task). The ADHD+ED group had significantly (p<.001) higher weight (+13kgs; +4 BMI points) than ADHD only and Controls. Also, ADHD+ED presented a significantly (p<.001) greater number of current Hyperactive/Impulsive symptoms than ADHD only group. Finally, ADHD+ED presented significantly (p<.001) greater omission errors on the CPT and a trend (p=.053) for more disadvantageous choices on the IGT when compared to the other groups. We concluded that patients with the comorbidity ADHD+ED have higher distractibility and a poorer decision making which might impair their ED treatment. When approaching patients with ADHD+ED clinicians should consider these characteristics when using psychotherapy tools that rely on self monitoring and vigilance. ADHD patients that start to gain weight should be screened for the presence of an ED.

5.4: Attentional Bias Modification Reduces Chocolate Consumption: The Role of Habitual Craving

Eva Kemps, MPsych, PhD, BPsych&Ed, Flinders University, Adelaide, South Australia

Marika Tiggemann, BA, PhD, Flinders University, Adelaide, South Australia

Ebony Stewart-Davis, BPsych (Hons), MPsych, Flinders University, Adelaide, South Australia

High levels of food craving are characteristic of individuals who binge eat, such as those with binge eating disorder, bulimia nervosa and some obese individuals. One neglected contributing factor to this unwanted (over)consumption is attentional bias for craving-related food cues. This study examined whether attentional bias modification can reduce craving-driven consumption. Using a modified dot probe task, 176 women (Mage = 20.19 years. MBMI = 23.17 kg/m2) were trained to direct attention away from, and thus avoid, craving-related food cues (pictures of chocolate). Chocolate was chosen because it is the most commonly craved food in Western cultures. Chocolate consumption was measured by an ostensible taste test. Habitual chocolate craving was measured by the Craving sub-scale of the Attitudes to Chocolate Questionnaire. Results showed that habitual chocolate craving moderated the relationship between attentional re-training and chocolate consumption. Specifically, while individuals with low levels of chocolate craving ate less chocolate following attentional re-training, individuals with high levels of craving actually ate more. It is possible that exposure to chocolate in the taste test may have triggered a craving in individuals with high levels of chocolate craving. This suggests that more extensive re-training may be required to combat craving-driven consumption in these individuals than the single training session used here. Theoretically, the results are consistent with cognitive-motivational models of craving which hold that craving-related cognitive biases drive consumption. At a more practical level, they highlight the need to tailor cognitive bias modification protocols to accommodate diagnostic characteristics of individuals with disordered eating, such as high levels of food craving.
5.5: Enduring Changes in Decision Making in Patients with Full Remission from Anorexia Nervosa

Trevor Steward, MSc, Bellvitge University Hospital—Idibell, Ciberobn, Barcelona, Spain

Gemma Mestre-Bach, MSc, Bellvitge University Hospital—Idibell, Ciberobn, Barcelona, Spain

Zaida Agüera, PhD, Bellvitge University Hospital—Idibell, Ciberobn, Barcelona, Spain

Roser Granero, PhD, Idibell, Ciberobn Fisiopatologia Obesidad y Nutrición Idibell, Ciberobn Instituto Salud Carlos III, Barcelona, Spain

Isabel Sánchez, PhD, Bellvitge University Hospital—Idibell, Ciberobn, Barcelona, Spain

Nadine Riesco, PhD, Bellvitge University Hospital—Idibell, Ciberobn, Barcelona, Spain

Iris Tolosa-Sola, MSc, Bellvitge University Hospital—Idibell, Ciberobn, Barcelona, Spain

Francisco Tinhahones, PhD, Idibell, Ciberobn, Barcelona, Spain

Felipe F Casanueva, PhD, Idibell, Ciberobn, Barcelona, Spain

Cristina Botella, PhD, Idibell, Ciberobn, Barcelona, Spain

Rafael de la Torre, PhD, Idibell, Ciberobn, Barcelona, Spain

Jose M Fernández-Real, PhD, Idibell, Ciberobn, Barcelona, Spain

Gema Frühbeck, PhD, Idibell, Ciberobn, Barcelona, Spain

Susana Jiménez-Murcia, PhD, Bellvitge University Hospital—Idibell, Ciberobn, Barcelona, Spain

Fernando Fernández-Aranda, PhD, Bellvitge University Hospital—Idibell, Ciberobn, Barcelona, Spain

The aim of this study was to evaluate decision making performance in anorexia nervosa patients before beginning treatment and a one-year follow up. Anorexia nervosa patients (n = 42) completed the Iowa Gambling Task upon admission to a 3-month day-hospital treatment program and at a one-year follow-up. Patient Iowa Gambling Task performance was compared to age-matched controls (n = 46). Anorexia nervosa patients displayed poorer performance on the Iowa Gambling Task at admission compared to controls (p<.001). Patients with full remission (n = 31; 73.9%) at the 1-year follow-up improved Iowa Gambling Task performance (p = 0.007), and scores were similar compared to those of controls (p = 0.557). Anorexia nervosa patients with partial/no remission at follow-up (n = 11; 26.1%) did not improve Iowa Gambling Task scores (p = 0.867). These findings uphold that enduring remission from anorexia nervosa can reverse decision-making impairments, and that such impairments might be most likely explained by clinical state rather than a trait vulnerability.

5.6: Differences in the Ability to Delay Monetary Gratification Across the Eating Disorder Spectrum

Savani Bartholdy, BSc, MSc, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, UK

Samantha Rennalls, BSc, MSc, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, UK

Iain Campbell, DSc, Institute of Psychiatry, Psychology and Neuroscience, Kings College London, London, UK

Ulrike Schmidt, MD, PhD, FRCpsych, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, UK

Owen O’Daly, PhD, Institute of Psychiatry, Psychology & Neuroscience, King’s College London, London, UK

Bulimia nervosa (BN) and binge eating disorder (BED) have been associated with greater reward-related impulsivity, reflected by a reduced capacity to delay gratification (i.e., greater temporal discounting [TD]) whereas the opposite has been found for anorexia nervosa (AN). However, differences in TD have not yet been directly compared between eating disorders. This study is the first to investigate the capacity to delay gratification across the eating disorder spectrum and compared to healthy individuals. A total of 94 women participated in the study: 66 women meeting the DSM-V criteria for an eating disorder (28 AN, 27 BN, 11 BED) and 28 healthy women (HC). Reward-related impulsivity was assessed via self-report (Delaying Gratification Inventory [DGI] questionnaire) and a hypothetical monetary TD task. Clinical variables were assessed using the Eating Disorder Examination Questionnaire (EDE-Q), and the Depression, Anxiety and Stress Scale (DASS-21). A main effect of group was observed for both TD performance and self-reported reward-related impulsivity on the DGI. Self-reported impulsivity was greater in both women with BED and BN compared to women with AN and healthy women, higher rates of TD were only observed in women with BN compared to AN, implicating the importance of perception of impulsivity or loss of control in BED. Moreover, a poorer self-reported capacity to delay gratification was associated with greater illness severity and frequency of binge eating. BMI and mood (DASS-21 total scores) significantly correlated with TD and DGI measures, however including these variables as nuisance covariates did not influence the result. These findings hold implications for the treatment of altered behaviour control in the context of different eating disorder diagnoses.
Research suggests that individuals with sweet taste preference are at greater risk for binge eating, however, it is unknown whether sweet liking affects health outcomes and eating behaviors in those with binge-eating disorder (BED). Forty-one adults (85.3% female, 82.9% White) with BED completed a sweet taste test, including ratings of pleasantness of five solutions (0.05M to 0.83M), and self-report measures of eating disorder behaviors and food cravings. A subset of participants completed an oral glucose tolerance test (OGTT; N=21) and a 24-hr dietary recall (N=26). ANCOVA tests were used to compare those who were sweet likers (SL [N=18]; rated 0.83M most pleasant) vs. sweet dislikers (SDL[N=23]; all others) on outcome variables; a Fischer’s exact test was used to compare these groups on diabetes status. Small (.01), medium (.06), and large (.14) effect sizes (η²) were found. All group differences in food cravings were based on diabetes status. Small (.01), medium (.06), and large (.14) effect sizes (η²) were found. Based on diabetes status (no, pre-, diabetes). Though preliminary due to limited sample size, results indicate that individuals who prefer sweet taste and have BED may be at increased risk for binge-eating, higher intake of macronutrients, and diminished insulin sensitivity. Understanding the role of sweet liking may contribute to a reduction in medical consequences in this population.

6.1: Sweet Taste Preference in Binge-Eating Disorder: A Preliminary Investigation

Erica Goodman, BA, University of North Dakota, Grand Forks, North Dakota
Lauren Breithaupt, MA, George Mason University, Fairfax, Virginia
Hunna Watson, PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
Christine Peat, PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
Jessica Baker, PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
Cynthia Bulik, PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
Kim Brownley PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina.

Bariatric surgery (BS) has been recognized as a gold standard treatment for obesity. Nevertheless, among those who underwent surgery, there is a significant group of individuals who exhibits weight regain (WR). Several factors are proposed to contribute to a poorer prognosis, including the presence of general and eating psychopathology. The objective of this study was to developed a systematic review of the literature of the relationship between psychiatric comorbidity and WR in obese individuals submitted to BS. This review was made according to PRISMA guidelines. A structured search, using a previous discussed set of keywords, was done in several databases (PubMed, Web of Science, Cochrane, Scopus and PsycoINFO), looking for studies that investigated the association between eating disorders and general mental illnesses and WR in patients submitted to BS with at least 18 months of follow-up. A total of 2311 articles was first screened. After the stepwise selection procedure, using specific inclusion criteria, by two independent reviewers, 15 articles were included in the review. Although several authors examined specific causes for insufficient weight loss, only few studies focused on factors that lead to WR in the post-bariatric period. Some limitations of the studies included the absence of a common definition of clinically significant WR, the lack of structured diagnosis of mental disorders and the small sample sizes. Nevertheless, the majority of studies found an association between the presence of psychopathology and WR. Specifically, post-bariatric patients who presented with WR exhibits higher rates of binge eating disorder and eating behaviors (grazing, loss of control and pickling and nibbling). This review outlined the potential re-emergence of maladaptive eating behavior for those submitted to BS and its impact on the long-term weight maintenance. However, a consensus should be discussed in order to define how to address WR in clinical studies.

6.2: Bariatric Patients, Weight Regain and Psychiatric Comorbidities: Systematic Review

Maria Francisca Firmino Prado Mauro, MD, Student, Instituto de Psiquiatria—Universidade Federal do Rio de Janeiro, Brazil, APO AE, Rio de Janeiro
Marcelo Papelbaum, MD, PhD, Instituto de Psiquiatria—Universidade Federal do Rio de Janeiro, Brazil, APO AE, Rio de Janeiro
José Carlos Appolinario, MD, PhD, Instituto de Psiquiatria—Universidade Federal do Rio de Janeiro, Brazil, APO AE, Rio de Janeiro
Marco Antônio Alves Brasil, MD, PhD, Universidade Federal do Rio de Janeiro UFRJ, Rio de Janeiro, APO AE, Brazil
João Regis Ivar Carneiro, MD, PhD, Universidade Federal do Rio de Janeiro UFRJ, Rio de Janeiro, APO AE, Brazil

Bariatric surgery (BS) has been recognized as a gold standard treatment for obesity. Nevertheless, among those who underwent surgery, there is a significant group of individuals who exhibits weight regain (WR). Several factors are proposed to contribute to a poorer prognosis, including the presence of general and eating psychopathology. The objective of this study was to developed a systematic review of the literature of the relationship between psychiatric comorbidity and WR in obese individuals submitted to BS. This review was made according to PRISMA guidelines. A structured search, using a previous discussed set of keywords, was done in several databases (PubMed, Web of Science, Cochrane, Scopus and PsycoINFO), looking for studies that investigated the association between eating disorders and general mental illnesses and WR in patients submitted to BS with at least 18 months of follow-up. A total of 2311 articles was first screened. After the stepwise selection procedure, using specific inclusion criteria, by two independent reviewers, 15 articles were included in the review. Although several authors examined specific causes for insufficient weight loss, only few studies focused on factors that lead to WR in the post-bariatric period. Some limitations of the studies included the absence of a common definition of clinically significant WR, the lack of structured diagnosis of mental disorders and the small sample sizes. Nevertheless, the majority of studies found an association between the presence of psychopathology and WR. Specifically, post-bariatric patients who presented with WR exhibits higher rates of binge eating disorder and eating behaviors (grazing, loss of control and pickling and nibbling). This review outlined the potential re-emergence of maladaptive eating behavior for those submitted to BS and its impact on the long-term weight maintenance. However, a consensus should be discussed in order to define how to address WR in clinical studies.

6.3: Reliability and Validity of the Stanford Integrated Psychosocial Assessment for Bariatric Surgery

Lianne Salcido, BA, PGSP-Stanford, PsyD Consortium, Palo Alto, California
Alina Kurland, MS, PGSP-Stanford PsyD Consortium, Palo Alto, California
Emerging evidence has shown that disordered eating behaviors play a role in suboptimal weight loss outcomes among bariatric surgery patients; however, there have been few studies indicating reliable behavioral variables that predict which patients are most at risk. Existing measures are limited by insufficient characterization of disordered eating (e.g. binge eating) and other psychosocial behaviors. We developed the Stanford Integrated Psychosocial Assessment for Bariatric Surgery (SIPABS)—an 18-item screening tool spanning 4 psychosocial domains that demonstrate associations to post-surgical outcomes. The SIPABS was applied to pre-surgical evaluations within the clinical charts of 60 patients who had bariatric surgery in 2012. Review was conducted by 4 raters (2 psychologists and 2 doctoral students). Inter-rater reliability was calculated averaging Cohen’s Kappa (K) for each rater set in the 4 domains: 1) Readiness for Surgery (K=.6, p= .36); 2) Availability and Functionality of Social Support (K=.43, p = .26); 3) Psychopathology/Disordered Eating (K=.65, p<.001) 4) Coping (K=.61, p< .001). Moderate to good inter-rater reliability was found. Predictive validity using linear regression revealed that higher SIPABS scores, using all 18 items, significantly predicted suboptimal weight loss at 2 years post surgery (F=2.615, p=.01). Specific items of ‘Understanding of the Bariatric Surgery Process’ and ‘Presence of Psychopathology’ significantly predicted worse weight loss outcomes. Pearson’s correlations showed compliance (r=.413, p=.007), availability of social support (r=.413, p=.007), coping with stress (r=.352, p=.002) and eating disorder psychopathology (r=.385, p=.012) significantly correlated to weight loss outcomes 2 years post surgery. Findings suggest associations between disordered eating, behavioral factors, and poor post-surgical outcomes. Early identification of risk due to disordered eating and other behaviors may allow for targeted interventions.

**6.4: Comparative Effectiveness of Treatments for Binge-Eating Disorder: Systematic Review and Network Meta-Analysis**

Christine Peat, PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
Nancy Berkman, PhD, RTI International, Durham, North Carolina
Kathleen Lohr, PhD, RTI International, Durham, North Carolina
Kimberly Brownley, PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
Carla Bann, PhD, RTI International, Durham, North Carolina

Katherine Cullen, BA, RTI International, Durham, North Carolina

The Agency for Healthcare Research and Quality 2016 systematic review on the management and outcomes for binge-eating disorder (BED) revealed several efficacious treatment options including both pharmacological and psychological interventions. In the current review, we provide information on the comparative effectiveness of these treatments. We searched for BED treatment articles published from inception through mid-November 2015 and updated the MEDLINE® search through mid-May 2016. We selected only studies meeting predetermined inclusion and exclusion criteria and used the Cochrane risk-of-bias tool to assess the risk of bias of the included studies. In all, 30 trials (12 comparing pharmacological interventions and 18 comparing psychological interventions) revealed 27 treatment comparisons. We were able to evaluate 1 pharmacological comparison (second-generation antidepressants [SGAs] vs lisdexamfetamine) with network meta-analysis; we evaluated the 26 comparisons of psychological interventions – primarily cognitive behavioral therapy (CBT) and behavioral weight loss (BWL) – qualitatively. Across these treatment comparisons, only 3 significant differences emerged: lisdexamfetamine was better for increasing binge abstinence than SGAs; therapist-led CBT was better for reducing binge-eating frequency than therapist-led BWL, but BWL was better for reducing weight. Thus, both pharmacological and psychological interventions are effective at reducing binge eating and improving associated outcomes; however, few differences between these treatments emerged. The current results suggest that patients and clinicians can make informed choices among several effective treatment options (e.g., CBT, lisdexamphetamine) depending on patient preference and treatment goals. Such information can empower individuals in making decisions about treatment; however, additional research is needed to determine which interventions might be more effective for individual patients with BED.

**6.5: Binge Eating Disorder and Food Addiction: Effects on Weight Loss and Attrition during Behavioral Obesity Treatment**

Ariana Chao, APRN-BC, PhD, University of Pennsylvania, Philadelphia, Pennsylvania
Jena Shaw, PhD, University of Pennsylvania, Philadelphia, Pennsylvania
Zayna Bakizada, BA, University of Pennsylvania, Philadelphia, Pennsylvania
Najj Alamuddin, MD, University of Pennsylvania, Philadelphia, Pennsylvania
Rebecca Pearl, PhD, University of Pennsylvania, Philadelphia, Pennsylvania
Christina Hopkins, BS, University of Pennsylvania, Philadelphia, Pennsylvania
There is a lack of consensus about whether individuals with binge eating disorder (BED) or food addiction (FA) benefit less from behavioral weight loss (BWL) relative to those without these conditions. This study examined differences in weight loss and attrition between participants with and without BED participating in a 14-week BWL intervention for obesity. We also explored the effects of meeting criteria for FA or not. Data were from 178 participants (mean age=44.2±11.2 yrs; baseline BMI= 40.9±5.9 kg/m2; 88.2% female; 70.8% Black) who followed a 1000-1200 kcal/d diet and attended weekly group lifestyle modification sessions. BED diagnosis was assessed using the Questionnaire on Eating and Weight Patterns-5 and confirmed by clinician interview. Participants completed the Yale Food Addiction Scale and weight was measured weekly. We used an intention-to-treat analysis to compare reductions in initial weight among participants with and without BED or FA. Analyses were conducted adjusting for demographic factors and baseline weight. Six (3.4%) participants met criteria for BED. Percent weight loss did not differ between individuals with (9.4±1.59%) and without BED (9.16±0.30%; p=0.88). Two of the 6 (33.3%) participants with BED dropped out of the program compared to 26 of the 172 (15.1%) participants without BED (p=0.24). Twelve (6.7%) participants met criteria for FA. Individuals with FA lost significantly less of their initial weight (6.85±1.17%) compared to those without FA (9.32±0.30%; p=0.04). Four of the twelve participants (33.3%) with FA did not complete the program, compared to 24 of the 162 (14.5%) participants without FA (p=0.10). Our results suggest that BWL produces similar weight loss effects among individuals with and without BED. Individuals who meet criteria for FA may need additional support during BWL treatment.

6.6: Validity of DSM-5 Indicators of Binge Eating Episodes in Obese Adults: An Ecological Momentary Assessment Study

Andrea B. Goldschmidt, PhD, Alpert Medical School of Brown University, Providence, Rhode Island
Ross D. Crosby, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Li Cao, MS, Neuropsychiatric Research Institute, Fargo, North Dakota
Stephen A. Wonderlich, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota
Carol B. Peterson, PhD, University of Minnesota, Minneapolis, Minnesota
James E. Mitchell, MD, Neuropsychiatric Research Institute, Fargo, North Dakota
Scott G. Engel, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota

DSM-5 criteria for binge eating disorder (BED) include 5 features of binge eating episodes which are intended to aid diagnosticians in determining the presence and severity of loss of control over eating. The validity of these features is currently unclear. We examined the extent to which DSM-5 indicators predicted self-reported binge eating (i.e., endorsing both overeating and loss of control) among 50 obese adults participating in an ecological momentary assessment (EMA) study. EMA timestamps were used to approximate “eating much more rapidly than usual” (i.e., eating episodes ≤-1 SD from each participant’s average eating episode duration). Self-reported pre-episode hunger levels, post-episode fullness, pre-episode feelings of shame + eating alone, and post-episode feelings of disgust, depression, and/or guilt were used to approximate the remaining 4 features: “eating until uncomfortably full,” “eating large amounts of food when not physically hungry,” “eating alone due to embarrassment over how much one is eating,” and “feeling disgusted with oneself, depressed, or very guilty after overeating,” respectively. Individual regression models, adjusted for body mass index and BED status (full- or subthreshold: n=8; no BED: n=42), revealed that binge eating was associated with lower pre-episode hunger ratings (B=0.22; S.E.=0.08; p=.004; higher post-episode fullness ratings (B=0.62. S.E.=0.12; p<.001); a greater likelihood of reporting moderate to extreme disgust, depression, and/or guilt after eating (B=1.26; S.E.=0.24; p<.001); Binge eating was not associated with eating more rapidly than usual (p=.85). Overall, findings provide support for the validity of most DSM-5 indicators in relation to the momentary experience of binge eating in the natural environment, although the utility of the rapid eating criterion is questionable.
items related to risk factors for eating disorders. Four subscales: “restriction” (R), “eating concern” (EC), “shape” and “weight” concerns (SC and WC); were assessed, as well as “binge eating” behaviors (BE) and “inappropriate compensation behaviors: purging behaviors such as self-induced vomiting (V), laxative abuse (LA), and Fasting. The prevalence of eating disorder symptoms scoring higher than 4.0 increased from 0.5% to 0.9% for R (p=<0.07), 0.1% to 0.3% for EC (p=<0.13), 0.8% to 1.4% for SC (p=<0.03), and 0.6% to 1.3% for WC (p=<0.01). Clinically significant BE (more than four times a month) increased from 4.2% to 5.3% (p=<0.002). V from 1.6% to 2.2% (p=<0.03), LA (more than twice a month) from 1.0%, and 1.8% (p=<0.00), and Fasting from 2.8% to 3.3% (p=<0.001). However, in comparison of the two areas studied, City A showed significant increases for almost all of the subscales, BE, and compensation behaviors, along with an increase in the prevalence rate of the items related to risk factors for eating disorders. In contrast, the findings in City B did not show similar changes. Our longitudinal population study of male Japanese junior high school students indicates that the increase in prevalence over the past five years may be related to changes in the risk factors for the eating disorders of early adolescents.

7.2: Developmental Premorbid BMI Trajectories of Adolescents with Eating Disorders in a Longitudinal Population Cohort

Zeynep Yilmaz, PhD, University of North Carolina, Chapel Hill, North Carolina, USA
Nisha Gottfredson, PhD, University of North Carolina, Chapel Hill, North Carolina, USA
Stephanie Zerwas, PhD, University of North Carolina, Chapel Hill, North Carolina, USA
Cynthia Bulik, PhD, University of North Carolina, Chapel Hill, North Carolina, USA
Nadia Micali, MD, PhD, Icahn School of Medicine at Mount Sinai, New York, New York, USA

Body mass index (BMI) plays a defining role in eating disorder (ED) diagnosis; however, whether child and adolescent BMI predicts later ED risk is not well understood. The present study examined whether developmental BMI trajectories represent a significant prospective risk factor for EDs. Using data from the Avon Longitudinal Study of Parents and Children (N=1839), we used subject-specific conditional growth models to describe premorbid BMI trajectories for individuals with anorexia nervosa (AN; N=261), bulimia nervosa (BN; N=333), binge eating disorder (BED; N=126), and purging disorder (PD; N=145), starting at 1.5 months and ranging to age 15.5 or 12 months prior to ED onset, whichever came first. Child and adolescent BMI was calculated for 22 time points via face-to-face assessments and maternal-report questionnaires. Self-report data on ED status were collected at ages 14, 16, and 18. Distinct developmental trajectories emerged for EDs at a young age compared with the no ED developmental trajectory. Most notably, the average growth trajectory for AN departed significantly lower than other trajectories by age 2 for females and age 7 for males (compared with no ED group: intercept=-1.72;SE=0.19) BMI units below at 100 months; slope=-1.12;SE=0.02) BMI units slower growth per month). The mean BMI trajectories for BN, BED, and PD were not statistically distinguishable from one another; they were consistently higher than the mean trajectories for AN and no ED group (compared with no ED group: intercepts range from 1.21;SE=0.12 to 1.39;SE=0.29) BMI units higher at 100 months; slope=1.2;SE=0.02 to 0.04) BMI units faster growth per month). While maternal ED status did not predict child ED, a 1 unit decrease in maternal BMI was associated with a 1.08 factor increase in the odds of developing AN, and a 1 unit increase in maternal BMI was associated with a 1.05, 1.08, and 1.13 factor increase in the odds of developing BN, BED, and PD, respectively. Taken together, our results provide important clues about the role of premorbid metabolic factors and weight in the etiology of EDs. Especially for AN, premorbid low weight may be a key biological risk factor. Observing children whose BMI trajectories persistently deviate from age norms for signs of disordered eating could potentially assist in identifying individuals at high risk for EDs.

7.3: Attachment and Hypothalamus-Pituitary-Adrenal Axis Functioning in Patients with Eating Disorders

Alessio Maria Monteleone, MD, Department of Psychiatry, Second University of Naples, Naples, Campania, Italy
Umberto Volpe, MD, PhD, Department of Psychiatry, Second University of Naples, Naples, Campania, Italy
Francesca Pellegrino, MD, Department of Psychiatry, Second University of Naples, Naples, Campania, Italy
Giovanna Fico, MD, Department of Psychiatry, Second University of Naples, Naples, Campania, Italy
Francesco Monaco, MD, Department of Psychiatry, Second University of Naples, Naples, Campania, Italy
Palmiero Monteleone, MD, Professor, Department of Medicine, Surgery and Dentistry, University of Salerno, Salerno, Italy

Body mass index (BMI) plays a defining role in eating disorder (ED) diagnosis; however, whether child and adolescent BMI predicts later ED risk is not well understood. The present study examined whether developmental BMI trajectories represent a significant prospective risk factor for EDs. Using data from the Avon Longitudinal Study of Parents and Children (N=1839), we used subject-specific conditional growth models to describe premorbid BMI trajectories for individuals with anorexia nervosa (AN; N=261), bulimia nervosa (BN; N=333), binge eating disorder (BED; N=126), and purging disorder (PD; N=145), starting at 1.5 months and ranging to age 15.5 or 12 months prior to ED onset, whichever came first. Child and adolescent BMI was calculated for 22 time points via face-to-face assessments and maternal-report questionnaires. Self-report data on ED status were collected at ages 14, 16, and 18. Distinct developmental trajectories emerged for EDs at a young age compared with the no ED developmental trajectory. Most notably, the average growth trajectory for AN departed significantly lower than other trajectories by

Body mass index (BMI) plays a defining role in eating disorder (ED) diagnosis; however, whether child and adolescent BMI predicts later ED risk is not well understood. The present study examined whether developmental BMI trajectories represent a significant prospective risk factor for EDs. Using data from the Avon Longitudinal Study of Parents and Children (N=1839), we used subject-specific conditional growth models to describe premorbid BMI trajectories for individuals with anorexia nervosa (AN; N=261), bulimia nervosa (BN; N=333), binge eating disorder (BED; N=126), and purging disorder (PD; N=145), starting at 1.5 months and ranging to age 15.5 or 12 months prior to ED onset, whichever came first. Child and adolescent BMI was calculated for 22 time points via face-to-face assessments and maternal-report questionnaires. Self-report data on ED status were collected at ages 14, 16, and 18. Distinct developmental trajectories emerged for EDs at a young age compared with the no ED developmental trajectory. Most notably, the average growth trajectory for AN departed significantly lower than other trajectories by

Attachment theory postulates that different attachment styles influence the development of individual’s self-esteem and modulate the individual’s ability to cope with stressful events by responding with adequate affective regulation. Life events and emotion regulation are involved in the onset and maintenance of eating disorders (ED) and insecure attachment style has a high prevalence in ED subjects. The variables mediating the relationship between attachment style and ED psychopathology have not been explored sufficiently. To assess the role of the endogenous stress response system in this relationship, we investigated the effect of attachment style on the hypothalamus-pituitary-adrenal (HPA) axis functioning in ED patients. Fifty-two women with ED and 25 healthy women filled in the Experience in Close Relationship questionnaire to evaluate their attachment style, and collected saliva samples in the morning to measure the Cortisol Awakening Response (CAR). Thirty ED patients and 15 healthy women took part also into the Trier-Social-Stress-Test (TSST). During TSST, subjective anxiety was measured by the State-Trait Anxiety Inventory and
saliva samples were collected to measure cortisol levels. Avoidant attached patients showed an enhanced CAR compared to both anxious and secure attached patients. In the initial TSST phase (threat appraisal), cortisol levels decreased in both secure patients and healthy subjects but not in insecure attached patients. In the TSST stress response phase, the cortisol increase was higher in insecure patients and delayed in avoidant ones. Finally, in the TSST recovery phase, cortisol levels returned to pre-test values in all but not in the avoidant patient group. In insecure patients, the mean state anxiety score was higher than in secure ones. These results suggest, for the first time, that in adults with ED attachment styles influence HPA axis and psychological responses to stressful events, which could have a role in the pathophysiology of ED.

7.4: Eating Rate is Increased Among Disinhibited Eaters Whose Attention is Directed Elsewhere

Kyle De Young, PhD, University of Wyoming, Laramie, Wyoming
Taylor Perry, Student, University of Wyoming, Grand Forks, North Dakota
Terra Towne, MA, University of North Dakota, Grand Forks, North Dakota
Erin Murtha-Berg, MA, University of North Dakota, Grand Forks, North Dakota
Nicole Della Longa, MA, University of North Dakota, Grand Forks, North Dakota
Erica Goodman, BS, University of North Dakota, Grand Forks, North Dakota
Alexandria Thiel MA, University of Wyoming, Laramie, Wyoming
Alexis O’Halloran, Student, University of North Dakota, Grand Forks, North Dakota
Alex Kari, Student, University of North Dakota, Grand Forks, North Dakota

Eating more rapidly than normal is a common feature of binge-eating episodes. We sought to test two factors – one situational and one dispositional – that might impact eating rate to understand what puts individuals at risk of eating rapidly, and perhaps binge eating. We hypothesized that eating while allocating attentional resources elsewhere would lead to an increased consumption rate. We also hypothesized that this would especially be the case for individuals prone to losing restraint over their eating (i.e., those who are disinhibited). Thirty-eight individuals (67% women; 42% reporting past-month binge eating) participated and completed measures, including the Three-Factor Eating Questionnaire Disinhibition subscale, at baseline. They then were instructed to drink for five minutes at a consistent rate from a large cup containing 32 oz. (960 kcals) of Boost meal replacement shake while performing a computerized attention task (Multi-Attribute Task Battery-II), which varied in difficulty (low, medium, high; order counterbalanced across participants). Their consumption rate was measured twice every second with a hidden scale. A mixed-effects linear model indicated the presence of a three-way interaction (attention task difficulty X disinhibition X time; p<.001) while controlling for sex and BMI. Under more attention-demanding conditions, participants drank the shake faster: this difference was especially strong for those higher in disinhibition. Results support the hypothesis that individuals prone to losing restraint over their eating eat faster when their attention is allocated elsewhere. This study highlights the importance of attention allocation and behavioral tendencies in determining eating rate, which is critical to understanding the mechanics of binge-eating episodes. Future research should examine whether the perception of loss of control is in part influenced by consumption rate, connecting objective indices of eating with subjective experience.

7.5: Model Behavior: How the Interpersonal (IPT) Model Predicts Disordered Eating in a College Longitudinal Study

Kerstin Blomquist, PhD, Furman University, Greenville, South Carolina
Erin Jackson, Student, Furman University, Greenville, South Carolina

The Interpersonal (IPT) Model of binge eating proposes that interpersonal stressors lead to either low self-esteem or negative affect, which then triggers disordered eating. Clinically-significant eating disorders typically develop in late adolescence (college years), with 26% of college women and 10% of college men reporting disordered eating and 44% engaging in binge eating. In addition, new and unique interpersonal stressors arise in college. However, studies testing the IPT model have been limited to predominantly non-college-aged, female samples and cross-sectional designs. To address this gap, the current study tested the IPT model in a longitudinal sample of undergraduate men and women (N=245). At 3 time points during their first year of college, participants completed self-report measures of interpersonal stress, self-esteem, negative affect, eating loss of control, and disordered eating. Using Hayes’ PROCESS macro to test for mediation, results revealed that self-esteem significantly mediated the relationship between interpersonal stress and eating LOC severity (Z=3.09, p=.002, K2=10) and disordered eating (Z=2.10, p=.036, K2=0.53). Likewise, negative affect significantly mediated the relationship between interpersonal stress and eating LOC severity (Z=2.91, p=.0036, K2=0.101), eating LOC frequency (Z=2.81, p=.0049, K2=0.091), and disordered eating behaviors (Z=3.43, p=.0006, K2=1.3). Self-esteem did not significantly mediate the relationship between interpersonal stress and eating LOC frequency. Our findings provide longitudinal support for the IPT model in a mixed gender, undergraduate sample, suggesting that targeting interpersonal stressors in college may be a useful avenue for eating disorder prevention.
The current study aimed to assess insecure attachment and the early maladaptive schema domain of disconnection and rejection in the context of disordered eating, and offer rejection sensitivity as a mediator of this relationship. The sample consisted of 108 female participants with a current or lifetime eating disorder (ED) diagnosis (age M=25 years) and 508 female healthy control participants (age M=21 years). Participants were asked to complete a number of self-report measures related to insecure attachment (anxious and avoidant), maladaptive schema (emotional deprivation, abandonment, mistrust, social isolation, and defectiveness), rejection sensitivity (interpersonal and appearance-based), and disordered eating behaviours. Invariance testing conducted between the ED and the healthy control groups indicated that the model was structurally variant (i.e. different between groups). Path analysis indicated that the overall model demonstrated good fit (RMSEA=0.054, CFI=0.988, TLI=0.979). For both the ED and the healthy control groups, attachment anxiety, abandonment schema, interpersonal rejection sensitivity, and appearance-based rejection sensitivity were directly associated with disordered eating (p<0.05). However, indirect effects indicated differences between groups. For the ED group, anxious attachment was associated with disordered eating through multiple pathways involving emotional deprivation schema, abandonment schema, interpersonal rejection sensitivity, and appearance-based rejection sensitivity. There was also an indirect effect for emotional deprivation schema on disordered eating through appearance-based rejection sensitivity (β=0.068, p<0.05). For the control group, indirect effects were found for emotional deprivation schema on disordered eating through interpersonal rejection sensitivity (β=0.245, p<0.05) and appearance-based rejection sensitivity (β=0.038, p<0.05). The results supported the hypotheses, indicating that both interpersonal and appearance-based rejection sensitivity are important mediators for the relationships between insecure attachment, maladaptive schema, and disordered eating. These findings may inform treatments targeting interpersonal functioning for those presenting with disordered eating.
changes in mental-health quality of life and eating disorder quality of life after 10 sessions. Further research is required to ascertain which aspects of treatment can be most effective in improving quality of life and motivation to change outcomes for patients who exercise compulsively.

8.2: Compensatory Behaviors among a Racially Diverse Sample of Undergraduate Women

Amanda Bruening, BA, MA, Arizona State University, Tempe, Arizona
Marisol Perez, PhD, Arizona State University, Tempe, Arizona

Research investigating the use of compensatory behaviors is largely inconsistent among racial minorities. Early studies among Blacks and Hispanics demonstrated that individuals were less concerned about their weight, engaged in less exercise, and were typically heavier, thereby supporting the notion that these groups were less at risk for eating disorders. However, more recent research has found that rates of bulimia nervosa and binge eating disorder are comparable to Non-Hispanic Whites. Despite these contrary findings, only one study has examined the differences in eating pathology among racial minorities in a community sample. Though norms for undergraduate women have been published using the Eating Disorder Examination Questionnaire (EDE-Q), which is often regarded as the gold-standard self-report measure for assessing compensatory behaviors, the majority of the sample (88%) were White. No study to date has attempted to establish norms for minority college women. Given the increasing rates of eating pathology on college campuses in tandem with the rising number of minority women attending college, it is of critical importance to examine how rates of various compensatory behaviors differ across racial groups among undergraduate women. A benchmarking analysis will be performed on a sample of approximately 2,910 undergraduate women. Similar to other studies, the sample recruited was predominantly White (n = 1696) followed by Hispanic/Latina (n = 524), Asian (n = 480), African American (n = 181), and Native American (n = 48). As there is limited knowledge of compensatory behaviors among Native American women, this subgroup was included despite the low sample size. Results of the current study extend not only our knowledge of how compensatory behaviors differ across racial groups, including those overlooked in the current literature, but also the clinical utility of the EDE-Q.

8.3: The Role of the 5-HTTLPR VNTR in Moderating Psychosocial Risks for Disordered Eating Pathology in Adolescence: Findings from the Australian Temperament Project (Est. 1983).

Vanja Rozenblat, BA, MPsyCh, PhD Candidate, The University of Melbourne, Parkville, VIC
Eleanor Wertheim, PhD, La Trobe University, Bundoora, VIC
Ross King, PhD, Deakin University, Burwood, VIC

The purpose of this study was to investigate whether sexual abuse, physical abuse, depression and emotional control interacted with a functional variable number tandem repeat (VNTR) in the promoter region of the serotonin transporter gene (5-HTTLPR) to predict disordered eating symptoms. The sample included 672 participants (49.8% female) from the Australian Temperament Project (ATP), a 33-year longitudinal study of social-emotional development. At age 15-16 years, participants completed the Bulimia and Drive for Thinness scales of the EDI-2, the Short Mood and Feelings Questionnaire, and an ATP-devised emotional control scale. At age 23-24 years, 481 of the original 672 participants retrospectively responded to four questions regarding childhood sexual abuse and parental physical punishment. We observed no association between disordered eating and sexual abuse, or disordered eating and a mild-to-moderate form of parental punishment. We did, however, observe associations with depression, emotional control, and severe parental punishment (where effects lasted beyond one day). There was also some evidence of interaction between 5-HTTLPR and severe parental physical punishment in predicting bulimic symptoms (p = .017). This effect persisted after controlling for gender, BMI and ethnicity, but did not meet the Bonferroni adjusted threshold (p < .005). Findings suggest that the 5-HTTLPR is not involved in risk for disordered eating, however, type and severity of exposure are likely to be important prognostic indicators of adolescent disordered eating.

8.4: What Does Gender have to do with it? Associations Between Bender-Linked Personality Traits and Eating Pathology

Vivienne Hazzard, MPH, RD, Student, University of Michigan School of Public Health, Ann Arbor, Michigan
Kendrin Sonneville, RD, ScD, University of Michigan School of Public Health, Ann Arbor, Michigan

The purpose of this study was to examine relationships between gender-linked personality traits (instrumentality and expressivity) and eating pathology, as well as to investigate depressive symptoms as a potential mechanism to explain such relationships. Data for this study were collected in Wave III of the National Longitudinal Study of Adolescent to Adult Health (Add Health) from a subsample of respondents (n=3,737) who completed the short form Bem Sex Role Inventory (BSRI). Using median split scoring for instrumental ("masculine") and expressive ("feminine") trait scales as measured by the BSRI, respondents were categorized as undifferentiated (low in both), masculine (high instrumentality), feminine (high expressivity), or androgynous (high in both). Self-reported outcomes...
assessed were disinhibited eating (overeating and/or loss of control eating), purging (vomiting and/or using laxatives) to control weight, and lifetime eating disorder (ED) diagnosis. Depressive symptoms were assessed by nine questions from the Center for Epidemiologic Studies Depression Scale (CES-D). Sex-stratified logistic regression analyses were run, accounting for survey design and adjusting for age, race/ethnicity, income, and parental education. In young adulthood (mean age=22.5 years, SD=0.12), prevalence of disinhibited eating was 8.7% in females and 5.9% in males, prevalence of purging was 0.9% in females and 0.0% in males, and prevalence of lifetime ED diagnosis was 4.5% in females and 0.2% in males. Compared to females categorized as undifferentiated, females categorized as masculine had lower odds of disinhibited eating (OR: 0.36; 95% CI: 0.15, 0.85), and females categorized as androgynous had lower odds of having ever been diagnosed with an ED (OR: 0.38; 95% CI: 0.15, 0.99). After adjusting for depressive symptoms, the association between masculinity and disinhibited eating remained significant, but the association between androgyny and ED diagnosis did not.

8.5: When Grit Goes Bad: The Interaction of Autism Symptoms and Grittiness in the Prediction of Eating Disorder Symptoms

Elizabeth Velkoff, BA, Miami University, Oxford, Ohio
Christopher Hagan, MA, Florida State University, Tallahassee, Florida
April Smith, PhD, Miami University, Oxford, Ohio

The purpose of the present study was to examine whether symptoms of autism spectrum disorder interact with grit (the ability to sustain interest and effort on long-term goals) to predict eating disorder (ED) symptoms. Previous research indicates that individuals with anorexia nervosa (AN) show a number of similarities to those with autism spectrum disorders, particularly in terms of cognitive functioning. One characteristic of autism spectrum disorder is a pattern of routines, rituals, and need for sameness. This is reflected in difficulties with set-shifting, or the ability to move from one task to an deficit also common among individuals with AN. It may be the case that this tendency toward sameness may manifest as grit, allowing individuals with autistic traits to pursue goals with sustained effort. However, when one of those goals is severe weight loss, as in AN, or other disordered eating behaviors, grit may serve a less adaptive purpose.

The present study tested the hypothesis that autism spectrum symptoms would interact with grit to predict ED symptoms. Specifically, we hypothesized that among individuals with high levels of grit, elevated autism spectrum symptoms would be associated with more severe ED symptoms. Participants (N = 140) were recruited online and through ED treatment centers across the United States and completed self-report questionnaires assessing for autism spectrum symptoms, grit, and ED symptoms. Results indicated that there was a significant interaction (p = 0.055) between grit and autism spectrum symptoms in predicting ED symptoms. Probing this interaction revealed that at high (p = 0.045) but not low (p = 0.386) levels of grit, greater autism spectrum symptoms are associated with more self-reported ED symptoms. Replication results from four independent samples will also be discussed. These findings point to a potential individual difference factor by which autism spectrum disorders are related to EDs, specifically through elevations in grit. Specifically, these findings may indicate that grit, a trait which serves a positive function in many contexts by facilitating the pursuit of long-term goals, may go awry in some cases, facilitating the dangerous weight loss characteristic of AN.

8.6: The Risk of Eating Disorders Comorbid with ADHD: A Systematic Review and Meta Analysis

Bruno Nazar, MSc, MD, PhD, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil
Joseph Sergeant, PhD, Professor, Vrije University, Amsterdam
Paulo Mattos, MD, Professor, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil
Janet Treasure, OBE, MD, FRCP, FAED, Professor, King’s College London, London, UK

There has been interest in whether people with Attention-Deficit/Hyperactivity Disorder (ADHD) are at higher risk of developing an Eating Disorder (ED). The aim of this study was estimate the size of this association with a meta-analysis of studies. We retrieved studies following PRISMA guidelines from a broad range of databases. Twelve studies fitted our primary aim in investigating ED in ADHD populations (ADHD = 4.013/Controls = 29.404, and 5 exploring ADHD in ED populations (ED = 1044/Controls = 11292). The pooled odds ratio of diagnosing any ED in ADHD was increased significantly, 3.82 (95% CI:2.34-6.24). A similar level of risk was found across all ED syndromes [Anorexia Nervosa = 4.28 (95%CI:2.24-8.16); Bulimia Nervosa = 5.71 (95%CI: 3.56-9.16) and Binge Eating Disorder = 4.13 (95%CI: 3.5-67)]. The risk was significantly higher if ADHD was diagnosed using a clinical interview (5.89 [95%CI:4.32-8.04]) rather than a self-report instrument [2.23[1.23-4.03]]. The pooled odds ratio of diagnosing ADHD in participants with ED was significantly increased, 2.57 (95%CI:1.30-5.11). Subgroup analysis of cohorts with binge eating only yielded a risk of 5.77 (95%CI:2.35-14.18). None of the variables examined in meta-regression procedures explained the variance in effect size between studies. People with ADHD have a higher risk of comorbidity with an ED and people with an ED also have higher levels of comorbidity with ADHD. Future studies should address if patients with this comorbidity have a different prognosis, course and treatment response when compared to patients with either disorder alone.
Etiological models for eating disorders are, in part, derived from sex differences found in epidemiological patterns. As such, evaluating sex differences in the natural course of eating pathology and posited risk factors across the lifespan is necessary to fully test these models. Nine-hundred men and women from a northeastern university completed surveys on eating attitudes and behaviors at 10-year intervals from late adolescence (Mean (SD) age = 20 [2] years) to later-adulthood (Mean (SD) age = 50 [2] years). Associations between posited risk factors and disordered eating over time were analyzed using multilevel modeling. DSM-5 eating disorder diagnoses decreased over the 30-year span for both sexes, with no significant sex difference in point prevalence at age 50 (men: 3.9%, women: 7.7% for any eating disorder, χ²(1) = 2.95, p = .09). Body mass index increased over time in both sexes (p < .001). For men, weight perception, dieting frequency, and drive for thinness increased over the 30-year span (all p-values <.001). In contrast, for women, weight perception and disordered eating grew weaker over time, and dieting frequency reached a nadir in midlife, with an increase at age 50 (all p-values <.001). The relationship between dieting and disordered eating grew weaker over time for both sexes, suggesting that increased dieting around age 50 may reflect a healthy response to age-associated weight gain, as opposed to a pathological response to body image disturbance. Notably, eating disorder diagnoses remain prevalent in later adulthood for both sexes. Results imply that current risk models require refinement to account for developmental trajectories in which dramatic sex differences observed in late adolescence diminish over time.

9.2: Maternal Eating Disorders and Perinatal Outcomes: A Three-Generation Study in the Norwegian Mother and Child Cohort Study

Hunna Watson, PhD, MPysch, MSc, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
Stephanie Zerwas, PhD, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina
Leila Torgersen, PhD, Norwegian Institute of Public Health, Oslo
Kristin Gustavson, PhD, Norwegian Institute of Public Health, Oslo
Elizabeth Diemer, PhD, Harvard T. H. Chan School of Public Health, Boston, Massachusetts
Gun Peggy Knudsen, PhD, Norwegian Institute of Public Health, Oslo
Ted Reichborn-Kjennerud MD, PhD, Norwegian Institute of Public Health, Oslo

An existing body of research indicates that mothers with a history of eating disorders are at risk of adverse birth outcomes. In turn, adverse birth outcomes have been associated with a higher likelihood of eating disorder onset in adult offspring, possibly reflecting a transgenerational cycle of risk. Previous studies of the relationship between maternal eating disorders and adverse perinatal outcomes have failed to control for familial transmission of perinatal event phenotypes, which may confound the association. In a unique design afforded by the Norwegian Mother and Child Cohort Study (MoBa) and Medical Birth Registry of Norway, we linked three generations through birth register records and maternal-reported survey data. The aim was to determine if maternal eating disorders increase risk after parsing out the contribution of familial transmission of perinatal events. The samples were 70,881 grandmother-mother-child triads for analyses concerning eating disorder exposure during pregnancy and 52,348 for analyses concerning lifetime maternal eating disorder exposure. As hypothesized, eating disorders predicted a higher incidence of perinatal complications even after adjusting for grandmaternal perinatal events. For example, anorexia nervosa immediately prior to pregnancy was associated with smaller birth length (relative risk = 1.62, 95% confidence interval = 1.21, 2.15), bulimia nervosa with induced labor (1.21; 1.07, 1.37), and binge-eating disorder with several delivery complications, larger birth length (1.26; 1.17, 1.37), and large-for-gestational-age (1.04; 1.02, 1.06). Maternal pregravid body mass index and gestational weight mediated some associations. Exposure to eating disorders increases the risk of adverse birth outcomes, independent of familial transmission of perinatal events.

9.3: Other Specified and Unspecified Feeding or Eating Disorders Among Women in the Community

Anna Keski-Rahkonen, MD, MPH, PhD, University of Helsinki, Helsinki, Finland
Linda Mustein, MD, MPH, PhD, University of Helsinki, Helsinki, Finland

Our goal was to examine the occurrence, course, and clinical picture of the DSM-5 residual categories ‘Other Specified Feeding or Eating Disorder’ (OSFED) and
'Unspecified Feeding or Eating Disorder' (UFED), to describe potential subtypes, and to evaluate whether the subdivision of the residual category appears meaningful. We screened women from the 1975-79 birth cohorts of Finnish twins (N = 2825) for lifetime eating disorders using questionnaires and the SCID interview. This analysis characterizes women who reported clinically significant eating disorder symptoms but did not fulfill diagnostic criteria for DSM-5 anorexia nervosa (AN), bulimia nervosa (BN), or binge eating disorder (BED). Thirty-eight women (21% of those with an eating disorder) fell in the residual OSFED/UFED category. A third of them (N = 14) fulfilled OSFED criteria, whereas two thirds (N = 24) fell in the UFED category. The lifetime prevalence of OSFED/UFED was 1.5% (95% CI 1.1-2.0%), less than half of the prevalence of DSM-IV eating disorder not otherwise specified (EDNOS). The mean age of onset of OSFED/UFED was 18 years, median duration of symptoms was two years, and the 5-year probability of recovery was 60%. Over a third of women with OSFED/UFED suffered from comorbid psychiatric disorders. Both residual categories were clinically heterogeneous and included atypical forms of AN, BN, and BED. In conclusion, applying the DSM-5 criteria in a community sample of young women more than halved the occurrence of residual eating disorder diagnoses, but resulted in two instead of one clinically heterogeneous residual categories. Nevertheless, residual eating disorders were associated with considerable clinical severity.

9.4: Disordered Eating Pre- and Postpartum: From Epidemiological Research to Implementation of Internet-Based Psycho-Education

David Clinton. PhD, Karolinska Institutet, Stockholm, Stockholm
Cecilia Brundin Pettersson. BSc, Karolinska Institutet, Stockholm

Eating disorders pre- and postpartum can have considerable negative consequences, such as low birth weight, prematurity, miscarriage, increased risk for caesarean section, postnatal depression, feeding problems and interactional difficulties. The present project aimed to: 1) investigate symptoms of disordered eating pre- and postpartum using a standardised measure of eating disorder psychopathology; 2) design and implement an internet-based programme of psycho-education on disordered eating during and after pregnancy for relevant health care workers. A consecutive series of women attending either pre- (N = 426) or postnatal (N = 345) clinics in metropolitan Stockholm were assessed using the Eating Disorder Examination Questionnaire (EDE-Q). Assessments were conducted at either the first visit to prenatal clinics (10-12 weeks of pregnancy) or 6 to 8 months postpartum. Using an optimised version of the EDE-Q with 14 items and a cut-off score of ≥2.8, it was estimated that 5.3% of prepartum and 12.8% of postpartum mothers were suffering from clinical eating disorders. Seriously disordered eating behaviour during, and especially after, pregnancy may be more common than previously thought. In order to help frontline healthcare services to deal with the challenges of seriously disordered eating pre- and postpartum, an interactive internet-based programme of psycho-education was developed. The programme teaches participants about eating disorders, how to identify and talk about eating problems, as well as how to help women find appropriate specialist services. The programme uses text-based learning tools, video, illustrative fictional cases, quizzes and the use of a reflective diary to help participants learn and develop appropriate skills. Experiences of extending empirical research to service development is discussed, and preliminary results from the implementation of the programme are presented.

9.5: The Epidemiology of Eating Disorder Risk and DSM-5 Eating Disorders among Austrian Adolescents: Results from the Mental Health in Austrian Teenagers (MHAT) study

Michael Zeiler. Mag., Medical University of Vienna, Department for Child and Adolescent Psychiatry, Vienna, Austria
Julia Philipp. Dr., Medical University of Vienna, Vienna, Austria
Stefanie Truttmann. Mag., Medical University of Vienna, Vienna, Austria
Gudrun Wagner. Dr., Medical University of Vienna, Vienna, Austria
Andreas Karwautz. Professor, Dr., FAED Medical University of Vienna, Austria
Karin Waldherr. Professor (FH) Dr., FernFH Distance Learning University of Applied Sciences, Wr. Neustadt, Lower Austria

The Mental Health in Austrian Teenagers (MHAT) study is the first large and representative epidemiological study on mental health problems and psychiatric disorders among adolescents in Austria. One aim was to assess the prevalence of disordered eating behaviors and full-syndrome eating disorders based on DSM 5 diagnostic criteria. A two-stage design was applied. In the first stage (screening stage) the eating disorders risk was assessed by the SCOFF questionnaire in a sample of 3610 students aged 10-18 years during school lessons. In a second stage (interview stage), adolescents with an elevated risk for mental health disorders as well as a sample of low-risk adolescents were interviewed by clinical psychologists to assess DSM 5 psychiatric disorders including eating and feeding disorders. Additional screening and interview data from unemployed adolescents and adolescents in inpatient care at Austrian child and adolescents psychiatric institutions were obtained. About one third of girls and 15% of boys showed an elevated risk for eating disorders. A high BMI, low socioeconomic status, burdensome events in the life course as well as chronic somatic and mental illnesses of parents and near relatives turned out as relevant risk factors. The point-prevalence of any eating or feeding disorder was 0.5%, the life-time prevalence was 2.6%. Correcting for adolescents not recruited via schools, the prevalence increased to 1.6% and 3.7% resp. Full-syndrome eating disorders were characterized by high comorbidity (57.9%) with other psychiatric disorders (especially depression, anxiety disorders and non-suicidal self-injury). The mental
The nationwide survey on patients with eating disorders (ED) in hospitals in Japan has not been conducted since 1998, which means a lack of epidemiological information on current status of ED patients in Japan. The present survey had two objectives. The first was to estimate the number of ED patients in hospitals. The second was to investigate the demographics and clinical characteristics of the patients. Targeted medical facilities were clinical departments of hospitals which were practicing psychiatry, psychosomatic medicine, internal medicine, pediatrics, and gynecology. From the relevant 11,766 facilities, 5,220 were extracted by stratified sampling based on the scale of the hospital. The survey used a two-stage design. The first questionnaire asked the facilities to report the number of patients who appeared or were admitted between October 1, 2014 to September 30, 2015 of each sex and the DSM5 diagnosis. Then, the second questionnaire that inquires clinical information of the individual patient was sent to the facility which reported a patient in the first questionnaire. Effective responses were obtained from 2,561 facilities (49.0%). The number of each diagnosis was estimated as follows: Anorexia nervosa, 12,667 (95%CI: 10,611-14,723); bulimia nervosa, 4,606 (3,133-6,078); binge eating disorder, 1,145 (833-1,457); other specified feeding or eating disorder, 2,447 (1,482-3,411); unknown diagnosis, 3,634 (2,278-4,990). The number of ED patients (total 24,498) estimated by this study was the same level as the number (total 23,200) that had been reported in the previous study in 1998. Because much fewer patients have been detected in clinical-based surveys, including the current study, than predicted by the school-based investigations, it is suggested that large number of ED patients are left untreated. The demographic and clinical information will be investigated in the second stage of the survey.

## 9.6: Nationwide Survey on Patients with Eating Disorders in Hospitals in Japan.

**Teysuya Aando**, MD, PhD, National Institute of Mental Health, National Center of Neurology and Psychiatry, Kodaira, Tokyo  
**Hiroe Kikuchi**, MD, PhD, National Institute of Mental Health, National Center of Neurology and Psychiatry, Kodaira, Tokyo  
**Norito Kawakami**, MD, PhD, Graduate School of Medicine, The University of Tokyo, Bunkyo-ku, Tokyo

The nationwide survey on patients with eating disorders (ED) in hospitals in Japan has not been conducted since 1998, which means a lack of epidemiological information on current status of ED patients in Japan. The present survey had two objectives. The first was to estimate the number of ED patients in hospitals. The second was to investigate the demographics and clinical characteristics of the patients. Targeted medical facilities were clinical departments of hospitals which were practicing psychiatry, psychosomatic medicine, internal medicine, pediatrics, and gynecology. From the relevant 11,766 facilities, 5,220 were extracted by stratified sampling based on the scale of the hospital. The survey used a two-stage design. The first questionnaire asked the facilities to report the number of patients who appeared or were admitted between October 1, 2014 to September 30, 2015 of each sex and the DSM5 diagnosis. Then, the second questionnaire that inquires clinical information of the individual patient was sent to the facility which reported a patient in the first questionnaire. Effective responses were obtained from 2,561 facilities (49.0%). The number of each diagnosis was estimated as follows: Anorexia nervosa, 12,667 (95%CI: 10,611-14,723); bulimia nervosa, 4,606 (3,133-6,078); binge eating disorder, 1,145 (833-1,457); other specified feeding or eating disorder, 2,447 (1,482-3,411); unknown diagnosis, 3,634 (2,278-4,990). The number of ED patients (total 24,498) estimated by this study was the same level as the number (total 23,200) that had been reported in the previous study in 1998. Because much fewer patients have been detected in clinical-based surveys, including the current study, than predicted by the school-based investigations, it is suggested that large number of ED patients are left untreated. The demographic and clinical information will be investigated in the second stage of the survey.

---

**Topic: Prevention**  
**North Hall, Second Floor**

Co-Chairs:  
**Melissa Atkinson**, PhD & **Susan Paxton**, PhD, FAED

**10.1: Advanced Data Integration for Epidemiologic Modeling to Evaluate Policy Approaches to Eating Disorder Prevention**

**Michael W. Long**, ScD, George Washington University, Washington, DC, District of Columbia  
**Xindy C. Hu**, MPH, Harvard Chan School of Public Health, Boston, Massachusetts  
**Davene R. Wright**, PhD, Seattle Children's Hospital, Seattle, Washington  
**S. Bryn Austin**, ScD, Boston Children's Hospital, Boston, Massachusetts

Scaling up eating disorders (ED) prevention strategies for population impact will require a new and concerted focus on policy translation research. Evaluating policies supporting public health prevention requires accurate and up-to-date epidemiologic modeling of the disease course, which currently does not exist. We develop and calibrate an Eating Disorder Microsimulation (EDM) model to conduct economic evaluations of prevention strategies. Each individual in the model is followed over a 25-year period as they transition among several health states annually: ED-free, anorexia nervosa, bulimia nervosa, binge eating disorder, other specified feeding or eating disorder, and dead. Data on diagnoses, outpatient, and inpatient charges were obtained from 10,782 patients and 67,119 patient visits provided by six US pediatric hospitals in the PEDSnet research collaborative, one of the largest in the nation. We model duration and expense of outpatient treatment, risk for hospitalization by treatment and patient characteristics, and transition between ED types. We calibrate the model to gold-standard data such as the Global Burden of Disease 2013, the US National Comorbidity Study-Adolescent Supplement and the US Healthcare Cost and Utilization Project Nationwide Inpatient Sample. After calibration, cumulative 25-year incidence and prevalence projections were similar between the EDM and the most recent epidemiologic evidence. One early application of our modeling approach has shown that secondary ED prevention would be as cost-effective as other well-accepted screening programs at willingness-to-pay thresholds of $50,000 and $100,000 per quality-adjusted life year gained. The same approach will be applied to several other prevention strategies in a comparative cost-effectiveness analysis framework. The presentation has broad applicability to the development of country-specific prediction models to evaluate the cost-effectiveness of proposed ED prevention strategies.
10.2: A Preliminary Investigation of REbeL: A Dissonance-based Program to Promote Positive Body Image, Healthy Eating, and Empowerment in Teens

Laura Eickman, PsyD, REbeL, Inc., Overland Park, Kansas
Jessica Betts, MS, RD, REbeL, Inc., Overland Park, Kansas
Lauren Pollack, MA, University of Missouri-Kansas City, Kansas City, Missouri
Frances Bozsik, MS, University of Missouri-Kansas City, Kansas City, Missouri
Brooke Guiot, Student, University of Missouri-Kansas City and REbeL, Inc., Kansas City, Missouri
Marshall Beauchamp, MS, University of Missouri-Kansas City, Kansas City, Missouri
Jenny Lundgren PhD, FAED, University of Missouri-Kansas City, Kansas City, Missouri

Short-term outcomes associated with participation in REbeL, a peer-led dissonance-based eating disorder prevention program for high school students, were evaluated. REbeL promotes healthy body image and eating behaviors/attitudes through social media and school-based activities that target body acceptance, mindful eating and exercise, healthy self-esteem and empowerment, and reduction of weight stigma. Four Kansas City regional high schools were randomized to REbeL or an assessment-only wait list control condition during the 2015-2016 academic year. One control school withdrew participation after learning of their randomization as a control. Seventy-one students enrolled in the study (REbeL schools N = 48; Control N = 23) and were assessed on measures of eating attitudes/behaviors, body image, weight bias, self-esteem, empowerment, and mood at the beginning of the school year. 37 REbeL students and 20 control students completed assessments at the end of the school year. Mixed effects GLM, controlling for baseline scores and nested across school and time, compared groups on outcomes at the end of the academic year. Pairwise comparisons with Bonferroni correction demonstrated that, in comparison to controls, students in both REbeL schools had statistically significantly lower scores on the Body Checking Questionnaire (adjusted means: 44.3 and 51.5 [REbeL] vs. 68.5 [control]) and the Eating Disorder Examination-Questionnaire (adjusted global mean: 1.1 and 1.2 [REbeL] vs. 2.5 [control]), all ps <0.05. The pattern of outcome across REbeL schools differed, however, with students in one REbeL school having several additional statistically significant outcomes in relation to controls than students in the other REbeL school. This study provides preliminary empirical support for the REbeL program. Future research will examine aspects of the curriculum that have the most impact and the variables (e.g., school culture, advisory support) that moderate REbeL outcomes.

10.3: Perceived Barriers and Facilitators Towards Seeking help for Eating Disorders: A Systematic Review

Laura Hart, PhD, La Trobe University, Melbourne, Victoria
Susan Paxton, PhD, La Trobe University, Melbourne, Victoria
Agus Salim, PhD, La Trobe University, Melbourne, Victoria

Parents provide an important environment in which young children develop body image attitudes and eating patterns. However, there are few evaluated resources design to to support parents. Confident Body. Confident Child (CBCC) is a new resource to assist parents in fostering body confidence and healthy eating patterns in 2-6 year-old children. The booklets, website, and poster were developed from research on child risk factors for body dissatisfaction and disordered eating and a Delphi expert consensus study. CBCC was evaluated using a four arm Randomized Controlled Trial: A) CBCC resource + face-to-face information session, B) CBCC resource only, C) Nutrition resource only and D) waitlist control. 345 parent participants completed online self-report measures of parenting variables (knowledge, behavioural intentions, family meals and parental feeding practices) at baseline, 6-weeks post-intervention, and twelve months later. ANCOVA analyses using multiple imputation for missing data revealed that, after controlling for baseline scores, there were significant differences between groups at 6-months and that many of these positive changes were still apparent at twelve month follow-up. The family meal time scales, child BMIz and amount of resource read, showed no significant differences between groups at six months. Parental knowledge, positive and negative parenting intentions, and the parental feeding practices of instrumental feeding and weight-based restriction, showed sustained improvement in the two CBCC groups at six and twelve months. Parents receiving the information session and resources appeared to perform better than parents receiving the resource only, suggesting face-to-face sessions are a superior method for dissemination. Although some intervention effects were no longer apparent at 12-months, this evaluation revealed that CBCC had a positive and enduring impact on the knowledge, intentions and feeding practices of parents in our sample. Plans for the future dissemination of CBCC and how to access the resources are outlined.

10.4: A Systematic Review of the Existing Models of Disordered Eating: Do They Inform the Development of Effective Interventions?

Jamie-Lee Pennesi, BA, Flinders University, Adelaide, South Australia
Tracey, D. Wade, PhD, Flinders University, Adelaide

Despite significant advances in the development of prevention and treatment interventions for eating disorders and disordered eating over the last decade, there still remains a need to develop more effective interventions. In line with the 2008 Medical Research...
Council (MRC) evaluation framework from the United Kingdom for the development and evaluation of complex interventions, the development of sound theory is a necessary precursor to the development of effective interventions. Thus the aim of the current review is to identify the existing models for disordered eating and identify those models which have helped inform the development of prevention and/or treatment interventions for disordered eating. A literature search was conducted by using the PsycINFO database (OvidSP). Keywords anorexia nervosa (Title) OR bulimia nervosa (Title) OR disordered eating (Title) OR eating disorders (Title) OR bulimic (Title) OR eating (Title) AND model (Title) OR theory (Title) were used to locate pertinent publications in all journals using an advanced search. Publications were then inspected for studies meeting the clearly defined inclusion criteria.

While an extensive range of theoretical models for the development of disordered eating were identified, only a few models have led to the development of effective interventions. Of the fifty-four models described in the literature, only ten (18.5%) had progressed beyond mere description and on to the development of interventions that have been evaluated. This review will add important insights to the eating disorder prevention literature and help to inform the development of effective approaches to prevention.

10.5: Efficacy of an Internet-Based Prevention Program in a Female Population with Subclinical Anorexia Nervosa

Kristian Hütter. DiplPsych, Technische Universität, Dresden, Sachsen
Corinna Jacobi. DiplPsych, Dr. rer. biol. hum., Technische Universität Dresden, Dresden, Sachsen
Bianka Vollert. DiplPsych, Technische Universität Dresden, Dresden, Sachsen
Paula von Bloh. DiplPsych, Technische Universität Dresden, Dresden, Sachsen
Nadine Eiterich. DiplPsych, Technische Universität Dresden, Dresden, Sachsen
Denise Wilfley. PhD, Washington University School of Medicine, St. Louis, Missouri
C. Barr Taylor. MD, Stanford School of Medicine, Stanford, California

Despite the urgent need for early interventions, no targeted (indicated) prevention programs for women at risk for anorexia nervosa are available. We developed an internet-based prevention program (Student Bodies-AN) specifically targeting this risk group. Following a pilot study with promising results, the objective of this randomized controlled trial was to determine the efficacy of Student Bodies-AN. The internet-based CBT-prevention program Student Bodies-AN consists of 10 weekly sessions and a booster session and includes psycho-educative and interactive components moderated by trained clinical psychologists. Woman aged 18 and above with either low body weight and high weight and shape concerns or normal body weight, high weight and shape concerns and high restrained eating were recruited at universities in three German cities as well as via an online version of the screening questionnaire. A total of N=168 participants were randomized to the intervention or a waitlist control condition. Primary outcomes for all participants are clinically significant changes in attitudes and behaviors of disordered eating and changes in BMI in the underweight group of participants at 12-month follow-up. In addition, specific symptoms of disordered eating (e.g., binge eating and compensatory behaviors) and associated psychopathology (e.g., depression) were assessed as secondary outcomes. At 12-month follow-up ITT analysis (mixed models) have shown a BMI increase for underweight participants (large effect size) and small to moderate effects for specific attitudes and behaviours of disordered eating (e.g. drive for thinness, restrained eating). Further analysis (e.g. binary outcomes of clinical relevance, moderators/mediators) are in progress.

10.6: Acceptability of an Online Mindfulness Intervention for Reducing Eating Disorder Risk Factors: Results from a Randomized Controlled Pilot Study in Young Adult Women

Melissa Atkinson. PhD, University of the West of England, Bristol, Avon
Philippa Diedrichs. PhD, University of the West of England, Bristol, Avon
Nichola Rumsey. PhD, University of the West of England, Bristol, Avon
Tracey Wade. PhD, Flinders University, Adelaide, South Australia

The application of mindfulness in the prevention of eating disorders has received preliminary support with regard to efficacy in a face-to-face format, however large scale dissemination is impeded by limited voluntary uptake by young women and reliance on expert facilitators. Offering interventions online may help to overcome these barriers to implementation. This study assessed the acceptability of an online mindfulness intervention for improving body image and other risk factors for eating disorders in young adult women. British undergraduate women (N= 174, Mage = 20.34, SD = 1.67; Mbmi = 23.78, SD = 4.97) were allocated to a self-guided online mindfulness intervention (3 x 30min modules delivered over 3 weeks) or control condition (online brochure outlining general tips for improving body image). Compliance and acceptability of the online mindfulness intervention were assessed as secondary outcomes. At 12-month follow-up. In addition, specific symptoms of disordered eating (e.g., binge eating and compensatory behaviors) and associated psychopathology (e.g., depression) were assessed as secondary outcomes. At 12-month follow-up ITT analysis (mixed models) have shown a BMI increase for underweight participants (large effect size) and small to moderate effects for specific attitudes and behaviours of disordered eating (e.g. drive for thinness, restrained eating). Further analysis (e.g. binary outcomes of clinical relevance, moderators/mediators) are in progress.

Melissa Atkinson, Philippa Diedrichs, Nichola Rumsey, Tracey Wade
the programme included lack of time, being too busy or forgetting, too much written content and reading, and not being personally useful. Despite positive feedback from some participants, these findings indicate limited feasibility of the online mindfulness intervention in this format. Future implementation and evaluation will require additional effort to maintain engagement, with the inclusion of video content in place of written instruction, additional reminders, use of commitment devices, and option to connect with other participants likely to be beneficial.

**Topic: Biology and Medical Complications**

Terrace 1, Second Floor

**11.1: A Longitudinal Investigation of the effect of Eating Disorder Diagnoses and Eating Disorder Behaviours on Bone Mineral Density in Adult Women**

Lauren Robinson, BSc, MPhil, UCL, London, UK
Victoria Aldridge, BSc, MSc, PhD, UCL, London, UK
Emma Clark, BSc, MSc, PhD, Bristol University, Bristol, UK
Nadia Micali, MRCPsych, MD, PhD, FAED, UCL, London, UK

This study aims to investigate the prospective association between lifetime ED and ED behaviors and Bone Mineral Density (BMD) in mid-life in women recruited as part of the Avon Longitudinal Study of Parents and Children (ALSPAC). A total of 5,658 women enrolled in ALSPAC participated in a lifetime prevalence study, lifetime ED behaviors and ED diagnoses were obtained. BMD was measured using Dual X-Ray Absorptiometry (DXA) at a mean age of 49 years. Linear regression methods investigated the association between ED behaviors and ED diagnosis and total body, hip, arm and leg BMD. Restrictive AN (AN-R), but not Binge-Purging AN (AN-BP) diagnosis was associated with a lower total body less head (TBLH) BMD when controlling for ethnicity, education, height2 and TBLH Bone Area (BA) z=0.37 (-0.62; -0.12); p=0.004 and z=-0.13 (-0.46; -0.19); p=0.03 respectively. Fasting and Restricting behaviors were individually predictive of low BMD at legs, arms, hip and total body after controlling for confounders (p<0.01), however the effect of purging behaviors on BMD (vomiting and misuse of medication) did not remain significant when those engaging in fasting behaviors were removed from the analysis. This is the first study of its kind to investigate ED behaviors and ED diagnosis prospectively in a community sample. ED diagnoses and ED behaviors were both individually predictive of low BMD in adult women across four anatomical sites. This study suggests that individuals who present ED behaviors without meeting the criteria for an ED diagnosis may still be vulnerable to low BMD and bone fractures throughout adulthood.

**11.2: Genome-Wide Association Study Reveals First Locus for Anorexia Nervosa & Metabolic Correlations**

Cynthia Bulik, PhD, FAED, University of North Carolina and Karolinska Institutet, Chapel Hill and Stockholm, North Carolina
Laramie Duncan, PhD, Stanford University, Palo Alto, California
Zeynep Yilmaz, PhD, UNC Chapel Hill, Chapel Hill, North Carolina, Eating Disorders Working Group/ Psychiatric Genomics Consortium, Consortium, UNC Chapel Hill, Chapel Hill, North Carolina

The Eating Disorders Working Group of the Psychiatric Genomics Consortium conducted the largest genome-wide association study (GWAS) of anorexia nervosa to date, by combining existing samples worldwide. With 3,495 AN cases and 10,982 controls, following uniform quality control and imputation using the 1000 Genomes Project (phase 3), we performed a GWAS of 10,641,224 common variants (minor allele frequency > 1%). One region on chromosome 12 reached genome-wide significance (top hit rs4622308, p=4.5x10-9). This region spans over six genes and contains variants that previously yielded significant GWAS findings for Type I diabetes, rheumatoid arthritis, asthma, polycystic ovary syndrome, and height. The heritability estimate (h2) for AN calculated using the variants on the genotyping chip was 0.20 (SE=0.02), which is comparable to chip-based h2 results for other psychiatric disorders. This estimate is expectedly lower than twin-based heritability, as this analysis only reflects common variants, whereas twin analysis captures the effects of all types of genetic variation. Using LD Score Regression techniques applied to publicly available summary statistics from a range of phenotypes, we identified significant positive genetic correlations between AN and schizophrenia, neuroticism, educational attainment, and HDL cholesterol along with significant negative genetic correlations with body mass index, insulin, glucose, and lipid phenotypes. This is the first report of a genome-wide significant finding for AN and the addition of incoming samples (~17,000 queued for genotyping) will yield additional significant loci. The observed patterns of genetic correlations support the reconceptualization of AN as a disorder with both psychiatric and metabolic components.

**11.3: Initial Medical Findings in 1,000 Consecutive Inpatient Eating Disordered Patients**

Philip Mehler, MD, FACP, CEDS, FAED, Eating Recovery Center, Denver, Colorado
Keegan Walden, BA, PhD, Eating Recovery Center, Denver, Colorado
Jennifer McBride, BS, MS, MD, Eating Recovery Center, Denver, Colorado
Simrat Kaur, BS, COPIC Medical Foundation student, Denver, Colorado
Jennifer Watts, BS, MD, Eating Recovery Center, Denver, Colorado
Kristine Walsh, MPH, MD, Eating Recovery Center, Denver, Colorado

The purpose of this study is to define the prevalence of common diagnostic medical test findings in the largest-ever sample of consecutive patients with anorexia nervosa (AN-R and AN-BP) and bulimia. This is a 3-year retrospective study of medical record-derived data from 1,000 consecutive patients treated in a large eating disorder health care system. Prognostic factors assorted with medical complications of eating disorders will also be discussed. Average percent ideal body weight in the AN-R patients was 72%, and 77% in the AN-BP patients. 42% of AN-R patients had osteoporosis and 19.7% of AN-BP patients (p<.003). Only 3% of all newly admitted AN-R patients had hypophosphatemia, but 22% had hypokalemia; in AN-BP, 34% had hypokalemia (p<.001). Hyponatremia was present in 11% of all AN patients, 41.6% had bradycardia and 2.6% of AN-R patients had QT prolongation, but it was present in 5.3% of those with AN-BP (p = NS). Vitamin D deficiency was noted in 2.3% of AN-R patients, but it was never noted in any AN-BP or bulimic patients. Thirty percent of all patients with AN and 15% of patients with bulimia had anemia, 7% of patients with AN had thrombocytopenia and 11% had an elevated MCV, which was the most common red cell indices abnormality. The most frequent blood chemistry abnormality was a metabolic alkalosis, with over 50% of all patients with AN having bicarbonate levels greater than 27 mm/hg, and 41.8% of all patients with bulimia. 36% of patients with AN-R had abnormally high ALT/AST levels, but only 20.9% of those with AN-R (p<.001). These results demonstrate a high prevalence of significant medical findings in newly admitted patients with eating disorders, but important differences based on the type of eating disorder.

11.4: Assessment of Sex Differences in Fracture Risk among Patients with Anorexia Nervosa: A Population-Based Cohort Study using The Health Improvement Network

Neville Golden, MD, FAED, Stanford University School of Medicine, Palo Alto, California
Jason Nagata, MSc, MD, Stanford University School of Medicine, Palo Alto, California
Mary Leonard, MSc, MD, Stanford University School of Medicine, Palo Alto, California
Lawrence Copelovitch, MA, MD, The Children’s Hospital of Philadelphia, Perelman School of Medicine, Philadelphia, Pennsylvania
Michelle Denburg, MD, MSc, The Children’s Hospital, Philadelphia, Perelman School of Medicine, Philadelphia, Pennsylvania

Though previous studies have demonstrated an increased fracture risk in females with anorexia nervosa (AN), fracture risk in males is not well characterized. The objective of this study was to examine sex differences in fracture risk and site-specific fracture incidence in AN. We performed a population-based retrospective cohort study using The Health Improvement Network, which includes data from 553 general practices shown to be representative of the United Kingdom. The median calendar year for the start of the observation period was 2004-5. We identified 9,239 females and 556 males <60 years of age with AN, and 97,889 randomly selected sex-, age-, and practice-matched participants without eating disorders (92,329 females and 5560 males). Multivariable Cox regression was used to estimate the hazard ratio (HR) for incident fracture. Median age at start of observation was 29.8 years in females and 30.2 years in males. The HR for fracture associated with AN differed by sex and age (interaction p = 0.002). Females with AN had an increased fracture risk at all ages (HR 1.59; 95% confidence interval [95% CI], 1.44-1.75). AN was associated with a higher risk of fracture among males >40 years of age (HR 2.54, 95% CI 1.32-4.90; p = 0.005) but not among males ≤40 years. Females with AN had a higher risk of fracture at nearly all anatomic sites. The greatest increased fracture risk was noted at the hip/femur (HR 5.59; 95% CI, 3.44-9.09) and pelvis (HR 4.54; 95% CI 2.42-8.50) in females. Males with AN had a significantly increased risk of vertebral fracture (HR 7.25; 95% CI, 1.21-43.45) compared to males without AN. Our results demonstrate that AN was associated with higher incident fracture risk in females across all age groups and in males >40 years old. Sites of highest fracture risk include the hip/femur and pelvis in females and vertebrae in males with AN.

11.5: Reduced Coronary Blood Flow in Adolescents with Anorexia Nervosa

Nogah Kerem, MD, Bnai-Zion Medical Center, Haifa, Northern Israel
Jenny Garkaby, MD, Bnai-Zion Medical Center, Haifa, Northern Israel
Liat Gelernter-Yaniv, MD, Bnai-Zion Medical Center, Haifa, Northern Israel
Yasmine Sharif, Student, Sakkler School of Medicine, Tel Aviv University, Tel Aviv, Central Israel
Isaac Srugo, MD, Bnai-Zion Medical Center, Haifa, Northern Israel
Dawod Sharif, MD, Bnai-Zion Medical Center, Haifa, Northern Israel

Cardiovascular complications in patients with anorexia nervosa (AN) may be significant and life threatening. Reduction in the Coronary Blood Flow (CBF), which supplies the oxygen demand of the myocardium, can potentially lead to ischemia, cardiomyopathy, and arrhythmias. The purpose of our study was to characterize the CBF in adolescents with AN. Our study evaluated CBF by measuring peak diastolic velocity calculated by echocardiography in adolescents with AN, who were hospitalized to an Adolescent Medicine Unit at their malnourished stage. A sample of healthy...
controls was used to establish the expected normal curve of CBF. 40 adolescents with AN were examined: 11/29 males/females, mean age of 15.3±2.4 years, mean weight loss of 22.3±11% percent body weight, mean BMI on admission 16.8±2.9 Kg/m2, percent of median BMI for age and gender 84.5±13.3%, minimal nocturnal heart rate of 38±6 beats per minute (bpm). 14 healthy controls with a functional heart murmur were examined and evaluated for their CBF curve. Their measurements were compared to those of the AN group. Peak Diastolic Velocity was 23.7±7.5 cm/sec in the AN group versus 33.9±6.3 cm/sec in the controls, p<0.00001. Reduced CBF was found to be correlated to lower percent of median BMI for age and gender (p=0.009), nocturnal bradycardia (p=0.039), diurnal bradycardia (p=0.003), decreased peak systolic velocity (p<0.0001), and decreased cardiac flow index (p<0.0001). Males were significantly more medically unstable than the females in the AN group (nocturnal bradycardia of 34.3±4.7 Vs 39.1±5.7 bpm, hospitalization days for reaching minimal heart rate of 45 16.1±5.2 Vs 10±5 days), yet no statistically significant difference was found in CBF between the genders. Our study indicates a significant decrease in CBF in adolescents with AN, and to the best of our knowledge it is the first to investigate this potentially hazardous complication, which may explain papillary muscle dysfunction (and thus valves regurgitation), and potential future cardiomyopathy.

11.6: A Longitudinal, Epigenomewide Study of DNA Methylation in Women with Anorexia Nervosa: Results in Actively ill, Long-Term Recovered, and Normal-Eater Control Women.

Howard Steiger, PhD, FAED, Douglas Mental Health University Institute, Montreal, Quebec
Linda Booij, PhD, Concordia University, Montreal, Quebec
Aurélie Labbe, PhD, McGill University, Montreal, Quebec
Luis Agellon, PhD, McGill University, Montreal, Quebec
Mimi Israël, PhD, FAED, Douglas Mental Health University Institute, Montreal, Quebec
Moshe Szyf, PhD, McGill University, Montreal, Quebec
Lea Thaler PhD, Douglas Mental Health University Institute, Montreal, Quebec

This ongoing study investigates genomewide methylation profiles in women with and without Anorexia Nervosa (AN) using 450K Illumina bead arrays. At present, we have obtained pre-treatment data for 95 AN patients (41 with AN-restrictive subtype and 54 with AN-Binge/Purge subtype), 52 AN patients at both pre- and post-treatment (28 with AN-restrictive subtype and 24 with AN-Binge/Purge subtype). 22 women in recovery from AN (for at least 12 months), and 37 normal-weight, normal-eater women. Ongoing data collection will enlarge each of the samples noted. Interim analyses using False Discovery Rate-corrected comparisons identify numerous probes that differentiate women with and without AN, touching genes associated with main neurotransmitter functions, neurogenesis, protein coding/transcription, lipid/glucose metabolism, and health of blood, bone and teeth. Preliminary pathway analyses implicate gene pathways affecting cell function, transcription, endocrine and cardiac status, and carbohydrate metabolism. Longitudinal data indicate associations between changes in BMI and changes in methylation at genes implicated in main neurotransmitter functions, immunity, glucose and lipid metabolism, and smell and taste. Findings are consistent with altered methylation in active AN, and normalization after nutritional rehabilitation, at genomic regions that are relevant to common behavioral, emotional and physiological complications in AN. If, as suggested by these data, alterations are reversible with nutritional rehabilitation, then these data have numerous clinical implications.
Simultaneously Translated to Spanish

Reframing Conflict as Collaboration: Bringing Together Food, Weight, and Eating Science

Chairs: Kendrin Sonneville, ScD, RD, and Rachel Rodgers, PhD

The Intersection between Weight-Related Disorders
Caroline Braet, PhD | University of Gent, Ghent, Belgium

The purpose of this talk is to provide an introduction to the overlap between obesity and eating disorders and to provide a framework for understanding the role of the sociocultural context in the comorbidity of eating disorders and obesity. Starting at the individual level, the presentation will first highlight key shared characteristics of weight-related disorders (such as emotional eating and reward/sensitivity). These characteristics and risk factors will then be discussed within the broader sociocultural context, specifically describing how environmental triggers (e.g., the overabundance of food in food environment) may exacerbate risk across the spectrum of weight-related disorders. Finally, this talk will contribute to highlighting opportunities for collaboration and integration of efforts across fields dedicated to the prevention and treatment of weight-related disorders.

Eating Disorders, Obesity, and Addiction: A Critical Analysis
G. Terence Wilson, PhD | Rutgers University, Piscataway, NJ, USA

Abstract:
Obesity is not an eating disorder, and eating disorders are not a form of addiction. Viewing them as an addiction ignores the socio-cultural and environmental forces involved in their cause and maintenance, and undermines the most effective form of evidence-based treatment—CBT. The well-documented efficacy of CBT for Bulimia Nervosa is mediated in part by the reduction of dietary restraint, with the inclusion of so-called ‘trigger’ or avoided foods being planned and deliberate—which is diametrically opposed to the addiction model. Binge Eating Disorder is not a biologically-based phenotype of obesity that is well-suited to the addiction model as often claimed. CBT with its core focus on reducing dietary restraint and overvaluation of body shape and weight is, contrary to an addiction model, highly effective in treating BED.

Food Addiction
Ashley N. Gearhardt, PhD | University of Michigan, Ann Arbor, MI, USA

Our food environment has changed drastically in the last 50 years. Highly processed foods that strongly activate reward and motivation systems have become cheap, easily accessible, and heavily marketed. Rising levels of overeating and difficulties controlling food intake have accompanied these changes to our food system. There is growing evidence that certain types of foods may be capable of triggering neurobiological and psychological responses that parallel drugs of abuse. This has led to growing interest in the role of addictive processes in certain types of eating pathology. This perspective is highly controversial, in part due to the potential treatment implications that stem from an addiction perspective. In this talk, the evidence that addictive processes may be playing a role in some types of disordered eating will be evaluated and implications will be discussed. Future directions to more fully investigate the role of addictive processes in disordered eating will be outlined.

Discussant:
Collaborative Conversations Towards Successful Solutions
Kelly D. Brownell, PhD | Duke University, Durham, NC, USA

Abstract:
Eating disorders and obesity share both clinical and conceptual overlap, and frequently are linked to the broader sociocultural discourse around weight and eating. Are our goals contradictory or are we really all trying to achieve the same outcomes, but just saying the same thing in different ways? What can we learn from other fields, and how can we best integrate our efforts? How does the ‘noise’ around food, nutrition, appearance, fitness, and health created by for-profit industry create a confusing and harmful sociocultural context? This session aims to start a conversation that will contribute to reframing issues around risk factors, prevention, and treatment of eating and weight-related disorders. Specifically, this plenary will aim to discuss the overlap between obesity and eating disorders and how this comorbidity may be produced by the sociocultural context, and how this can inform our understanding and efforts to address weight-related disorders. In addition, the usefulness of food addiction models in conceptualizing the role of the food industry in the emergence of weight-related disorders will be considered and argued. Finally, these issues will be brought together in a discussion of how different aspects of the environment contribute to eating and weight-related concerns, and the role of the eating disorder field in helping to advance the conversation and develop successful collaborative solutions.
**Learning Objectives:**
Participants will be able to:
- Understand the role of the sociocultural context, including appearance stereotypes, in the comorbidity of eating disorders and obesity
- Understand the food addition model and its potential implications for eating disorders
- Critically analyze the empirical evidence in support of, or not, the food addition model
- Understand the need for collaborative conversations with the aim of decreasing sociocultural pressures contributing to eating disorders and other comorbid disorders.

**5:45 p.m. – 6:45 p.m.**

**SIG Annual Meetings**
- Neuroimaging | Meeting Hall 1A, First Floor
- Neuropsychology | Meeting Hall 1B, First Floor
- New Investigators | Club A, First Floor
- Nutrition | Club C, First Floor
- Professionals & Recovery | Club E, First Floor
- Psychodynamic & Integrated Psychotherapies | Club H, First Floor
- Student | Meeting Hall V, Second Floor
- Substance-Related & Addictive Disorders | North Hall, Second Floor
- Trauma & Eating Disorders | Terrace 1, Second Floor
- Universities | Meeting Hall IV, Second Floor

**5:45 p.m. – 7:15 p.m.**

**Poster Session II Dismantle**

**5:45 p.m. – 6:30 p.m.**

**5:45 p.m. – 7:15 p.m.**

**SATURDAY, JUNE 9**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 a.m. - 12:00 p.m.</td>
<td>ICED Registration Open</td>
</tr>
<tr>
<td>7:00 a.m. - 8:00 a.m.</td>
<td>ICED 2020 Committee Meeting</td>
</tr>
<tr>
<td>8:00 a.m. - 9:00 a.m.</td>
<td>Past Presidents’ Breakfast</td>
</tr>
<tr>
<td>8:00 a.m. - 9:00 a.m.</td>
<td>SOC Meeting</td>
</tr>
<tr>
<td>9:00 - 10:45 a.m.</td>
<td>Plenary Session IV: Biology</td>
</tr>
</tbody>
</table>

**Simultaneously Translated to Spanish**

**Neuroimaging and Beyond: The Clinical Value of Eating Disorders Brain Research**
*Chairs: Anja Hilbert, PhD, FAED, Annemarie van Elburg, MD, PhD, FAED, and Hana Papežová, MD, PhD*

**Background of Neuroimaging and Clinical Applications: Evidence of These Approaches in Psychiatric Disorders and Their Application to Eating Disorders**
*Damiaan Denys, MD, PhD | Amsterdam Medical Center, University of Amsterdam, Amsterdam, The Netherlands*

To discuss the findings of neuroimaging in psychiatry and the effects of those findings on clinical outcomes and treatment techniques, in general and more specific, those with relevance to eating disorders. In this presentation a brief overview of the state of neuroimaging findings will be given and evidence of these approaches for clinical use. Although neuroimaging has shown various abnormalities and deficits, replication and meaning of these findings has proven difficult and translation from one psychiatric disorder to another a challenge. Apart from non-invasive methods that have been developed and will be discussed later in this symposium; more invasive methods like Deep Brain Stimulation will be given attention. In some parts of the field progress has been made in this more invasive translation to clinical applications, i.e. in the use of DBS in OCD. Recently the first findings of DBS in ED have been published.
Empirical Evidence from Brain-Directed Interventions and/or Treatments for Eating Disorders
Hans-Christoph Friederich, MD | Medical University Hospital Dusseldorf, Dusseldorf, Germany

The presentation provides empirical evidence from non-invasive brain-directed interventions and/or treatments in eating disorders. The most common non-invasive techniques are transcranial magnetic stimulation (TMS) and transcranial direct current stimulation (tDCS). These techniques are used to target brain regions of the cortical cognitive control network to modulate self-regulatory control of food intake. Findings from proof-of-concept studies as well as from first clinical trials will be presented. Another promising non-invasive intervention is real-time neurofeedback that allows patients to learn to self-regulate their brain activity in specific brain regions. Combining neurofeedback and cognitive treatment strategies may enhance clinical outcomes. Additionally, brain directed neuropsychological treatments such as cognitive remediation therapy and cognitive bias modification will be highlighted. The presentation addresses questions regarding ethics, potential complications, patient selection criteria, and future developments. The potential of multimodal neuroimaging to inform neuromodulation targets and protocols in the scope of personalized medicine is discussed.

An Overview of New Research into Food Choice and Habit Formation and the Effect Seen in the Brain
Joanna Steinglass, MD | Columbia University, New York, NY, USA

To provide an overview of the new research into food choice and habit formation and the effect seen in the brain. Eating disorders are defined, in part, by disturbances in eating behavior. While much is understood about the appetitive and inhibitory controls of normal eating, the brain mechanisms of maladaptive eating behavior are just beginning to be characterized. A critical advance in cognitive neuroscience has been the increasing understanding of the basic neural mechanisms of decision-making and choice. Application of these tools to the study of eating disorders has been fruitful in linking neuroimaging with actual disturbances in behavior. One promising line of investigation has used a range of neurocognitive tasks to test disturbances in reward processing among individuals with anorexia nervosa. Reward processing is critical for shaping behavior, therefore understanding general disturbances in reward has yielded insights about how these neural mechanisms may contribute to the development and persistence of maladaptive eating behavior. Furthermore, examining decision-making about food directly has identified that individuals with anorexia nervosa use these circuits differently when choosing what foods to eat. These approaches to the study of AN can link brain and behavior, and identify mechanisms of illness that will open new avenues of investigation for treatment.

Discussant:
Neuroimaging in Eating Disorders—Has the Money Been Worth it for Our Patients?
Ursula Bailer, MD, FAED | Medical University of Vienna, Vienna, Austria

To provide an integration of the three previous talks and to try to answer controversial questions regarding the money spent on imaging research and the resulting meaning to clinical treatment strategies for eating disorders. What does the field need to do in order to translate brain imaging data to clinical practice?

Abstract:
Over the past decade, research on neuroimaging of eating disorder-related brain circuitry has been accruing. Volumetric evidence suggests increased volumes of the left medial orbitofrontal gyrus rectus and of the right insula in anorexia nervosa and bulimia nervosa, deemed important in the regulation of food intake and interoception. The white matter integrity of the fornix, a limbic pathway involved in the regulation of food intake and emotions was decreased. Functional brain imaging studies found reward pathways to be involved in the processing of food stimuli, including insula and striatum, which could contribute to over- and undereating in eating disorders. The main aim of this plenary will be to provide an overview of the clinical value of neuroimaging research on eating disorders. The contributions and limitations of neuroimaging techniques, such as functional magnetic resonance imaging (fMRI), positron emission tomography, and single photon emission computed tomography will be discussed. Non-invasive intervention strategies, including realtime fMRI or EEG neurofeedback, repetitive transcranial magnetic stimulation, and transcranial direct-current stimulation will be presented. Brain-directed psychological treatments such as cognitive remediation therapy will be highlighted. These approaches will be discussed against the background of recent evidence, while addressing practical questions. Their potential as therapeutic tools in brain-directed treatment of eating disorders will be discussed, focusing on applicability and ethics. These approaches will be discussed against the background of their meaning for clinical use.
Learning Objectives:
Participants will be able to:
» Understand the scope and clinical implications of neuroimaging research in the eating disorders.
» Understand food choice and habit formation in relation to brain research.
» Understand the scope, content, and effects of non-invasive brain-directed interventions and brain-oriented psychological treatments as well as their ethical implications.
» Understand necessary adaptations for translation of brain research into practice.

10:45 – 11:15 a.m.
Refreshments with the Exhibitors | Forum Hall Foyer BC, Second Floor

11:15 a.m. – 12:45 p.m.
Workshop Session III | Forum Hall, Second Floor

W 3.1 | Weight, Health, and the Growing Brain: Contemporary Considerations in Treatment Goal Weight Determination for Children and Adolescents with Restrictive Eating Disorders

Simultaneously Translated to Spanish

Rebecka Peebles, MD | The Children's Hospital of Philadelphia, Philadelphia, Pennsylvania, USA
Debra Katzman, MD, FAED | The Hospital for Sick Children, Toronto, Canada
Andrea Garber, PhD, RD and Daniel Le Grange, PhD, FAED | University of California, San Francisco, San Francisco, California, USA
Lisa LaBorde, BA, JD, LLB, AccFM | F.E.A.S.T. (Families Empowered and Supporting Treatment of Eating Disorders), Toronto, Canada

Treatment goal weights (TGWs) are generally agreed to be important milestones in the treatment and recovery of patients with restrictive eating disorders. However, how best to determine and label them, or even whether to use them at all, remain controversial. TGWs can vary widely for individuals and among treatment programs, and this ‘apples and oranges’ reality causes considerable confusion for patients, caregivers, providers, and researchers. Some providers feel reaching a TGW is critical, while others feel TGWs should not be discussed or emphasized in treatment. For post-menarchal females, maintaining optimal menstrual function without exogenous hormones is one consideration. However, many questions remain unanswered. In the context of pediatric growth and development, how do we know when a patient has reached their TGW? What role does the patient’s historical growth curve play in calculating a TGW? How should TGWs be calculated if the patient is pre-pubertal? Male? On hormonal contraception? Stunted in linear height? Transgender? Historically overweight or low weight? Normal weight with significant eating disordered cognitions? This workshop will address these challenging clinical topics in determining pediatric TGWs.

The workshop will be led by a team of clinicians and researchers (adolescent medicine, nutrition, behavioral health, and a parent advocate) who regularly care for children and adolescents with eating disorders. Discussion points include the necessity of incorporating expected pubertal growth and development, linear growth, historical growth curves, expressed cognitions, dietary habits and hormonal milestones into TGW calculations, how TGWs are ‘moving targets’ in pediatric patients, and how clinician and parent weight bias impact TGWs. The impact of malnutrition on the growing and developing brain will be discussed, as well as emerging findings that malnutrition may precede anorexia nervosa in certain patient subgroups. Finally, different models for presenting TGWs to patients and caregivers in different treatment paradigms will be discussed. Interactive discussion using case-based learning will engage participants and stimulate a lively dialogue. Participants will be encouraged to share interesting and challenging cases.

Learning Objectives:
» Describe pubertal, growth, and cognitive considerations in setting a treatment goal weight (TGW), and explain the rationale for incorporating an individual patient’s historical growth curve in TGW determination
» Differentiate considerations in determining TGW in the context of unique and challenging clinical issues (young children, males, transgender youth, and youth who have grown at extremes of the growth curve prior to developing an eating disorder) in children and adolescents
» Discuss a common language for presenting TGWs to patients and caregivers, and how weight bias might influence these conversations.

W 3.2 | Suicide in Eating Disorders: Who is at Highest Risk and How do We Work More Effectively with These Clients? | Club C, First Floor

Emily Pisetsky, PhD and Scott Crow, MD, FAED | University of Minnesota, Minneapolis, Minnesota, USA
Lindsey Bodell, PhD | University of Chicago, Chicago, Illinois, USA
Lucene Wisniewski, PhD, FAED | The Emily Program, Cleveland, Ohio, USA
Suicide is a common cause of the elevated mortality in eating disorders (ED). Although this is an oft-cited statistic, many clinicians report not knowing which individuals are at highest risk for suicide or how to effectively manage these clients clinically. Thus, during the first part of this workshop (15 minutes), Dr. Crow will review the literature on mortality in EDs and prevalence of suicide attempts. Next, Drs. Pisetsky and Bodell will discuss recent research findings on who are at highest risk for suicide attempts, including specific ED symptom presentations, comorbid psychopathology, and personality traits, as well as psychological models of suicide risk and their application for treatment and prevention efforts (15 minutes).

The second half of the workshop will focus on specific clinical skills for working with suicidal clients. Dr. Wisniewski will present a case and discuss the therapeutic techniques she uses working with these clients, drawing from dialectical-behavioral therapy. She will discuss managing both acute and long-term high risk for suicide. Workshop participants will be able to ask questions about this case as well as their own challenging clinical cases. There will be opportunities for workshop participants to engage in role plays with the presenters who will provide feedback (30 minutes). The workshop will end with a discussion facilitated by all of the presenters on clinicians’ concerns about working with high risk clients and strategies to maintain self-care and professional and personal boundaries while engaging in challenging clinical work (30 minutes).

Learning Objectives:
- Identify the prevalence and correlates of suicide attempts in individuals with eating disorders.
- More effectively work with clients both at acute and long-term risk of suicide.
- Use strategies to deal with the stress of working with high risk clients.

W 3.3 | The Body Project Collaborative: Building Global Partnerships for Eating Disorder Intervention Dissemination; How You Can Too! | Club E, First Floor

Alan Duffy, MS | Eating Recovery Center/The Body Project Collaborative, Denver, Colorado, USA
Marisol Perez, PhD | Arizona State University, Tempe, Arizona, USA
Phillippa Diedrichs, PhD | University of the West of England, Bristol, Avon, United Kingdom
Carolyn Becker, PhD, FAED | Trinity University/The Body Project Collaborative, San Antonio, Texas, USA

Dissemination of effective interventions to reduce body dissatisfaction and prevent some eating disorders (ED) is a critical public health priority. The Body Project is a dissonance-based intervention program in which young women critique the appearance-ideal. Over the past decade and a half, efficacy trials have shown that the Body Project produces greater reductions in ED risk factors (including body dissatisfaction) and symptoms relative to assessment-only control and several alternative interventions. It also has been shown to reduce the onset of some EDs. More recent research on the Body Project has focused on translation to real-world settings. These efforts have indicated very strong potential for program dissemination.

In 2012, the Body Project Collaborative was formed with the intention of broadly disseminating the program around the world through unique partnerships. This workshop will begin with the presenters briefly reviewing the research supporting the efficacy and effectiveness of the Body Project and provide a succinct history of dissemination efforts prior to 2012. The core portion of the workshop will be the presenters discussing five global partnership case studies in the United States (two partnerships), Canada, Mexico, and the United Kingdom that have made scalable dissemination of the Body Project at minimal cost possible. Presenters will discuss challenges in developing global partnerships, suggest potential avenues for global partnerships in addressing body dissatisfaction as well as ED prevention and treatment dissemination; participants will be able to discuss strategies for building global partnerships with their own therapeutic/prevention/research dissemination.

The presenters will guide participants through an interactive forum that will allow participants to develop a plan for beginning partnerships at the local, national, and international level for the smallest to the biggest research and practice initiatives.

Learning Objectives:
- Understand how the Body Project Collaborative has developed global partnerships in multiple countries.
- Articulate the methods utilized to develop meaningful global partnerships to disseminate research, therapeutic, and prevention interventions.
- Emerge with a preliminary plan for developing partnerships to assist in dissemination of their own interventions.
### W 3.4 | Integrating Basic Behavioral, Psychological, and Neurobiological Research into the Study of Eating Disorders | Club H, First Floor

Amy M. Heard, BA | Loyola University Chicago, Chicago, Illinois, USA  
Margaret Sala, BS | Southern Methodist University, Dallas, Texas, USA  
Lauren E. Breithaupt, MA | George Mason University, Fairfax, Virginia, USA  
Kendra R. Becker, PhD | Massachusetts General Hospital/Harvard Medical School, Boston, Massachusetts, USA  
Jason M. Lavender, PhD | Neuropsychiatric Research Institute, Fargo, North Dakota, USA

Translational research seeks to apply findings from basic behavioral, psychological, and neurobiological research to treat disease and improve well-being. This workshop focuses on integrating these areas of research and obtaining funding in the study of eating disorders (ED). The workshop will begin with a moderated group discussion (Heard) of how basic behavioral, psychological, and neurobiological research intersects with clinical intervention in the ED field (5 minutes). After this initial discussion, panelists will present examples of how their own research fits within a translational model. One panelist (Lavender) will discuss the National Institute of Mental Health (NIMH) Research Domain Criteria (RDoC) initiative, which seeks to integrate basic dimensions of human functioning into the study of mental disorders, and describe ED research consistent with this framework (15 minutes). Two panelists (Heard, Sala) will build on this discussion by presenting an integrated model of reward and affect regulation within anorexia nervosa (10 minutes). Another panelist (Breithaupt) will discuss the application of neuroimaging research investigating reward processing to bulimia nervosa (10 minutes). Participants will then have an opportunity to ask questions about presented research (10 minutes) before breaking into groups to discuss methods of incorporating translational research in their own work (15 minutes). The workshop will end with a moderated group discussion (Heard) on available funding opportunities to conduct translational research. Graduate students, postdoctoral fellows, and early-career investigators (Breithaupt, Sala, Becker, Lavender) who have received funding from the National Science Foundation and the NIMH will describe how funding agencies define "basic" research and distinguish it from clinical research (5 minutes). Participants will have an opportunity to ask questions and receive advice from panelists on leveraging such grants to fund ED research (20 minutes). Didactic (40 minutes); Interactive: (50 minutes)

#### Learning Objectives:
- Understand the role of translational research in the study of eating disorders
- Identify funding mechanisms that may be relevant for translational research in the study of eating disorders.
- Discover ways in which current research questions may be answered by using more basic behavioral, psychological, and neurobiological research.

### W 3.5 | Integrating Research Evidence for a Novel Emotion Skills Training Intervention | Meeting Hall 1A, First Floor

Kate Tchanturia, DClinPsy, PhD, FAED | King’s College London/Maudsley Hospital, London, United Kingdom  
Marcela Marin Dapelo and Heather Westwood | King's College London, London, United Kingdom

The aim of this workshop is to synthesis research and clinical practice on socioemotional functioning in eating disorders. The workshop will be split into four sections, two of which are more didactic and two more interactive in nature. In the first section, we will describe how experimental findings on emotion expressivity and research exploring co-occurring Autism Spectrum Disorder traits have complimented our understanding of socio-emotional functioning. Our systematic evaluation of the literature in eating disorders and related conditions clearly shows reduced expressivity of emotions through facial expression during the acute phase of illness and the presence of co-occurring autistic symptoms in a significant proportion of patients with eating disorders. The most important findings in the area will be presented to the attendees in this section (15 minutes). In the second section, attendees will gather together in small groups to discuss how emotional difficulties and the presence of co-occurring autistic symptoms can make treatment for eating disorders challenging (20 minutes). In the third part, we will share with the workshop attendees recent experimental work which we have conducted using facial expression experimental work and how we have translated this into the Cognitive Remediation and Emotion Skills Training (CREST) manualised treatment package (20 minutes). Finally, we will demonstrate some experiential exercises we have used in emotion skills training sessions with patients with eating disorders and novel possible extensions of CREST, focusing on difficulties with social interaction (20 minutes).
Learning Objectives:
- Identify difficulties with socioemotional functioning which are commonly experienced by patients with eating disorders in intensive clinical care.
- Apply experimental methods to study expressivity in patient with eating disorders.
- Demonstrate how research findings can be translated into clinical practice through the use of experiential exercises.

W 3.6 | Multidisciplinary Teaching Methods: Engaging the Next Generation
Meeting Hall 1B, First Floor

Melissa Nishawala, MD, Kate Cheney, MD, Michelle Miller, PsyD, Bridget Murphy, MS, RDN, Andrea Vazzana, PhD, Lisa Kotler, MD, and Rebecca Berry, PhD | New York University, New York, New York, USA

Many clinicians reach the end of their training reporting that they do not feel equipped to treat patients with eating disorders. In addition to the obvious obstacle of lack of knowledge regarding eating disorders, bias and reluctance to delve into sensitive topics keep trainees from recognizing important signs and symptoms. The first step in gaining the confidence to treat eating disorders is becoming comfortable is asking tough questions and doing so with compassion and without judgement.

The teaching modalities presented in this workshop were developed to teach medical students during an inter-clerkship intensive week of studies on addiction, nutrition and behavior change; enhanced by strategies used to engage students in our undergraduate minor in child and adolescent mental health studies; and adapted to use with a broad base of learners, including psychology interns, post-doctoral fellows, child psychiatry fellows, general psychiatry residents, and social work students, as well as faculty who have not yet specialized in eating disorders. After a brief introduction (5 minutes), we will spend the remainder of the workshop demonstrating our interactive teaching methods incorporating viewpoints from our different disciplines of psychiatry, psychology and nutrition. This will include: Live poll quiz (20 minutes); Team-based learning using multidisciplinary format (25 minutes); Live interview role play (25 minutes); Panel discussion with Q & A including all presenters (15 minutes). Each section will include away-points to help participants to develop their own curricula. Emphasis will be placed on creating excitement for learning, understanding bias, eliciting sensitive information, avoiding judgment, and facilitating entry into effective treatments. Participants will receive practical teaching skills to engage groups of all types including undergraduate students, professional students and clinicians of all disciplines.

Learning Objectives:
- Identify the weaknesses in standard, didactic learning.
- Integrate innovative, interactive teaching methods into previously developed curricula.
- Encourage trainees to challenge biases that act as barriers to accessing treatment.

W 3.7 | Spotlight on the Needs of Children with Eating Disorders
Terrace 2, Second Floor

Dasha Nicholls, MBBS, MD (Res), MRCPsych, FAED | Great Ormond Street Hospital for Children NHS Foundation Trust, London, United Kingdom
Catherine Stewart, PhD | South London and Maudsley NHS Foundation Trust, London, United Kingdom
Cathaline Tangau, MSc | University College London, London, United Kingdom
Nadia Micali, MD | UCL Institute of Child Health, London, United Kingdom

Although described in the literature since 1894, childhood (preadolescent) onset eating disorders (ED) were once considered a relatively rare phenomenon. A possible rise in incidence of childhood ED coincides temporally with a rise in obesity, and associated efforts to combat this. This workshop will: 1) review the epidemiology of childhood onset ED across countries, exploring evidence for temporal trends (10 minutes); 2) present new data from a two site retrospective case notes study looking at triggers for onset of childhood ED (10 minutes); 3) review diagnostic and assessment procedures in this age group (10 minutes) and 4) discuss how developmental differences inform adaptations to early intervention and standard treatment and consider the role of community education/prevention based approaches (10 minutes introduction, 50 minutes interactive discussion using clinical case material).

Learning Objectives:
- Calculate the likely incidence of childhood EDs in their context and recognize where further data are needed.
- Develop an assessment protocol for younger patients.
- Anticipate the treatment needs of this patient cohort within their own setting.
**W 3.8 | Cue Exposure Therapy for Binge Eating-Related Disorders Using Virtual Reality**

**Terrace 1, Second Floor**

**Marta Ferrer-Garcia**, PhD, **José Gutiérrez-Maldonado**, PhD, **Joana Pla-Sanjuanelo**, MPsych, and **Ferran Vilalta-Abella**, MPsych | University of Barcelona, Barcelona, Spain

**Giuseppe Riva**, PhD | Università Cattolica del Sacro Cuore, Milan, Italy

**Antonios Dakanalis**, PhD | Università degli Studi di Milano-Bicocca, Milan, Italy

This workshop provides information on the use of a virtual reality-based intervention for cue-exposure therapy (CET) in patients with binge eating-related disorders (BERD) resistant to treatment. Cognitive-behavioral therapy (CBT) is usually recommended as the first-line treatment for both bulimia (BN) and binge eating disorder (BED) and there is a strong body of research supporting its efficacy. However, a large percentage of patients do not improve despite treatment. Consequently, several approaches have been proposed to improve standard interventions. CET is based on the classical conditioning model and aims to extinguish food craving and anxiety associated with binge behavior through breaking the bond between the conditioned stimuli (e.g., palatable food, emotional states) and the unconditioned stimulus (intake of binge food). Previous research shows that CET is effective in reducing food craving, anxiety and binge behavior. However, logistical difficulties and the time needed to apply CET have hindered its development and implementation. Virtual reality (VR) technology is a powerful resource for simulating real-life situations in which CET can be used while ensuring security, privacy, flexibility, ecological validity, and control of the situation. Given that, new VR-based software for CET has been developed for administration as a component of BERD treatment. This workshop is structured in three parts. First, the efficacy, applicability and rationale of CET are briefly summarized. Second, the VR-based intervention is presented. Information on its development and use will be provided and attendees will be able to test how it works. Third, an experiment with the use of VR-based CET in patients with BN and BED resistant to treatment will be presented. Data on the efficacy of the software will be provided and several clinical cases will be discussed.

**Learning Objectives:**

1. To review the rationale of cue-exposure therapy for binge eating-related disorders and to analyze available studies of its efficacy, applicability and current drawbacks.
2. To use new software based on virtual reality technology for cue exposure therapy in binge eating-related disorders.
3. To integrate virtual reality-based cue-exposure therapy in the treatment of binge eating-related disorders, to analyze the main advantages and disadvantages of the software, and to identify patients especially likely to benefit from its use.

---

**W 3.9 | Home Treatment in Greece: Working with Families and Patients with Severe AN according to the Interpersonal Component of Cognitive Interpersonal Maintenance Model (Not NBCC Approved)**

**Meeting Hall V, Second Floor**

**Maria Tsika**, BA and **Janet Treasure**, OBE, MD, FRCP, FAED | Institute of Psychiatry, Psychology and Neuroscience, King’s College, London, United Kingdom

**Angeliki Zormpala**, BS, MSc | Hellenic Center For Eating Disorders, Athens, Greece

**Constantinos Bletsos**, BSc, MSc | Adolescent Inpatient Unit, Sismanoglio Hospital, Athens, Greece

Home treatment is emerging as an alternative treatment plan to hospital admission for adolescents and adults with acute or severe anorexia nervosa in Greece due to the lack of specialized inpatient and day care units. Moreover, the home treatment program includes intensive monitoring, supervision of meals at home, or additional individual/family support that usually lasts approximately 16 weeks. It is a family centered approach, which aims to address the patient’s psychological and age-related needs in the home environment. Further, it is designed to empower and support family members, reduce the parental burden, and enable the family to live a normal life. Take into consideration that substantiated research indicates that familial factors can contribute to the maintenance of eating disorders. The family intervention of home treatment is based on the theory of the maintenance model for anorexia nervosa that is proposed by Schmidt and Treasure in 2006. Specifically, this model suggests that the caregivers’ emotional reactions are characterized by high levels of anxiety and depression, psychological distress and dysfunctional responses to the illness in the form of Expressed Emotions or accommodation to symptoms, can act as maintaining factors of an eating disorder. Also, the model has been applied to the home treatment program for the last four years and its efficiency is currently under study.

**Learning Objectives:**

1. To describe the phases of home intervention, focusing on implementation of the interpersonal maintenance model for anorexia nervosa.
2. Increase their knowledge of the application of this model in the home environment by using role-playing based on scenarios and real case material.
3. Discuss the advantages and disadvantages of home treatment.
W 3.10 | E-Health for Eating Disorders: Featback as Example
Meeting Hall IV, Second Floor

Eric van Furth, PhD, FAED | Rivierduinen Eating Disorders Ursula/LUMC, Leiden, Netherlands
Alexandra Dingemans, PhD and Jiska Aardoom, PhD | Rivierduinen Eating Disorders Ursula, Leiden, Netherlands

E-health interventions decrease barriers to care, because they are widely available and more easily accessible than traditional face-to-face treatment. Internet-based interventions have the potential to provide promising ways to enhance health care. In the first part of the workshop we will critically review, and discuss with participants, the emerging evidence for e-mental health for eating disorders.

We will provide an update on our published reviews on this topic (PMID: 26946513 and PMID: 23674367). Next we will provide a comprehensive overview of the results of our randomized controlled trial of Featback, a psycho-education and automated self-monitoring system with added psychologist support. We will briefly present and integrate the effectiveness (PMID: 27317358), cost-effectiveness (PMID: 27441418), predictors and moderators (what works for whom), mediators (mechanisms of change) and the results of a content analysis of the support sessions. This ‘360-view’ on Featback provides input for the discussion with participants about the clinical utility of anonymous e-health interventions and next steps in research and clinical practice.

Finally, we will introduce the brief psychologist led online-interventions used in the support sessions of our RCT. In pairs of two, participants will practice briefly with this model.

Learning Objectives:
- Following this workshop participants will be able to appraise the state-of-the-art in the emerging field of e-health for eating disorders.
- Following this workshop participants will be able to appreciate the scope (strengths, limitations) of e-health for eating disorders.
- Following this workshop participants will be able to integrate the different perspectives of the results of an RCT on an anonymous e-health intervention.

W 3.11 | Research-Practice Integration: How Do I Actually Integrate in a Real-World Setting?
North Hall, Second Floor

Caitlin Martin-Wagar, MA | The University of Akron, Akron, Ohio, USA
Kelly Bhatnagar, PhD | The Emily Program, Beachwood, Ohio, USA

The purpose of this workshop is to present a model for integrating research and practice in real-world clinical settings that is both practical and feasible. Additionally, strategies for researchers and clinicians to collaborate in obtaining clinically relevant data will be provided. While the scientist-practitioner model is highly valued in the field of psychology, it often feels unattainable to actually implement the model. Reasons such as a lack of funding, interest, or resources have been cited as barriers to true research-practice integration. However, even if clinicians are delivering evidence-based treatment (EBT), without program evaluation or research examining their treatment delivery, it can be difficult to discern how effective the EBT is in their specific practice. Evaluating outcomes is also vital when making adaptations to empirically supported models for more practical use in clinical settings. As clinical practice continues to be more linked to managed care and the larger healthcare system, program evaluation is increasingly mandated by stakeholders, accreditation agencies, and insurance companies. A step-by-step procedure describing how to integrate research and practice in clinical settings will be provided and examples from the presenters’ own eating disorder research-practice integration team will be described. Additionally, major obstacles the team faced during development and implementation of research-practice procedures will be reviewed. This workshop aims for both primary clinicians and primary researchers to find concrete ways to more realistically integrate research and practice.

Overview and rationale of the importance of the integration of research and practice for eating disorders (20 minutes); Group discussion on barriers to integration (15 minutes); Description of processes one Midwestern outpatient eating disorder specialty clinic took to integrate research and practice; description of obstacles faced during this implementation and step-by-step suggestions (20 minutes); Video clips from members of the research-practice integration team on what they feel they have gained from this approach (5 minutes). Small group discussions to problem-solve perceived barriers (15 minutes); Wrap up with audience members action plans/goals to move towards more fully integrating research and practice (15 minutes)

Learning Objectives:
- Describe the process the research-practice integration team used to develop procedures in an outpatient clinic that integrate clinical work and research.
- Problem-solve barriers to developing or enhancing research-practice integrations in primary clinical and primary research settings.
- Develop concrete steps to reduce the research-practice gap at host institutes.
PAPER PRESENTATIONS SESSION II
Topic: Treatment of Eating Disorders (Adult) II (Not NBCC Approved)
Club A, First Floor

Co-Chairs:
Jennifer J. Thomas, PhD, FAED & D. Catherine Walker, PhD

12.1: Predictors of Outcome in an Evidence-Based Intensive Outpatient Program for the Treatment of Eating Disorders Support Rapid Response and Treatment Duration

D. Catherine Walker, PhD, Union College, Schenectady, New York
Julia Brooks, Student, Union College, Schenectady, New York
Emily Ehrlich, Student, Union College, Schenectady, New York
Julie Morison, PhD, HPA/Livewell, Albany, New York
Drew Anderson, PhD, University at Albany, State University of New York, Albany, New York

Treatment outcome research is limited among transdiagnostic ED samples and in intensive outpatient programs (IOPs). Previous research within treatment settings for eating disorders (EDs) consistently indicates that rapid response (RR) to treatment is a significant predictor of overall treatment success (Macdonald et al., 2015). However, the RR phenomenon has not been replicated in a transdiagnostic ED IOP sample. The current study sought to examine previously reported outcome predictors (weight suppression, RR, severity of illness, ED diagnosis, number of comorbid disorders, comorbid substance use, and comorbid personality disorder), in a community IOP for EDs. The current sample consisted of 167 consecutive admissions to a community ED IOP from May 2013–June 2016. Patients were 90% female and 95% Caucasian, with mean illness duration of 8.08 years (SD = 7.95, range: 33-36) and mean of two treatment attempts (range: 0-6) prior to intake. Patients’ mean intake BMI was 21.58 kg/m2 (SD = 5.13, range: 14.53-45.09). Modal number of comorbid diagnoses was one (range: 0-3); 14 (8.2%) had a substance use disorder and 13 (7.6%) had a personality disorder diagnosis. Most were diagnosed with anorexia nervosa (n = 102; 61.1%), 38 (22.7%) with bulimia nervosa, 4 (2.4%) with binge eating disorder, 21 (12.6%) with other/unspecified feeding or eating disorder, and 2 (1.2%) with avoidant/restrictive food intake disorder. Most were diagnosed with anorexia nervosa (n = 102; 61.1%), 38 (22.7%) with bulimia nervosa, 4 (2.4%) with binge eating disorder, 21 (12.6%) with other/unspecified feeding or eating disorder, and 2 (1.2%) with avoidant/restrictive food intake disorder. Patients completed a mean of 13.73 weeks (SD = 12.37, range: 1-64) in the IOP. Only RR (FΔ(1,76) = 10.96, p < .001) and total treatment duration (FΔ(1,74) = 5.51, p = .02) were significant outcome predictors, accounting for 12.6% and 6.1% of the variance in Eating Attitudes Test-26 change, respectively. The current study indicates that RR remains a consistent outcome predictor across treatment settings and in transdiagnostic samples. Future work should evaluate factors that mediate and moderate RR and incorporate RR findings into the design and implementation of outpatient ED treatment.

12.2: Clinical Characteristics of Eating Disorders Patients who do not Respond to Cognitive Behavioral Therapy: A Six-Year Follow-up Study

Giovanni Castellini, MD, PhD, University of Florence, Florence, APO AE
Valdo Ricca, MD, University of Florence, Florence, APO AE

Longitudinal studies indicated that a consistent rate of Eating Disorders (EDs) patients do not report any improvement when they undergo cognitive behavioral therapy (CBT). The present study attempts to identify the clinical characteristics of EDs who do not respond to CBT. Five hundred sixty four EDs patients (165 with
Anorexia Nervosa (AN), 137 with Bulimia Nervosa (BN), 262 with Binge Eating Disorder (BED)) were evaluated by means of the Structured Clinical Interview for DSM-IV, and several self-reported questionnaires. The clinical assessment was conducted on the first day of admission and at further follow-up time points (end of individual CBT. 3, 6 years). A high rate of non-response to treatment rate was observed (AN: 20.0%; BN: 28.5%; BED: 14.1%). Duration of illness, the lack of weight gain at one year follow up, and severe EDs psychopathology were found to increase non-response risk in AN. Non-response was associated with impulsivity, diagnostic crossover, and substance abuse in BN patients, and with Unipolar Depression and Emotional Eating in BED patients. Non-responders showed mild behavioral improvement but no relevant change in EDs psychopathology. Therapeutic interventions should be targeted on specific psychopathology, taking into account potential non-response predictors.

12.3: Time to Eat! Less Regular Eating Patterns in Individuals who Binge and/or Purge

Kathryn Coniglio, BA. Massachusetts General Hospital, Boston, Massachusetts
Abigail Cooper, BA. Massachusetts General Hospital, Boston, Massachusetts
Kendra Becker, PhD. Massachusetts General Hospital, Boston, Massachusetts
Debra Franko, PhD, FAED. Northeastern University, Boston, Massachusetts
Lazaro Zayas, MD. Massachusetts General Hospital, Boston, Massachusetts
Kamryn Eddy, PhD. FAED. Massachusetts General Hospital, Boston, Massachusetts
Jennifer Thomas, PhD, FAED. Massachusetts General Hospital, Boston, Massachusetts

A critical initial goal in enhanced cognitive behavioral therapy for eating disorders (CBT-E) is to help the patient establish a pattern of regular eating, comprising of three meals and two to three snacks at prescribed times throughout the day. A previous study showed that youth with anorexia nervosa restricting type (AN-R) follow a more regular pattern of eating than youth with binge eating/purging type (AN-BP). The current study aimed to test whether individuals who engage in any binging and/or purging follow a less regular pattern of eating (i.e., are more likely to skip meals and/or snacks) than individuals who do not binge or purge, regardless of diagnosis. Consecutive referrals to a residential eating disorders program (N=147, mean age=18.09) completed the Eating Disorders Examination (EDE), in which they described eating patterns prior to admission. We conducted a one-way ANOVA and found that women who binge and/or purged (n=92), compared to women who did not (n=55), more often skipped breakfast [F(1,145)=13.11, p<.001], mid-morning snack [F(1,145)=6.27, p<.05], lunch [F(1,145)=14.43, p<.001], mid-afternoon snack [F(1,145)=19.61, p<.001], dinner [F(1,145)=26.30, p<.001], and evening snack [F(1,145)=18.67, p<.001]. The frequency of skipping any of these meals or snacks—except mid-morning snack—was correlated with the frequency of both binging (r=-.20 to -.39, all p’s <.05) and self-induced vomiting (r=-.26 to -.45, all p’s <.05). In particular, skipping dinner showed moderate-to-large correlations with binging (r=-.39, p<.001) and vomiting (r=-.45, p<.001). In sum, individuals who binge and/or purge may need additional support to establish a regular eating pattern. Furthermore, our results support the CBT-E recommendation that mid-morning snack could be optional for non-underweight patients whose primary goal is to reduce binge/purge frequency, as skipping mid-morning snack was not correlated with episodes of binging or purging.

12.4: Assertive Refeeding for Medically Compromised Adult Inpatients with Anorexia Nervosa: An Observational Study of Outcomes

Shane Jeffrey, RD, BSc. Royal Brisbane and Women’s Hospital, Brisbane, Queensland
Kylie Matthews, M Nut and Diet. University of Queensland, St Lucia, Brisbane, Queensland
Warren Ward, MBBS. Royal Brisbane and Women’s Hospital, Herston, Brisbane, Queensland
Amanda Davis, RD. Royal Brisbane and Women’s Hospital. Heron, Brisbane, Queensland
Elsie Patterson, RD. Sunshine Coast University, Sippy Downs, Sunshine Coast, Queensland

Assertive refeeding for medically compromised adult inpatients with anorexia nervosa: An observational study of outcomes. S. Jeffrey, K. Matthews, E. Patterson, A. Davis, W. Ward Refeeding syndrome (RS), a potentially life-threatening condition, has been defined as abnormal fluid and electrolyte shifts in response to the commencement of refeeding in malnourished patients. Due to the presence of significant malnutrition, patients with anorexia nervosa (AN) are typically considered high risk for developing RS. In adolescent AN inpatients, recent research has demonstrated that the traditional ‘start low, go slow’ approach commonly recommended to minimise RS risk, is unnecessary. More assertive approaches to refeeding have not increased RS occurrence. Despite this, there is a paucity of evidence demonstrating the impact of this approach in adult inpatients with AN. In 2013, the Eating Disorders Outreach Service modified its refeeding guidelines for medically compromised adults with AN admitted to non-specialist medical wards across the state of Queensland, Australia. This protocol, supported by structured medical monitoring, commenced feeding at 1500cal/day (previously 1000cal/day) and increased by 500cal every second day until the goal of 3000cal/day was reached. Route of nutrition delivery was either nasogastric feed or oral meal plan. Outcomes from a three year study sample of 163 patients compare pre and post data for incidence of RS, hypophosphatemia, hypoglycaemia, and time to medical stability. Preliminary data suggests that AN patients treated in a non-specialist environment are not medically disadvantaged by assertive nutritional rehabilitation with suitable levels of medical monitoring. Anecdotal feedback from health professionals and patients indicate the protocol is widely accepted.
12.5: Assessing the Effectiveness of Attention Training Therapy in the Treatment of Binge Eating within Bulimia Nervosa and Binge Eating Disorder—A Randomised Controlled Trial

Nadine-Devaki Wright, BA, Student, Postgrad Dip in Ed, University of Dublin, Dublin, Ireland
Stephen Touyz, PhD, Professor, University of Sydney, Sydney, APO AE, Australia
Maree Abbott, DClinPsy, PhD, Associate Professor, University of Sydney, Sydney, APO AE, Australia
Evelyn Smith, PhD, University of Western Sydney, Sydney, APO AE, Australia
Elizabeth Hall, DClinPsy, University of Sydney, Sydney, APO AE, Australia

Binge eating is a core symptom of both Bulimia Nervosa (BN) and Binge Eating Disorder (BED). Information processing theories of eating disorders propose that selective attention towards food stimuli may be a significant factor maintaining binge eating within these disorders. The Attention Training Therapy (ATT) program used in this RCT was originally designed as a treatment for social phobia. ATT was found to be as effective as CBT but with better outcomes in reducing fear of negative evaluation and self-focused attention. This ATT program was modified to focus on binge eating by teaching individuals to shift their attention away from binges urges to the task at hand and towards thoughtful eating, which was hypothesized to reduce binge eating frequency. This study aimed to evaluate the efficacy of group-based manualised ATT for individuals with BN or BED compared to a waitlist control condition. 49 females met DSM-5 criteria (BN = 42; BED = 7) and were randomly allocated to either group-ATT treatment (N = 27) or waitlist control (N = 22). All participants were assessed using a clinician-administered semi-structured interview (EDE) and a battery of questionnaires at pre-treatment, post-treatment and follow-up. Results at post-treatment and follow-up found no significant reduction in binge eating frequency between the groups. However, the treatment group reported significantly increased impulse control, a reduced sense of 'no control over their eating' and they also endorsed fewer weight concerns compared to the waitlist group. This study provides a unique contribution to the eating disorders treatment literature by examining the impact of modifying attentional focus on binge eating symptoms, an area not previously researched.

12.6: Therapist Drift and Clinicians Experiences of Working with People who have Eating Disorders

Sonja Skocic, BSc, MA, PhD, The University of Melbourne, Melbourne, Victoria

Several studies have suggested that clinicians are reluctant to commit to evidence-based treatment protocols (e.g., Simmons et al., 2008). The aim of this study was to explore the relationship between interpersonal experiences of working therapeutically with people that have eating disorders and therapist drift away from using evidence based treatment.
The classes are offered to all day patients, and to outpatients who identified as having features of over-control which prevent psychological recovery. Analysis of factors associated with over-control measured before and after RO-DBT treatment reveals significant improvement in self-reported social connectedness (t = 2.47, p < 0.05, n = 26) and experiences of anticipatory pleasure (t = 2.43, p < 0.05, n = 21), and consummatory pleasure (t = 4.68, p < 0.001, n = 25). Young people also reported changes in their perceptions of their parents’ acceptance of them (t = 4.84, p < 0.001, n = 14). Statistical trends are observed in changes in emotion regulation (t = 2.17, p = 0.05), and reductions of discomfort in attachment relationships (t = 2.12, p < 0.05, n = 11). These findings will be discussed in relation to models of social, emotional and neurobiological features of AN, and the impact of change in these on recovery from AN in adolescence.

13.2: Compulsive Exercise in Adolescents with Eating Disorder: A Multi-site Longitudinal Study

Johanna Levallius, BSc, MSc, Karolinska Institute, Stockholm, Stockholm
Christina Collin, MD, Karolinska Institute, Stockholm, Stockholm
Andreas Birgegård, PhD, Karolinska Institute, Stockholm, Stockholm

Excessive exercise (EE) to control weight and/or shape has been proposed as significant in the etiology, development and maintenance of eating disorder (ED), resulting in more severe and enduring pathology. Few studies have investigated EE among adolescents with ED. This study aimed to investigate the clinical picture and prognosis of adolescents with ED and EE. Over 3000 girls and boys from a national ED database were investigated on EE prevalence and frequency in relation to psychiatric symptoms, associated features and outcome. Denial of illness was adjusted for. Adjusted EE prevalence in girls was 44%, with lowest prevalence in anorexia nervosa. Those with EE scored significantly higher than non-EE on total ED severity, restriction and negative perfectionism. There were only minor differences between EE and non-EE patients on emotional distress, hyperactivity, suicidality and self-esteem. Initial EE did not impact prognosis, yet cessation was associated with remission. Among boys, adjusted EE prevalence was 38%, and their clinical presentation mirrored very well that of girls. EE is a common clinical feature in adolescents with ED and cessation is associated with recovery. When controlling for denial of illness, EE had less detrimental impact on ED than predicted. We recommend development of a clear definition of EE and further exploration of treatment implications.

13.3: Establishing Goal Weights for Adolescent Eating Disorder Patients: What is the State of the Field?

Jocelyn Lebow, PhD, Mayo Clinic, Rochester, Minnesota. Leslie Sim, PhD, Mayo Clinic, Rochester, Minnesota
Erin C. Accurso, PhD, University of California, San Francisco, San Francisco, California

Eating disorder treatment success often hinges on achieving an “expected body weight” (EBW)—the weight at which physical and psychological symptoms recede, medical complications resolve, and functioning returns to baseline. This indicator is necessary for diagnostic accuracy, for tracking progress, and for justifying higher levels of care to third-party payers. Despite the importance of this marker, there is little consensus in the field about the optimal method of determining EBW. Calculation for adolescents becomes even more complicated since their EBW is a moving target. Despite several suggested methods (e.g., BMI, McLaren, Moore methods), it is unclear whether a practical “industry standard” exists for calculating or conceptualizing EBW. This study surveyed 112 child/adolescent eating disorder treatment providers (13.4% physicians, 38.4% psychologists, 36.7% masters level therapists, 9% dietitians). Results suggest that methods of determining EBW varied among practitioners. Although 40.7% use data from individual growth curves to determine EBW, the remaining use diverse approaches ranging from algorithms (e.g., the BMI method) to considering patient input. Group differences were considered with regards to 3 broad categories of EBW calculation methods: rule-based approaches (e.g., BMI, McLaren or Moore methods), individual difference-based approaches (e.g., growth curve, physiological, cognitive symptoms), or other approaches (e.g., patient preference). No group differences were found between provider types, years of experience, percentage practice with children/adolescents vs. adults, or practice setting. However, providers who used FBT were significantly more likely to use an individual approach vs. non-rule based approaches that were considered “other.” Results suggest that there is a lack of consensus of how best to define EBW. Clinical implications and future research directions will be discussed.

13.4: Caregiver Coping and Appraisal of the Caregiving Experience among Adolescent Eating Disorder Patients: A Comparative Study with Substance Use Disorder Patients and Healthy Adolescents

Melissa Parks, MSc, Autonomous University of Madrid, Madrid, Spain
Dimitra Anastasiadou, PhD, Universitat Oberta de Catalunya, Barcelona, Madrid
Ana Rosa Sepulveda, PhD, Autonomous University of Madrid, Madrid, Madrid
Montserrat Graell, MD, PhD, Niño Jesús University Hospital, Madrid, Spain
Julio César Sánchez, MSc, Proyecto Hombre–Programa Soporte, Madrid, Spain
Tamara Álvarez, MSc, Autonomous University of Madrid, Madrid, Spain

Caring for a child with an eating disorder (ED) has several mental and physical consequences. The stress-coping model suggests this relationship is moderated by the appraisal of the situation as positive or negative and the coping strategies possessed by the caregiver. Limited quantitative data exists on ED caregivers’ coping strategies or if they are associated with their appraisal of the caregiving experience. Furthermore,
The purpose of this study was to examine eating disorders in children under age 13 in a tertiary care hospital setting. The study included patients ranging from age 7 to 12, participating in inpatient or outpatient eating disorders treatment between January 2013 and July 2016. At time of entry into the Eating Disorders Program, patients and parents participated in a semi-structured diagnostic interview and completed a range of questionnaires. A total of 106 patients were assessed. Of these patients, 68 were diagnosed with AN, 25 with ARFID, 3 with OSFED, 2 with UFED, and 8 had no eating disorder. Therefore, 93 patients were retained for data analyses. The average age of patients was 11.27 (SD= 9), the average BMI was 15.28 (SD=1.82), and the average percentage of ideal body weight (IBW) was 80.11 (SD= 7.62). Patients with ARFID and AN were compared descriptively and using one-way ANOVAs. 28% of the ARFID sample was male, while only 13% of the AN sample was male. Significant differences were found between groups for chronicity (M=20.25, SD=32.13) than patients with AN (M= 6.32, SD= 4.89). For illness severity, patients with ARFID (M= 81.00, SD= 7.90) and AN (M= 79.77, SD= 7.65) were similar in terms of percentage of ideal body weight (IBW). but patients with AN (M= 59.79, SD= 14.47) had significantly lower heart rates than patients with ARFID (M= 73.63, SD= 17.45). Related, 62% of patients with AN, and only 44% of patients with ARFID were admitted as inpatients at the time of assessment. In terms of co-morbidities, 5% of patients with AN had a co-morbid developmental disorder, while 13% of those with ARFID did. High rates of anxiety disorders were found in both groups (38% for ARFID and 30% for AN). Co-morbid depressive disorders were low in patients with ARFID and AN. Findings have implications for assessment and treatment of eating disorders in children under the age of 13.

13.6: Program Evaluation of a Canadian Residential Treatment Model for Adolescents with Eating Disorders—Pilot Data from the First 2 Years of Operation

Leora Pinhas, MD, Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario
Raluca Morariu, BSc, Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario
Melanie Stuckey, PhD, Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario
Sheila Bjarnason, MSW, Ontario Shores Centre for Mental Health Sciences, Whitby, Ontario

The Eating Disorder (ED) Residential Program (EDRP) is a government-funded program in Ontario, explicitly created to provide an alternative for adolescents unsuccessfully treated by traditional ED programs. It is an innovative model that incorporates concepts of transparency, patient directed care and co-design common in the general mental health discourse, but are relatively new to ED literature. Over the first two years of operation, quantitative data was collected using a questionnaire battery administered at admission and discharge and included demographics, primary and concurrent diagnoses, ED psychopathology (EDE-q), depressive symptoms (Child Depression Inventory; CDI2), anxiety symptoms (Multidimensional Anxiety Scale for Children; MASC2), heights and weights. Descriptive analyses, chi-square analyses, T-Tests and ANOVAs were performed in analyzing the data. Twenty two adolescents (61% of the total patient population; Female=21; Male=1), with a mean age of 16.1 years (SD=117) consented to be included in the study sample. Patients all had a minimum of 2 prior inpatient admissions and a mean length of stay of 7.7 (SD=5.13) months. Primary diagnoses were anorexia nervosa (91%), bulimia nervosa (5%) and ARFID (5%). Concurrent diagnoses were present in 68% of the sample, most commonly anxiety disorders (41%). The mean BMI on admission was 18.3 (SD=1.51) and at discharge was 19.8 (SD=1.50) (p<0.001). The EDE-q significantly improved from admission (M=3.93; SD=1.31) to discharge (M=1.55; SD=1.29) (p<0.005). A similar pattern was found on the MASC2 at admission (M=65.3; SD=16.57) and discharge (M=56.8; SD=20.02) (p<0.05) and the CDI at admission (M=69.83; SD=12.58) and discharge (M=55.42; SD=11.19).

no studies employ comparison groups. This cross-sectional study involved 48 mothers and 44 fathers of ED patients, 46 mothers and 36 fathers of patients with a substance use disorder (SUD) and 63 mothers and 51 fathers of healthy adolescents (HC). Study aims included 1) to assess the differences in coping strategies (COPE-60) between groups, 2) to evaluate gender differences in use of coping strategies, and 3) to explore the relationship between coping strategies and appraisal of the caregiving experience (Experience of Coping ECI). The results of the MANCOVA revealed an effect of caregiver group on coping strategies for mothers [F(8, 302) = 2.558, p = .010; Wilks’ Λ = .877, partial η² = .063], but not for fathers. Mothers of both patient groups used self-sufficient problem-focused coping (an adaptive strategy) more than HC mothers. Also, mothers used an adaptive strategy of social support coping significantly more than fathers in all three groups. Finally, among ED mothers, adaptive coping was associated with recognition of positive aspects of the caregiving experience whereas avoidant coping was associated with recognition of the negative aspects of the caregiving experience. The strategies used by ED caregivers do not differ greatly from the comparison groups. However, the relationship between coping strategies and appraisal underlines the importance of encouraging adaptive strategies and minimizing the use of maladaptive ones among ED caregivers. Furthermore, both mothers and fathers should be included in the treatment process.

13.5: A Comparative Study of ARFID and AN in Children under the Age of 13 in a Tertiary Care Hospital Setting: Prevalence, Severity, Chronicity and Co-morbidities.

Melissa Lieberman, PhD, Hospital for Sick Children, Toronto, Ontario
Melissa Houser, PhD, Hospital for Sick Children, Toronto, Ontario

The purpose of this study was to examine eating disorders in children under age 13 in a tertiary care hospital setting, in light of the new DSM-5 diagnostic classification system. Children with ARFID and Anorexia (AN) were compared to determine the prevalence, severity, chronicity, and co-morbidity in these disorders. The study included patients ranging in age from 7 to 12, participating in inpatient or outpatient eating disorders treatment between January 2013 and July 2016. At time of entry into the Eating Disorders Program, patients and parents participated in a semi-structured diagnostic interview and completed a range of questionnaires. A total of 106 patients were assessed. Of these patients, 68 were diagnosed with AN, 25 with ARFID, 3 with OSFED, 2 with UFED, and 8 had no eating disorder. Therefore, 93 patients were retained for data analyses. The average age of patients was 11.27 (SD= 9), the average BMI was 15.28 (SD=1.82), and the average percentage of ideal body weight (IBW) was 80.11 (SD= 7.62). Patients with ARFID and AN were compared descriptively and using one-way ANOVAs. 28% of the ARFID sample was male, while only 13% of the AN sample was male. Significant differences were found between groups for chronicity in months (F(90)= 12.22, p < .001). ARFID patients had higher rates of chronicity (M=20.25, SD=32.13) than patients with AN (M= 6.32, SD= 4.89). For illness severity, patients with ARFID (M= 81.00, SD= 7.90) and AN (M= 79.77, SD= 7.65) were similar in terms of percentage of ideal body weight (IBW). but patients with AN (M= 59.79, SD= 14.47) had significantly lower heart rates than patients with ARFID (M= 73.63, SD= 17.45). Related, 62% of patients with AN, and only 44% of patients with ARFID were admitted as inpatients at the time of assessment. In terms of co-morbidities, 5% of patients with AN had a co-morbid developmental disorder, while 13% of those with ARFID did. High rates of anxiety disorders were found in both groups (38% for ARFID and 30% for AN). Co-morbid depressive disorders were low in patients with ARFID and AN. Findings have implications for assessment and treatment of eating disorders in children under the age of 13.
(p<0.001). Patients experienced both a clinically and statistically significant improvement during their stay at the EDRP. The results of this pilot study suggest that patients with chronic and/or complex EDs can benefit from an alternative innovative intensive treatment model.

**14.1: Is Response in Inhibitory Control Circuitry Modulated by Eating in Women Remitted from Bulimia Nervosa?**

Laura A. Berner, PhD, University of California, San Diego, San Diego, California

Amanda Bischoff-Grethe, PhD, University of California, San Diego, San Diego, California

Christina E. Wierenga, PhD, University of California, San Diego, San Diego, California

Alan Simmons, PhD, University of California, San Diego, San Diego, California

Ursula Baller, MD, Medical University of Vienna, Vienna, Vienna

Alice V. Ely, PhD, University of California, San Diego, San Diego, California

Walter H. Kaye, MD, University of California, San Diego, San Diego, California

Aberrant activation in inhibitory control circuitry is correlated with binge eating frequency in bulimia nervosa (BN). However, it is unclear whether this dysfunction is exaggerated 1) after restriction, potentially increasing vulnerability to binge eating initiation, or 2) after eating has started, potentially contributing to difficulty stopping eating. The purpose of the present study was to examine frontostriatal function in women remitted from BN (RBN) when both fasted and fed to help disentangle the impact of metabolic state on inhibitory control. RBN (n = 23) and control women (CW, n = 22) performed a parametric Stop Signal Task during fMRI on two counterbalanced visits—after a 16-hour fast or a standard meal. Regardless of metabolic state, groups performed similarly on the task, but, during inhibitory errors, the RBN group showed increased activation relative to CW in left dorsolateral prefrontal cortex (DLPFC) and right anterior cingulate (ACC). In contrast, activation during successful inhibition depended on metabolic state. After eating, when correctly inhibiting responses, RBN women showed greater activation than CW in left DLPFC. RBN also showed greater activation in this region during response inhibition when fed compared to when they were fasted. Increased error-related ACC activation has been observed in women ill with BN and predicts BN onset in adolescents. Therefore, our results in RBN suggest that increased error-related ACC response may represent a trait biomarker for the disorder. Findings during successful inhibition suggest a potential neural mechanism underlying fast-binge-purge cycles. Individuals with BN may require fewer prefrontal resources to inhibit responses when fasted, but greater effort to maintain the same level of control when fed. Since stopping may require greater neural effort after eating in BN, focusing on stimulus control and inhibitory training in the post-meal period may be an effective target for future interventions.

**14.2: Structural Covariance Networks in Anorexia Nervosa: A Graph Theoretical Analysis**

Enrico Collantoni, MD, University of Padua, Padua, Veneto

Davide Gallicchio, MD, University of Padua, Padua, Veneto

Maria Antonietta Vergine, MD, University of Padua, Padua, Veneto

Elisa Bonello, PsyD, University of Padua, Padua, Veneto

Elena Tenconi, PhD, PsyD, University of Padua, Padua, Veneto

Daniela Degortes, PhD, PsyD, University of Padua, Padua, Veneto

Paolo Santonastasso, MD, University of Padua, Padua, Veneto

Angela Favaro, MD, PhD, University of Padua, Padua, Veneto

In this study we used graph theory to describe cortical network organization in Anorexia Nervosa (AN). We used a MRI morpho-structural covariance analysis based on three parameters: cortical thickness, gyrification and fractal dimension. A total of 38 patients with acute AN and 38 healthy controls were included in this study. A group of 20 patients in full remission from AN were included to test the state/trait nature of any MRI finding. Data was collected on a Philips Achieva 1.5T scanner equipped for echo-planar imaging. Surface extraction, local gyrification index and cortical thickness estimation were completed using the FreeSurfer package. Graph analysis was performed using the Graph Analysis Toolbox. The differences between the analysed parameters likely depend on their different morpho-functional meanings: cortical thickness is more influenced by situational factors, like malnutrition, while gyrification and fractal dimensionality show more stable features over neurodevelopment. In patients with acute AN, the covariance analysis among cortical thickness values showed a significant increase of some parameters (clustering coefficient, local efficiency, modularity) indicating a more segregated network. We also observed a reduced global efficiency coefficient, which is a measure of global network integration. In the recovered patients group, we noticed a similar global trend (increased network segregation and lower global integration) without statistically significant differences for any single parameter. According to gyrification indexes, the covariance network showed a trend towards high segregation, both in acute and recovered patients. We did not, on the contrary, observe any significant difference in the covariance networks in the analysis of fractal dimension. The presence of
increased segregation properties in cortical covariance networks in AN may be determined by a retardation of neurodevelopmental trajectories, or by an energy saving adaptive response.

14.3: Medial Prefrontal Cortex Engagement During Self and Other Evaluations is Related to Body Shape and Anxiety in Adolescent Anorexia Nervosa

Carrie McAdams, MD, PhD, UT Southwestern Medical Center, Dallas, Texas
Jie Xu, MD, PhD, UT Southwestern Medical Center, Dallas, Texas
Jessica Harper, BA, UT Southwestern Medical Center, Dallas, Texas
Erin Van Enkevort, PhD, UT Southwestern Medical Center, Dallas, Texas
Kelsey Latimer, PsyD, UT Southwestern Medical Center, Dallas, Texas
Urszula Kelley, MD, UT Southwestern Medical Center, Dallas, Texas

Anorexia nervosa (AN) is an illness that frequently begins during adolescence and involves weight loss motivated by a desire to change one’s appearance. Two groups of adolescent girls (AN-A, weight-recovered following AN, n = 24) and (HC-A, healthy comparison, n = 18) completed a functional magnetic resonance imaging task involving social self-evaluations. Depression, anxiety, eating behaviors and body shape were correlated with neural activity in a priori regions of interest, established from prior work examining adults with AN. A cluster in medial prefrontal cortex and the dorsal anterior cingulate correlated with the body shape questionnaire \( r = -0.44, p = 0.004 \); subjects with more body shape concerns used this area less during self than friend evaluations in both groups. A cluster in medial prefrontal cortex and the cingulate correlated with anxiety in the AN-A group \( r = -0.51, p = 0.01 \), whereby more anxiety was associated with engagement when disagreeing rather than agreeing with social terms during self-evaluations. One year clinical follow-up was obtained for the AN-A group, leading to recovered (AN-AR) and ill (AN-AI) groups. The AN-AR group used the posterior cingulate and precuneus more when considering another person’s perspective during self-evaluations than the AN-AI group \( r = 0.62, p = 0.005 \). Differences in the utilization of frontal brain regions for social evaluations may contribute to both anxiety and body shape concerns in adolescents, potentially mediating pathology in AN. As clinical outcomes were associated with use of the posterior cingulate and precuneus, neural differences related to social evaluations may provide clinical predictive value. Activation of these neural regions appropriately for social evaluations may be a key component for achieving sustained weight-recovery following AN.

14.4: Neural Correlates of Explicit Regulation of Negative Emotions in Patients with Anorexia Nervosa

Stefan Ehrlich, MD, Faculty of Medicine, TU Dresden, Dresden, Saxony
Joseph A. King, PhD, Faculty of Medicine, TU Dresden, Dresden, Saxony
Franziska Ritschel, DiplPsych, Faculty of Medicine, TU Dresden, Dresden, Saxony
Ilka Boehm, DiplPsych, Faculty of Medicine, TU Dresden, Dresden, Saxony
Daniel Geisler, DiplIng, Faculty of Medicine, TU Dresden, Dresden, Saxony
Fabio Bernardoni, PhD, Faculty of Medicine, TU Dresden, Dresden, Saxony
Kersten Diers, DiplPsych, Department of Psychology, TU Dresden, Dresden, Saxony
Alexander Strobel, PhD, Department of Psychology, TU Dresden, Dresden, Saxony
Thomas Goschke, PhD, Department of Psychology, TU Dresden, Dresden, Saxony
Henrik Walter, MD, PhD, Department of Psychology, Charité Berlin, Berlin, Berlin
Maria Seidel, MSc, Faculty of Medicine, TU Dresden, Dresden, Saxony

Theoretical models and treatment development efforts have increasingly focused on the role of emotion recognition and regulation difficulties in the etiology and maintenance of anorexia nervosa (AN). However, up to now research has mainly included self-report data to undermine this theory. The current study aims at testing the ability of AN patients to willingly downregulate negative emotions by means of reappraisal. Such strategies are regarded as adaptive and have been shown to successfully reduce amygdala activity and recruit prefrontal areas associated with cognitive control processes. Emotion regulation ability is investigated via behavioral assessment (arousal ratings) and neural activity (fMRT) by using a standard emotion regulation paradigm comparing simply watching emotional stimuli and regulating them. Our sample consists of 35 acute AN patients and an pairwise age-matched control group. Behavioral and imaging analyses suggest a successful reduction of arousal and amygdala activity during the regulation condition for both patients and controls. However, compared with controls, individuals with AN showed relatively increased activation in the amygdala as well as in the bilateral dorsolateral prefrontal cortex during the passive viewing of aversive compared with neutral pictures. Our data do not support the notion of a general emotion regulation deficit in AN. However, the findings support previous theories of increased emotional reactivity to negative events in AN. Further, we found increased task-independent recruitment of brain regions implicated in cognitive control which could be interpreted within the framework of habitual control processes in AN. The current results might also suggests that reappraisal may represent a successful emotion regulation strategy for individuals with AN.
14.5: Threat Detection and Attentional Bias to Threat in Women Recovered from Anorexia Nervosa: Neural Alterations in Extrastriate and Medial Prefrontal Cortices.

Lasse Bang, MA, Student, Regional Department for Eating Disorders, Oslo University Hospital, Oslo
Øyvind Ro, MD, PhD, Regional Department for Eating Disorders, Oslo University Hospital, Oslo
Tor Endestad, PhD, Department of Psychology, University of Oslo, Oslo

Behavioral studies have shown that anorexia nervosa (AN) is associated with attentional bias to food- and body-related cues. Similar attentional bias to general threat cues have been reported, but findings are inconsistent. The aim of this study was to investigate the neural responses associated with threat-detection and attentional bias to threat in women recovered from AN. We used functional magnetic resonance imaging to measure neural responses to a dot-probe task, involving pairs of angry and neutral face stimuli, in 22 adult women recovered from AN (age 27.32 ± 5.14 years) and 21 comparison women (age 26.00 ± 4.71 years). Women recovered from AN were behaviorally unimpaired, and did not exhibit a behavioral attentional bias to threat. In response to angry faces, women recovered from AN showed significant hypoactivation in the extrastriate cortex. During attentional bias to angry faces, recovered AN women showed significant hyperactivation in the medial prefrontal cortex. Our results suggest that women recovered from AN are characterized by altered neurocognitive attentional processes to such stimuli, which may reflect compensatory mechanisms. This could account for some of the discrepant findings of behavioral attentional bias to general threat in AN.

14.6: Lower Levels of Glutamate in the Brains of those with Anorexia Nervosa: A Magnetic Resonance Spectroscopy Study at 7 Tesla

Alexandra Pike, BA, MSc, University of Oxford, Oxford, Oxfordshire
Beata Godlewska, MBBS, PhD, University of Oxford, Oxford, UK
Ann Sharpley, BSc, PhD, University of Oxford, Oxford, UK
Rebecca Park, BSc, MB, MRCPsych, PhD, University of Oxford, Oxford, UK
Agnes Ayton, MD, MRCPsych, MSc, MMedSc, University of Oxford, Oxford, UK
Uzay Emir, BSc, MSc, PhD, University of Oxford, Oxford, UK
Philip Cowen, BS, BSc, MB, MD, MRCPsych, University of Oxford, Oxford, UK

The purpose of this study was to use Magnetic Resonance Spectroscopy (MRS) to examine brain glutamate concentration in patients with Anorexia Nervosa (AN) compared to healthy controls, with the hope of improving our neurobiological understanding of this disorder. Recently it has become possible to perform MRS at 7T, which enables researchers to differentiate between glutamate and its precursor and metabolite glutamine. The higher field strength removes the confounding necessity found at lower field strengths to derive a combined measure of these two neurochemicals (known as Glx). We applied this technique to 13 patients with anorexia nervosa (AN) and 12 healthy controls, and looked at three voxels: the anterior cingulate cortex, the occipital cortex, and the putamen. We corrected for total CSF in the voxel and for water content, and analysed the data using LCModel. We found that in patients with acute AN, brain glutamate levels were significantly lowered compared to healthy controls in all three voxels we studied. A repeated measures ANOVA for glutamate showed a main effect of diagnosis (F (1,19) = 13.7, p=0.002) but no interaction between diagnosis and voxel region (F (2,19) = 0.13, p=0.89). There was no change in glutamine concentration in AN (all p values > 0.1). The overall reduction in glutamate across these three voxels was about 8%. Some previous investigations have found lowered Glx in AN; our study suggests this is attributable to lowered glutamate concentrations rather than alterations in glutamine. The lowered glutamate levels in AN might be a consequence of starvation or could play a maintaining role in the disorder. If the latter is the case there may be a place for pharmacological manipulation of glutamate in AN treatment.

Topic: Body Image II

Club H, First Floor

Co-Chairs:
Jennifer Lundgren, PhD, FAED & Kendra Becker, PhD

15.1: Body Dissatisfaction Predicts Engagement in Non-Compensatory Purging among Eating Disorder Patients who have a Greater Tendency to be Intolerant of Negative Emotions

Kendra Becker, BA, MS, PhD, Massachusetts General Hospital/Harvard Medical School, Boston, Massachusetts
Nassim Tabri, PhD, Carleton University, Ottawa
Kathryn Coniglio, BA, Massachusetts General Hospital, Boston, Massachusetts
Sarah Fischer, PhD, FAED, George Mason University, Fairfax, Virginia
Franziska Plessow, PhD, Massachusetts General Hospital/Harvard Medical School, Boston, Massachusetts
Debra Franko, FAED, PhD, Northeastern University, Boston, Massachusetts
Kamryn Eddy, PhD, FAED, Massachusetts General Hospital/Harvard Medical School, Boston, Massachusetts
Jennifer Thomas, PhD, FAED, Massachusetts General Hospital/Harvard Medical School, Boston, Massachusetts
Overvaluation of weight/shape or body dissatisfaction (BD) is identified as the core psychopathology underlying extreme weight-control behaviors in the cognitive behavioral therapy (CBT) model of eating disorders (ED). However, while CBT emphasizes reducing binge frequency as a way to reduce compensatory purging, fewer strategies are described for addressing non-compensatory purging (e.g., vomiting or laxative use not associated with a specific binge episode). Further, non-compensatory purging may be complicated by poor emotion regulation. We examined the utility of BD and low distress tolerance for predicting engagement in non-compensatory purging (combined laxative use and self-induced vomiting) among individuals with ED. We hypothesized that BD would predict engagement in non-compensatory purging, particularly among participants who have a predisposition towards negative mood intolerance and emotional reactivity. In Study 1 (N = 143), we examined whether the Behavioral Inhibition Scale (BIS: measure of anxiety sensitivity) moderated the relationship between BD and non-compensatory purging in a transdiagnostic residential sample. In Study 2 (N = 193), we examined whether negative urgency (NU: tendency to act rashly during negative moods) moderated the relationship between BD and non-compensatory purging in a transdiagnostic outpatient sample. As expected, in Study 1, BD was a predictor of non-compensatory purging among participants who scored high on BIS (B = .01; p = .02). Among participants who scored low on BIS, BD was not related to non-compensatory purging. We observed the same pattern of results in Study 2 with NU as moderator (B = .06; p = .02). These findings suggest that addressing negative mood intolerance and emotional reactivity by including an emphasis on distress tolerance, mindfulness, and emotion regulation may be instrumental for addressing non-compensatory purging, particularly among patients with high BD.

15.2: Disentangling Body Image: The Relative Clinical Significance of Weight/Shape Overvaluation, Dissatisfaction, and Preoccupation in Australian Girls and Boys

Deborah Mitchison, MPsyCh, MSc, PhD, Macquarie University, Sydney, NSW
Phillipa Hay, DPhil, FAED, Western Sydney University, Sydney, ACT
Scott Griffiths, PhD, BPsc(h) (Hons), University of Canberra, Canberra, ACT
Stuart B Murray, DClinPsy, PhD, BPsc(h) (Hons), University of California San Francisco, San Francisco, California
Caroline Bentley, BSc, Australian National University, Canberra, ACT
Kassandra Gratwick-Sarll, BA, DClinPsy, Australian National University, Canberra, ACT
Carmel Harrison, PhD, BPsc(h) (Hons), Australian National University, Canberra, ACT
Jonathan Mond, MPH, PhD, Western Sydney University, Sydney, NSW

The distinctiveness, and relative clinical significance of overvaluation, dissatisfaction, and preoccupation with body weight/shape remains inconclusive. This study sought to add to the evidence by testing associations between these three body image constructs and indicators of clinical significance. Male and female secondary students (N = 1666) aged 12-18 years completed a survey that included measures of dissatisfaction with, overvaluation of, and preoccupation with weight/shape, psychological distress, eating disorder behaviors, and basic demographic information. Conditional process analysis was employed to test the independent and mediating effects of overvaluation, dissatisfaction, and preoccupation on distress, dietary restraint, and objective binge eating. In girls, preoccupation demonstrated the strongest independent and mediating effects on distress, dietary restraint, and binge eating; whereas neither the direct or indirect effects of dissatisfaction on distress and overvaluation on binge eating were significant. Among boys however, the direct and indirect effects of overvaluation, dissatisfaction, and preoccupation on distress and eating disorder behaviors were relatively equal. These findings indicate that preoccupation with weight/shape may be particularly clinically significant in girls, whereas all constructs of body image disturbance may be equally significant in boys. The findings are consistent with the view that these constructs, while closely related, are distinct.

15.3: Weight and Shape Overvaluation as a Core Symptom in Eating Disorder Psychopathology: A Transdiagnostic and Disorder-Specific Network Analysis

Russell DuBois, MS, Northeastern University, Boston, Massachusetts
Rachel Rodgers, PhD, Northeastern University, Boston, Massachusetts
Debra Franko, PhD, Northeastern University, Boston, Massachusetts
Kamryn Eddy, PhD, Massachusetts General Hospital, Boston, Massachusetts
Jennifer Thomas, PhD, Massachusetts General Hospital, Boston, Massachusetts

The purpose of the current study is to test the enhanced cognitive behavioral model of eating disorders by investigating whether weight and shape overvaluation is a core symptom in eating disorder psychopathology using a network analysis. Males and females (n = 194; age M = 25.5, SD = 11.7) who were seeking outpatient treatment for an eating disorder and who received an eating disorder diagnosis were included in the study. We used the Eating Disorder Examination Questionnaire and the Eating Pathology Symptoms Inventory to assess participants’ eating disorder symptoms. We conducted a network analysis to create transdiagnostic and disorder-specific (anorexia nervosa, bulimia nervosa, and binge eating disorder) eating disorder symptom networks whereby
each node in the networks represents one eating disorder symptom and each edge in the networks represents the L1 (lasso) regularized covariance between two symptoms. We calculated the centrality of each symptom to identify core symptoms that have the greatest correlation with all other symptoms in the network. We assessed network stability with subset bootstrapping. Results indicated that weight and shape overvaluation had the largest symptom centrality among all of the eating disorder symptoms (MStrength = 1.12). Weight and shape overvaluation also exhibited the highest symptom centrality when calculated separately for each diagnostic group, including binge eating disorder. Our results provide robust support for the enhanced cognitive behavioral model of eating disorders by highlighting the powerful influence of overvaluation of weight and shape on nearly all other eating disorder symptoms, regardless of eating disorder diagnosis. Our findings identify weight and shape overvaluation as both a critical transdiagnostic treatment target and a potentially useful severity specifier for binge eating disorder.

15.4: When the Fit-Ideal Gets Scary: Body Image Ideals and Associated Eating and Body Dysmorphic Disorder Symptoms in Women in Weight Training

Andrea Hartmann, BSc, MPsych; PhD, Osnabrück University, Osnabrück, Lower Saxony
Leon Lange, BSc, Osnabrück University, Osnabrück, Schleswig-Holstein
Anna Spree, MPsych, Christian-Albrechts-Universität zu Kiel, Kiel, Schleswig-Holstein
Florian Steenbergen, BSc, Osnabrück University, Osnabrück, Lower Saxony
Manuel Waldorf, PhD, Osnabrück University, Osnabrück, Lower Saxony

To examine the differential relationship of thin, lean, and muscular body image ideals with eating and body dysmorphic disorder pathology, exercise dependence, and the use of appearance- and performance-enhancing drugs and supplements in a sample of women in weight training. We recruited 158 female weight trainers with a mean age of 26.6 years. In an online survey, participants completed Drive for Thinness (DT), Leaniness (DL), and Muscularity (DM) scales, Eating Disorder Examination-Questionnaire, Muscle Dysmorphia Inventory (MDI), and Body Dysmorphic Disorder Questionnaire. Additionally, 36 different body silhouettes assessed in a subsample the participants’ perceived current and ideal mix of fat and muscular body mass. A total of 29.5% participants (subsample of n=51) chose the two greatest muscle options on the ‘should’ silhouettes. DT and DM correlated significantly with ED (r = .85 and .36) and BDD (r = .66 and .31; all ps < .01), pathologically. DL was only related to ED pathology (r = .22, p < .05). While exercise dependence (MDI) is highly associated with all drives (all r > .22, all ps < .01), the scales supplement use and pharmacology are only correlated with DM and DL (r = .49 and .18), and DM and DT (r = .24 and .28; all ps < .01), respectively. This study is the first to focus on DM in relation to DT and DL in females and examines a sample of women in weight training. Findings suggest that both DT and DM might increase the risk for ED and BDD pathology. Women in fitness sports, therefore, need to be a target for screening and further investigation, in particular given the potential harmful use of appearance- and performance-enhancing drugs and supplements. Furthermore, the newly developed fat-muscle silhouettes allow for a more face-valid assessment of fat/muscle body image ideals.

15.5: Examination of the Mechanisms Accounting for the Protective Effect of Media Literacy on Body Dissatisfaction

Rachel Rodgers, PhD, Northeastern University, Boston, Massachusetts
Siân McLean, PhD, La Trobe University, Melbourne, Victoria
Susan Paxton, PhD, FAED, La Trobe University, Melbourne, Victoria

Media literacy has been highlighted as a critical protective factor, conferring resilience to media pressures that increase eating disorder risk. However, to date, the mechanisms underlying the protective effect of media literacy are poorly understood. The aim of the present study was to bridge this gap, by exploring the moderating role of three dimensions of media literacy on the relationship between media exposure and body dissatisfaction, mediated by thin-ideal internalization and appearance comparison among early adolescent girls. A sample of 284 early adolescent girls, (Mean age = 13.15 years), completed self-report measures of media exposure, thin-ideal internalization, appearance comparison, body dissatisfaction, and three dimensions of media literacy including: realism scepticism, similarity scepticism, and critical thinking. Moderated mediation analyses were conducted. Findings revealed different patterns of relationships for the different dimensions of media literacy. Specifically, similarity scepticism moderated the mediated relationship between media exposure and body dissatisfaction via both thin-ideal internalization (p = .003) and appearance comparison (p = .004). In contrast, realism scepticism and critical thinking were not found to moderate the mediated pathways between media exposure and body dissatisfaction. Findings suggest that similarity scepticism, the scepticism that one’s body could resemble unrealistic images in media, may be a critical component of media literacy in mitigating the effects of media exposure on body dissatisfaction. Further longitudinal and experimental research should aim to confirm these findings and clarify the role of other dimensions of media literacy with a view to informing prevention efforts.

15.6: Effectiveness of a Dissonance-Based Intervention for Girl Guides and Girl Scouts on Body Image and Disordered Eating: Results from a Global Pragmatic Controlled Trial

Phillippa Diedrichs, PhD, Centre for Appearance Research, University of the West of England, Bristol, Avon, UK
The World Association of Girl Guides and Girl Scouts (WAGGGS), the world’s largest youth organization for girls, partnered with the Dove Self-Esteem Project to implement a global body image intervention, Free Being Me (FBM). Using a community participatory approach, FBM was adapted from the dissonance-based eating disorder (ED) prevention intervention The Body Project. A train-the-trainer dissemination model was created, with global trainers delivering national trainings, after which trainees cascaded training down to local groups. Since 2013, FBM has been disseminated in over 120 countries to 3 million young people. The purpose of this study was to conduct a pragmatic controlled trial to explore the effectiveness of Free Being Me on body image, disordered eating, and related risk factor outcomes among universal samples of girl guides and girl scouts in nine countries (UK, Argentina, Germany, Hong Kong, India, Japan, Netherlands, Taiwan, Thailand). Girls (N = 377; Mage = 13.9) in each country were assigned to receive the intervention delivered over four weeks by a community leader, or, a waitlist control group. Standardised self-report measures of body image, disordered eating, and related risk factors were administered at pre- and post-intervention. After controlling for baseline scores, girls who received Free Being Me reported significant reductions in body dissatisfaction, eating disorder symptoms, behavioural avoidance due to body image concerns, negative affect, and thin-ideal internalisation compared to waitlist controls. The pattern of results varied somewhat between countries. These findings provide preliminary evidence to support the scaling up of body image and eating disorder prevention interventions. Future research with larger sample sizes and longer-term follow-up, particularly among middle- and low-income countries often ignored in ED prevention research, will be beneficial to further understanding of the effectiveness of global dissemination efforts for evidence-based body image and ED prevention interventions.

Topic: Gender, Ethnicity, Culture
Meeting Hall 1A, First Floor

Co-Chairs:
Lindsay Bodell, PhD & Kendrin Sonneville, ScD, RD

16.1: Eating Disorder Examination Questionnaire: Norms for Transgender Youth

Claire Peterson, PhD, Cincinnati Children’s Hospital Medical Center, Cincinnati, Ohio
Michael Toland, PhD, University of Kentucky, Lexington, Kentucky

The purpose of this study was to contribute new data about the factor structure of the Eating Disorder Examination Questionnaire (EDE-Q), and for the first time, provide normative data on the EDE-Q for transgender (TG) youth. This sample consisted of 186 male-to-female (MTF; n = 51) and female-to-male (FTM; n = 135) TG youth age 12-23 (M = 17.01, SD = 2.89) with a mean BMI of 26.31 (SD = 7.6). The EDE-Q was best represented by a bifactor solution with 3 orthogonal factors (restrict, eating concern, shape/weight concern). Multiple group analyses did not show latent mean differences (estimate = 0.06, z = 0.35, p = .73) between MTF and FTM on the general eating disorder dimension. Plus, no differences were found between observed means (estimate = 0.09) based on MTF status, z = -0.40, p = .60, d = 0.07 (MTF: M = 1.45, SD = 1.33, FTM: M = 1.54, SD = 1.29). As a whole group, observed mean EDE-Q Global score was 1.52 (SD = 1.3). In the last month 20% endorsed objective binge eating episodes while only 3% endorsed self-induced vomiting. Results indicate no differences between MTF and FTM transgender youth on EDE-Q Global scores. There were no gender differences observed for self-induced vomiting. However, MTF youth were more likely to endorse binge eating than FTM youth (z = 2.16, p = .03, estimate = 0.88). Overall, transgender norms on the EDE-Q are similar to cisgender samples. Further, the bifactor model of the EDE-Q is recommended for modeling purposes. For individual assessment scoring purposes the Global scale can be interpreted as a unidimensional reflection of eating disorder symptoms. However, raw subscale scores are not recommended.

16.2: Prospective Associations between Childhood Gender Conformity, Bullying Victimization, and Adolescent Disordered Eating Behaviors in a UK Cohort Study

Jerel Calzo, PhD, MPH, San Diego State University, San Diego, California
S. Bryn Austin, ScD, FAED, Boston Children’s Hospital and Harvard Medical School, Boston, Massachusetts
Stuart Murray, DClinPsy, PhD, University of California, San Francisco, San Francisco, California
Allegra Gordon, MPH, ScD, Boston Children’s Hospital and Harvard Medical School, Boston, Massachusetts
Nadia Micali, MRCPsych, PhD, MD, FAED, Icahn School of Medicine at Mount Sinai, New York, New Mexico
The internalization of cultural appearance ideals may be one dominant pathway by which gender conformity (i.e., adherence to masculinity and femininity norms) in childhood influences disordered eating behaviors (DEB). The processes by which conformity and nonconformity to gender norms are policed, which could include bullying and social exclusion, may create an additional pathway to DEB. We examined associations among childhood gender conformity, bullying victimization, and adolescent DEB in a representative cohort study of UK youth (Avon Longitudinal Study of Parents and Children; 2,367 males, 2,681 females). Childhood conformity to masculinity and femininity were assessed at age 8 years; past-year victimization (bullying [teasing; being hit]; social exclusion) at age 10, and frequency of past-year purging, overeating, and binge eating at age 16 via self-report questionnaire. Gender stratified, prospective path analyses (adjusting for sexual orientation, weight status, socioeconomic status, body dissatisfaction) revealed significant indirect paths from childhood gender conformity, bullying victimization, and adolescent binge eating. In females, higher conformity to masculinity (β=0.03) and femininity (β=0.03) at age 8 were associated with greater victimization at age 10 (p's <0.01), and greater victimization predicted greater frequency of binge eating (β=0.17). The indirect paths from gender expression to binge eating via victimization were significant (p's <0.01). In males, higher conformity to masculinity (β=0.05) and femininity (β=0.02) were associated with greater victimization at age 10 (p's <0.001), and greater victimization was linked to greater frequency of binge eating in adolescence (β=0.13, p<0.001). The indirect paths from gender expression to binge eating via victimization were significant (p's <0.01). Results indicate that victimization experiences may represent an additional intermediate mechanism linking gender expression to eating disorder risk.

16.3: Black Beauty: Exploring Body Ideals Among Black Women

Alice S. Lowy, MA, Northeastern University, Boston, Massachusetts
Elizabeth S. Cook, MS, Northeastern University, Boston, Massachusetts
Debra L. Franko, PhD, FAED, Northeastern University, Boston, Massachusetts
Rachel F. Rodger, PhD, Northeastern University, Boston, Massachusetts

Available instruments measuring body dissatisfaction often reflect White Western ideals that may not capture nuances of other racial and ethnic perceptions of attractiveness. It has been suggested that Black women in particular may not endorse the thin ideal and instead attribute importance to culturally specific body features. This may protect them from body dissatisfaction and eating disorder symptoms. The purpose of this study was to examine the associations between Black women’s endorsement of mainstream and cultural specific beauty ideals and eating disorder symptoms. The Black Body Ideals Scale (BBIS) was developed to assess beliefs about what Black women consider to be ideal body features, as well as personal investment in those beliefs. A sample of 49 Black female college students, mean age = 22.9 (5.5) years, completed an online questionnaire, including the BBIS, Eating Disorder Diagnostic Scale-5 (EDDS-5) and the Female Drive for Muscularity Scale (FDMS). Preliminary analyses revealed that culturally specific ideals were associated with drive for muscularity (r = .37, p = .02). Interestingly, small but inverse associations were found between eating disorder symptoms and culturally specific ideals (r = -.16) and Eurocentric ideals (r = -.14). These results suggest that endorsement of culturally specific features might protect against eating disorders among young Black women, whereas endorsement of Eurocentric features may increase risk. Such findings support using an intersectional approach in future prevention efforts that addresses cultural body ideals in relation to body image and eating pathology.


Joanna Doley, Student, BPsyc (Hons), La Trobe University, Melbourne, VIC
Laura Hart, BA, BSc, PhD, La Trobe University, The University of Melbourne, Melbourne, VIC
Arthur Stukas, BA, PhD, La Trobe University, Melbourne, VIC
Katja Petrovic, MPsych, La Trobe University, Melbourne, VIC
Ayoub Bouguettaya, BSc in Psychology (Hons), Deakin University (Burwood campus), Melbourne, VIC
Susan Paxton, BA (Hons); MPsych; PhD; FAED, La Trobe University, Melbourne, VIC

Stigma is recognized as a problem for individuals with eating disorders (EDs), as it forms barriers to disclosure and help-seeking. Interventions to reduce ED stigma may assist in removing these barriers; however it is not yet known which types of intervention are effective. This systematic review examined the effectiveness of intervention types, and identified gaps in the literature. We identified eligible studies through four databases, and relevant LISTSERVs. Two independent raters performed screening, data extraction, and quality assessment. We conducted meta-analyses on etiological explanations of ED (comparing biological, multifactorial, and sociocultural) and stigma reduction strategy (education and contact). Other study characteristics of interest were examined in a critical narrative synthesis. Eighteen papers were eligible for narrative synthesis, with ten also eligible for inclusion in meta-analysis. Interventions emphasizing biological etiology of ED resulted in lower stigma than those emphasizing multifactorial or sociocultural etiology, most notably in attitudinal stigma (biological versus sociocultural explanations; N=5, g =.47, p <.001; biological versus multifactorial
explanations N=3, g =.48, p <.001). Education-only interventions had larger reductions in stigma (N=2, g =.31, p =.45) than those including contact (N=4, g =.17, p =.18), but these results were less reliable than findings for etiological interventions. Most studies examined stigma related to Anorexia Nervosa or EDs as a general diagnostic category and had mostly female, undergraduate participants. There was inconclusive evidence on iatrogenic effects of interventions. Despite their effectiveness, research is needed to verify that biological explanations do not cause unintentional harm, such as biological essentialism. Future research should examine the role of in vivo contact, directly compare education and contact strategies, and aim to generalize findings to community populations.

16.5: Developmental Trajectories of Eating Disorder Symptoms in Black and White Girls

Lindsay Bodell, PhD, The University of Chicago, Chicago, Illinois
Jennifer Wildes, PhD, The University of Chicago, Chicago, Illinois
Yu Cheng, PhD, University of Pittsburgh, Pittsburgh, Pennsylvania
Andrea Goldschmidt, PhD, Warren Alpert Medical School of Brown University/The Miriam Hospital, Providence, Rhode Island
Kate Keenan, PhD, The University of Chicago, Chicago, Illinois
Alison Hipwell, PhD, University of Pittsburgh, Pittsburgh, Pennsylvania
Stephanie Stepp, PhD, University of Pittsburgh, Pittsburgh, Pennsylvania

Epidemiological research suggests racial differences in the temporal course and presentation of eating disorder symptoms. However, no studies have examined associations between race and eating disorder symptom trajectories across youth and adolescence, which is necessary to inform culturally sensitive prevention interventions. The purpose of the current study was to examine the trajectories of eating disorder symptoms from childhood to young adulthood and to examine whether race is associated with trajectory group membership. Data were drawn from 2,305 Black and White girls who participated in a community-based longitudinal cohort study examining the development of psychopathology (The Pittsburgh Girls Study). The child and adult versions of the Eating Attitudes Test assessed self-reported eating disorder symptoms at six time points between ages 9 and 21 years. Group-based trajectory modelling was used to examine developmental trajectories of dieting frequency, binge eating, vomiting, and overall eating disorder psychopathology. Three or four distinct developmental patterns were found for each disordered eating construct, including none, increasing, decreasing, or stable trajectories. White race was associated with a greater likelihood of being in the increasing and stable dieting trajectories and the increasing eating disorder psychopathology trajectory group. Black race was associated with a greater likelihood of being in the increasing or decreasing vomiting trajectories and the decreasing eating disorder psychopathology trajectory group. These results highlight the importance of examining eating disorder symptoms by racial background and the potential need for differences in the timing and focus of prevention interventions in these groups.

16.6: Community Based Nutrition Education to Reduce Geophagic Practices and Improve Nutrition in Women of Reproductive Age in Nakuru Municipality, Kenya: A Pilot Study

Sharon Iron-Segev, DSc, R.D., The Hebrew University of Jerusalem, Rehovot, IL
Janterose Nasimiyu Lusweti, MSc, The Hebrew University of Jerusalem, Rehovot, Kenya
Elizabeth Kamau-Mbuthia, PhD, Egerton University, Nakuru, Kenya
Aliza Stark, PhD, R.D., The Hebrew University of Jerusalem, Rehovot, IL

Geophagia, the deliberate consumption of earth, soil, stones or clay, is considered a type of pica. It is prevalent among pregnant and breastfeeding women, and is widespread in sub-Saharan Africa. In Nairobi Kenya, reported rates are at an alarming level of 74%. Health risks from geophagia include increased exposure to heavy metals and parasites and micronutrient deficiencies. Poor nutritional status coupled with geophagic practices are known to contribute to poor pregnancy outcomes. This study aimed to reduce geophagy and improve diet through nutrition education. A cross sectional study was conducted in 135 women of reproductive age (15-49 y), in low socioeconomic areas of Nakuru, Kenya. Questionnaires including dietary recall and program evaluation. Geophagia was cut across all ages within[167.4%] consuming 7100 g/day. Strong cravings were reported by 81.5% as the primary reason for geophagic practices. Sociodemographic factors were not associated with the amount of geophagic material consumed or dietary practices. The most common negative effect reported by participants was constipation (16.3%). Nutrition education focusing on geophagia significantly elicited a decrease in amount of geophagic material consumed per day in 82 (77%) of participants ($Z= -7.914, p<0.000$). After intervention the proportion of participants who chose to make half their plate vegetables using the healthy plate model increased significantly from 12% to 76.4%. A significant increase in dietary diversity was observed (Z=3.058, p<.002). Nutrition education was shown to be an effective approach for reducing geophagic practices in rural Kenya and improving overall nutrient intake. This pilot intervention showed that it is important to identify women at risk and provide nutrition education to combat this eating disorder.
Mobile technology presents a high potential as a means of delivery for interventions aiming to develop positive body image. Furthermore, self-compassion has emerged as a useful framework for body image interventions. The aim of the present study was to examine the efficacy of a randomized-controlled evaluation of BodiMojo, a mobile app-based intervention grounded in self-compassion aiming to promote positive body image. A sample of 273 adolescents and young adults, mean (SD) age = 18.36 (1.34), 75% female, participated in the study. Participants were randomly allocated to either an assessment-only control group or the intervention group, in which they were asked to use BodiMojo for 6 weeks. The intervention consisted of participants receiving two daily text messages containing a quiz, an audio mediation, an affirmation, or a behavioral tip. In addition, participants were asked to record their mood in the app once a day and to keep a daily gratitude journal. At baseline and post-test, participants completed measures of body esteem, social comparison, and dimensions of self-compassion including self-judgment. Findings revealed significant time (pre vs. post) and group (intervention vs. control) interactions for body esteem (p = .044) and self-judgment (p = .047) in the expected directions, such that body esteem showed a greater increase in the intervention group as compared with the control group, and self-judgment revealed a greater decrease in the intervention group relative to the control group. No significant group effects were found for social comparison. These findings provide preliminary support for BodiMojo as a cost-effective mobile app intervention for promoting positive body image. Interventions grounded in self-compassion theory may have the potential to promote positive body image by targeting negative self-evaluations.
Individuals with eating disorders struggle to eat during meals, which leads to significant weight loss and relapse. However, little is known about what contributes to difficulty eating meals such as how eating disorder (ED) cognitions that occur during a meal contribute to ED behaviors. We used mobile technology to test which mealtime ED cognitions predicted daily ED behaviors. Using the technique of ecological momentary assessment (EMA), we tested the ED cognitions of perfectionism (concerns about making mistakes during a meal), anxiety during a meal, avoiding emotions during a meal, ruminating about a meal, and worrying about weight gain during a meal as predictors of ED behaviors (e.g., restriction, binge eating, vomiting, excessive exercise, and body checking). Participants (N=61 individuals with an ED) completed 28 at-home ecological self-assessments across one week utilizing a mobile application. They then completed an assessment of ED symptoms at one-month follow up. Concerns about making mistakes during a meal (b=.16, p=.018) significantly predicted daily restriction. Rumination about a meal (b=.17, p=.004) predicted later binge eating. Worrying about weight gain during a meal (b=.07, p=.048) predicted later vomiting. Avoiding emotions during a meal predicted later excessive exercise (b=.08, p=.010). Finally, avoiding emotions during the meal (b=.14, p=.008), worrying about weight gain during a meal (b=.17, p=.001) and rumination about a meal (b=.14, p=.006) predicted later body checking. At one month follow up, fears of gaining weight (Wald=7.78, p=.005) and rumination about a meal (Wald=5.68, p=.017) predicted drive for thinness. This study pinpoints specific ED cognitions occurring during mealtimes that predict ED behaviors. We conclude that mobile technology-based EMA is ideal for detecting ED cognitions. Interventions could be developed to target these cognitions (e.g., purposely making mistakes, approaching emotions) to reduce ED behaviors. These interventions have the potential to promote healthy mealtimes experiences and prevent ED relapse.

**17.4: Risk for Eight Specific Eating Disorders, Obtained by a Virtual Assistant (“NUTMIN”), for the Support of Diagnosis Process of Eating Disorders: A Validation Study**

**Ana Olivia Caballero-Lambert**, MPC, Universidad Iberoamericana Leon, Leon, Guanajuato  
**Marcelo Funes-Gallanzi**, MPhil, PhD, AVNTK, SC, Guadalajara, Guanajuato  
**Ana Olivia Caballero-Lambert**, MPC, Universidad Iberoamericana Leon, Leon, Guanajuato  
**César Horacio Torres-Montañez**, ISC, AVNTK, SC, Guadalajara, Jalisco  
**Daniela Irazu Lopez-Gomez**, LN, Universidad Iberoamericana Leon, Leon, Guanajuato  
**Krisein Alejandra Martinez-Fuentes**, LNCA, Universidad Iberoamericana Leon, Leon, Guanajuato

Artificial intelligence has allowed several advances in health areas. “Nutmín” was developed as an Android app, using technology already in use by a general cognitive engine called Rachael Repp. This conversational assistant is capable of six logic operations (equivalence, similarity, induction, deduction, abduction, and metaphor); it is also able to learn free unstructured text and it is capable of improving itself. In a combined effort between Universidad Iberoamericana Leon and AVNTK, SC., it was possible for “Nutmín” to identify the user’s risk for developing eight different eating disorders (ED’s) - anorexia nervosa, bulimia nervosa, binge eating disorder, avoidance/restrictive disorder, pica, rumination, purging disorder and night eating syndrome. To achieve this, a qualitative study was conducted involving patients with eating disorders and health experts in these diseases. A questionnaire was used to find typical eating disorders phrases and confirmatory questions were added. Currently, a study is being conducted in a 484 adolescent sample. 15-19 y, both sexes, to validate the risk for these eight eating disorders determined by “Nutmín”. The risk for these ED’s is compared to body mass index, food intake obtained by a validated 24-hour recall, abnormal eating behaviors using Unikel’s validated Mexican brief questionnaire to measure the risk of abnormal eating behaviors, food selection using a Mexican questionnaire to identify food selection motives, and self-image using a validated scale. The aim of this research is to obtain a valid instrument that could be used by any physician worldwide as a diagnostic support to increase ED’s detection, opportune referral and treatment. At the conference, preliminary data will be presented. “Nutmín” is being translated to 10 different languages including English, Spanish, Italian, French and Russian. It is important to point out that after obtaining a percentage of risk for any of the eight ED’s, “Nutmín” directs the user to a health and nutrition orientation section. Finally, the user can be referred to a specialized clinic or an independent professional. As said before, this app has the objective to be of diagnostic support, at no time it seeks to take the place of a well-trained eating disorders professional.

**17.5: Between- and Within-Subjects Analysis of an Individualized Internet-Based Program for Prevention and Early Intervention: Associations Between Eating Disorder Symptoms and Program Utilization.**

**Sally Kindermann**, DiplPsych, Center for Psychotherapy Research, University Hospital Heidelberg, Heidelberg, Baden-Wurttemberg  
**Markus Moessner**, DPhil, Center for Psychotherapy Research, University Hospital Heidelberg, Heidelberg, Baden-Wurttemberg  
**Fikret Ozer**, BSc, Center for Psychotherapy Research, University Hospital Heidelberg, Heidelberg, Baden-Wurttemberg
Internet-based interventions have proven their potential for the prevention of eating disorders (ED). Yet, it is challenging to engage individuals in prevention programs, especially if they do not experience significant psychological impairment. Research has shown that individuals with substantial ED symptoms are more likely to engage in publically available online programs than at-risk populations. Instead of providing a structured intervention that offers the same amount of support to all participants, a more flexible individualized approach as offered by the online program ProYouth allows to adjust the intensity of support to participants’ individual needs and thus might be suitable for a broad spectrum of participants.

The aim of the present study was to investigate associations between ED related impairment and program usage both on a between-subjects and a within-subjects level. The sample consists of N = 396 German ProYouth participants who used the program between 2 and 52 months. Generalized estimated equations (GEEs) were used to examine associations between self-reported ED symptoms monitored throughout participation and program utilization assessed via server logs. The results show that participants with high levels of weight and shape concerns and those with high frequencies of dieting had significantly higher numbers of page visits. Within-subjects dieting showed the strongest associations with the intensity of program utilization. Results indicate that both between-subjects and within-subjects intensity of program utilization is associated with the level of impairment. The flexible approach of ProYouth yields a good fit of individual needs and the intensity of support. Especially for prevention and early intervention an individualized, needs-based approach appears promising.

**17.6: ProYouth OZ: An Online Peer-to-Peer Support Prevention and Early Intervention Program for Young People at Risk of Eating Disorders**

**Kathina Ali**, BSc, MSc, The Australian National University, Canberra, ACT

**Louise Farrer**, PhD, The Australian National University, Canberra, ACT

**Daniel Fassnacht**, DiplPsych, PhD, The Australian National University, Canberra, ACT

**Elizabeth Rieger**, BA, MPsych, PhD, The Australian National University, Canberra, ACT

**Markus Moessner**, DiplPsych, PhD, University Hospital Heidelberg, Heidelberg, Baden-Württemberg

**Kathleen M Griffiths**, BSc, PhD, The Australian National University, Canberra, ACT

**Stephanie Bauer** DiplPsych, PhD, University Hospital Heidelberg, Heidelberg, Baden-Württemberg

Evidence suggests that Internet-based approaches are effective for the prevention and treatment of eating disorders and peer-to-peer support is commonly used as a component of these interventions. However, the effectiveness of online peer-to-peer support for eating disorders has not yet been examined. The current study will evaluate ProYouth OZ, an Internet-based prevention and early intervention program. The program consists of a number of modules including psycho-education, a supportive monitoring and feedback system, and peer support delivered through synchronous weekly chat sessions. Young people at risk of eating disorders were randomly assigned to one of the three study conditions: (1) ProYouth OZ including peer-to-peer support (participation in weekly moderated peer support group chats), (2) ProYouth OZ without peer-to-peer support, and (3) a waitlist control group. Assessments were conducted at baseline, post-intervention (6 weeks), at 3- and 6-month follow-up to examine disordered eating behaviors, help-seeking barriers (e.g., stigma, eating disorder literacy), and help-seeking intentions. Recruitment commenced October 2016 and preliminary data from the first recruitment wave will be presented. Internet-based interventions offer a promising approach to preventing and treating eating disorders. This is one of the first studies to examine the additional effect of synchronous peer-to-peer support in an Internet-based prevention and early intervention program for eating disorders. This study will also provide a better understanding of whether peer support can successfully reduce barriers to care and increase help-seeking in young people.

**Topic: Diagnosis, Classification and Measurement**

**Panorama, First Floor**

**Co-Chairs:**

**Ross Crosby**, PhD, FAED & **Pamela Keel**, PhD, FAED

**18.1: Eating, Food, and Substance Versus Behavioral Addiction: Investigating the Validity of the Eating Addiction Questionnaire**

**Kristin von Ranson**, PhD, FAED, University of Calgary, Calgary, Alberta

**Melissa King-Hope**, BA, University of Calgary, Calgary, Alberta

Food addiction (FA) is theorized to contribute to rising obesity rates. Although controversial, FA theory holds that, like alcohol and other substances of abuse, hyper-palatable foods are addictive. Alternatively, it was recently proposed that people may become addicted to the act of eating, rather than to food as a substance; i.e., eating behaviours may be experienced as behavioural rather than substance additions. This critical distinction may impact addiction-influenced treatment approaches used for eating disorders. The purpose of this study was to evaluate the convergent and divergent validity of the first measure of eating addiction, the Eating Addiction Questionnaire (EAQ). Female and male undergraduates (N = 576) completed a first version of the EAQ, and after items were revised according to detailed feedback from 8 eating disorders and obesity experts, 428 participants completed a second version. Participants also completed self-report
measures of similar (FA, eating psychopathology, food craving and grazing), and dissimilar constructs (alcohol and illicit substance abuse). Principal components analyses of EAQ items revealed 1 factor. EAQ scores were moderately correlated (r = .50) with FA scores, indicating shared and unique variance. Stronger correlations were observed with eating-related constructs such as binge eating (r = .70), food cravings (r = .66), and grazing (r = .58), and weaker correlations were seen with non-eating-related substance addictions of drug abuse (r = .10) and alcohol abuse (r = .12). This pattern of findings suggests eating addiction is distinct from FA as well as several other types of eating and addictive symptoms, and provides preliminary support for the convergent and divergent validity of the EAQ. Additional research is needed to help disentangle the complex issue of whether and how food and eating are addictive, and how FA and eating addiction may relate to existing constructs such as binge eating.

18.2: Investigating the DSM-5 Severity Specifiers Based on Body Mass Index for Anorexia Nervosa

Oyvind Ro, MD, Regional Department for Eating Disorders, Oslo University Hospital, Norway, Oslo, Norway

Deborah L. Reas, PhD, Regional Department for Eating Disorders, Oslo University Hospital, Norway, Oslo

The DSM-5 includes severity indicator for anorexia nervosa (AN) based on current body mass index (BMI). This study investigated differences in global ED pathology, eating disorder behaviors, and eating disorder-related impairment across DSM-5 severity levels in a clinical sample of AN. A treatment-seeking sample of 146 AN patients (6 men, 140 women) were categorized as 34 (23.3%) mild (BMI ≥17.0 BMI), 35 (24.0%) as moderate (16.16.99 BMI), 32 (21.9%) as severe (15.15.99 BMI), and 45 (30.8%) as extreme ≤15 BMI). Preliminary results found no significant differences by sub-group in terms of age (p = .113) or gender (p = .270), although significantly higher proportion of AN restricting (40.7%) versus AN binge-purge type (19.4%) fell into the extreme category (p = .042). A comparison of severity groups on the Global EDE-Q score and subscales revealed no significant differences (all p’s >.100 except EC = .07). Similarly, there were no significant subgroup differences on laxative use, vomiting, binge eating, or excessive exercise (all p’s > .100). Likewise, ED-specific impairment as measured by the Clinical Impairment Assessment global score showed no significant differences between sub-groups (279). Bivariate correlational analyses for the total sample showed significant and positive associations between BMI and restriction (p = .022) and the global EDE-Q (p = .04). We found little empirical evidence to support the DSM-5 severity grouping based upon on current BMI in adults, although dimensional analyses did indicate a significant bivariate relationship between increasing BMI and higher ED pathology, especially increased restraint.
years after baseline. Thus far, 64.4% of women with baseline PD (n=56) and 64.1% of women with baseline BN (n=78) have completed diagnostic interviews and questionnaires at mean (SD) 10.00 (3.99) years following baseline assessments. Participants had a mean (SD) age of 33.43 (7.57) years at follow-up. Of those with PD at baseline, 33.3% (n=17) had achieved full or partial remission; in contrast, 46.8% (n=36) of those with BN at baseline had achieved full or partial remission. PD and BN did not differ in likelihood of remission, p=0.15. Baseline diagnosis was associated with follow-up diagnosis, such that stability was more likely than cross-over for both PD (59% stability) and BN (74% stability) (p=0.02). Individuals with PD reported a smaller decrease in purging frequency over time relative to those with BN at a trend level, p=0.056. Women with PD at baseline also reported a smaller decrease in shape concerns than those with BN at baseline, p=0.01. Results support the longitudinal stability of PD’s clinical presentation. Distinguishing between PD and BN provides information about course, as PD appears to be associated with a more chronic course. Data collection will be completed in spring 2017.

18.5: Primary Care Assessment and Triage of Adolescent Patients with Anorexia Nervosa

Kendra Homan, PhD, Mayo Clinic, Rochester, Minnesota
Leslie Sim, PhD, Mayo Clinic, Rochester, Minnesota
Lisa Kransdorf, MD, MPH, UCLA Division of Internal Medicine and Pediatrics, Los Angeles, California
Susan Crowley, PhD, Utah State University, Logan, Utah
Jocelyn Lebow, PhD, Mayo Clinic, Rochester, Minnesota
Margo Scott, Student, Creighton University, Omaha, Nebraska

Medical complications in adolescent eating disorders are common and often life threatening. In acute situations, hospitalization may be required to achieve medical, nutritional and/or psychiatric stability. The American Academy of Pediatrics has published specific criteria outlining when hospitalization is advised for adolescents with anorexia nervosa (AN). However, many adolescents may not be receiving appropriate care. Barriers include lack of physician awareness and poor adherence to these guidelines. The purpose of the present study was to examine the assessment and triage that adolescents with AN receive in primary care. A retrospective cohort review of all adolescent patients (ages 10-18) who were diagnosed with AN at Mayo Clinic between 2010 and 2016 was conducted. The cohort consisted of 69 patients (M age=13.9 years, SD=2.1; 85.5% female; 94.2% White). Criteria for hospitalization and associated treatment recommendations were abstracted from patients’ primary care appointment in which eating and/or weight concerns were first identified. Results indicated that during the initial episode of care criteria for hospitalization were inconsistently assessed. Although blood pressure was collected for the majority of patients (n=59, 85.5%), less than half received measurements of heart rate (n=29, 42.0%), temperature (n=29, 42.0%), or assessment for cardiac arrhythmia (e.g., electrocardiogram; n=23, 35.9%). Even fewer patients were assessed for percentage weight loss (n=9, 13.0%), orthostatic changes (n=8, 11.6%), or body fat percentage (n=0). Though most patients received inadequate assessment, 34.8% (n=24) met at least one criterion for hospitalization. Of these, only eight patients (33.3%) were hospitalized. Results suggest that adolescent patients are not receiving medical assessment and triage consistent with practice guidelines. Implications for medical education are discussed.

18.6: Getting Shredded: Development and Validation of a Disordered Eating Measure for Increasing Muscularity and Leanness

Marita Cooper, MPsych, Australian National University, Centre for Integrative Health, Brisbane, Queensland
Kate Pollard, Bachelor of Nut & Diet (Hons), Centre for Integrative Health, Brisbane, Australian Capital Territory
Kathleen Griffiths, DPhil, Australian National University, Canberra, Australian Capital Territory

Male societal ideals are increasingly promoting unrealistic mesomorphic body types. These body types endorse a combination of high muscularity and leanness equally unattainable as thin ideals commonly idealised in individuals with Anorexia and Bulimia Nervosa. This study aimed to develop a valid and reliable scale to measure disordered eating behaviours that promote muscularity and leanness. The Eating for Muscularity Scale (EMS) was developed through review of relevant literature as well as consultation with experts in the areas of Muscle Dysmorphia, eating disorders and dietetics. This process culminated in the development of a broad item pool that was then evaluated in a sample of community participants and gymnasium attendees. Internal reliability was adequate and convergent validity was assessed with the Drive for Muscularity Scale. These findings provide preliminary evidence that the EMS is a reliable and valid measure of dysfunctional eating behaviours towards muscularity as well as leanness. Additional research is needed to evaluate the clinical utility and discriminant validity of the EMS.
19.2: How Much is Enough? Dose, Phase Completion, and Outcome in Family Based treatment for Adolescent Anorexia Nervosa

Andrew Wallis, MFT, Eating Disorder Service, The Children's Hospital, Westmead, Westmead, New South Wales

Studies had suggested that therapeutic alliance is a promising factor associated with the outcome of the intervention. The aim of this study was to examine the relationship between individual variables in a group of teenagers treated for ED and the strength of the therapeutic alliance at the beginning of an inpatient treatment. The sample was composed of 94 teenagers with ED (ANR=82%, ANB=7%, B= 6% and EDNOS = 4%) aged between 11 and 18 y.o. and hospitalized on an inpatient unit ED program in a University Children's Health Centre in Québec, Canada. At the beginning of the inpatient treatment (T1), participants completed self-report questionnaires assessing Motivation to change (Anorexia Nervosa Stage of Change Questionnaire), Self-efficacy (Self-Efficacy Questionnaire. SEQ). Eating disorder risk scales and Psychological scales (Eating Disorder Inventory-3). The participants also answered a questionnaire on the strength of the therapeutic alliance with their assigned therapist. Therapeutic alliance was assessed with the short version of the Working Alliance Inventory-S (WAI-S) and was completed after at least 3 meetings with their therapist. Results showed that Motivation to change (r= .332, p < .001) and Self-efficacy (total score) were positively correlated (r=.348, p < .001) with the strength of the therapeutic alliance at T1. Two subscales of the SEQ were strongly correlated with the TA: the Social Self-efficacy (r=.372, p < .001) and the Emotional Self-efficacy (r=.298, p < .01). The scores on the scales of Drive for Thinness (r= -.215, p < .05) and Body Dissatisfaction (r= -.207, p < .05) of the EDI3 were negatively correlated with the therapeutic alliance. The scores on Personal Alienation (r= -.246, p < .05) and Asceticism (r= -.237, p < .05) of some of the psychological scales of the EDI3, were negatively correlated with the strength of the TA. Analysis of regression showed that scores on Social Self-efficacy and Emotional Self-efficacy (subscales of the Self-efficacy Questionnaire) measured at T1 are the best predictors (model of two factors) of the strength of TA at T1, accounting for 20.6% of the variance. These results suggest that self-efficacy is an important factor to consider in the establishment of the therapeutic alliance with teenagers treated for ED.

This aim of this research was to investigate Family Based Treatment (FBT) dose and phase completion on outcomes at 12-month follow up. Participants were 69 medically unstable adolescents with DSMIV diagnosed Anorexia Nervosa with an EBW 78.27 (6.39) percent and Global EDE 3.03 (1.13) at admission. These participants were a subset of a randomised control trial that investigated length of hospital admission prior to a 20 sessions FBT protocol. These participants completed the 20 session protocol but if not remitted at session 20 could opt to continue FBT sessions or move to other treatment options. Assessments occurred at admission, session 20 and 12 months post the 20th session. The analysis first compared those who met a strict remission criteria (Weight >95% EBW and EDE 1 SD of community norms) at session 20 with those who continued with FBT and those who choose to change to another treatment. The second analysis compared those who completed phase 3 of treatment with those who ceased treatment at phase 2. Fifty three participants did not meet remission criteria at session 20. Additionally those that continued in FBT had significantly less hospital readmissions and less admission days at 12 months follow up. Thirty nine participants commenced phase 3 and at 12 month follow up had a significantly higher remission rate (49%) than those who ceased sessions in Phase 2 (23%). Those that finished in phase 3 had significantly lower global EDE and hospital readmission days than those who completed 20 or more sessions but clinically were in phase 2. These results indicate that continuing beyond the recommended 20 sessions can increase remission rate for some adolescents. It also suggests completing all treatment phases leads to improved outcomes, and less psychosocial disruption through reduced hospitalisation. These results have implications for routine clinical practice where patients often present with multiple problems and need to be cared for regardless of how quickly they initially respond to treatment. Results also point to the importance of addressing adolescent issues after the initial focus on weight recovery.
19.3: Home-Based Interventions in Acute Restrictive Eating Disorders: A Mixed Methods Study

David Clinton, PhD, Karolinska Institutet, Stockholm, Stockholm
Carl Estenfeld, BSc, Stockholm centrum för ätstörningar (SCÄ), Stockholm

Restrictive eating disorders are severe, life-threatening conditions that can affect patients at a young and formative age. In order to avoid negative course of illness it is imperative that these disorders are diagnosed and treated early. To meet these challenges, The Stockholm Centre for Eating Disorders (SCÄ) has developed a mobile family unit (MOF) that uses intensive short-term interventions in the home environment to normalise eating, support parenting skills and improve self-image. The present study examined the effectiveness of these home-based interventions. A mixed-methods design using quantitative and qualitative components was used to compare MOF patients aged 10-14 years (N=40) with a control group matched on age and diagnosis receiving specialist ED treatment without home-based components (N=40). Qualitative interviews were conducted of mothers (N=7), fathers (N=6) and patients (N=6) treated at the MOF unit. One year after initial assessment MOF patients and controls showed significant increases in BMI, as well as significant reductions in self-rated ED psychopathology and negative aspects of self-image. No significant differences were found between groups. Experiences of home-based interventions were characterised by four major themes (and component themes): Importance of being at home (Emotional comfort, Practicality, Ease of disclosure); Getting to the heart of the matter (Quick interventions, Confrontation, Regaining the initiative, Building relationships); Feeling lost (Humbled by the situation, Communication and knowledge, Being taken seriously); and Being part of a whole (Family unit, Wholeness, Time with therapists). Home-based interventions present unique opportunities to strengthen the working alliance, confront shame, and engage families in effective treatment.

19.4: Implementation and Efficacy of Multi-Family Therapy for Anorexia Nervosa at the Eating Disorder Service, The Children’s Hospital, Westmead, Australia

Elaine Tay, DPsych, Eating Disorders Service, The Children’s Hospital Westmead, Sydney, NSW
Andrew Wallis, LCSW-C, Eating Disorder Service, The Children’s Hospital Westmead, Sydney, NSW
Julian Baudinet, DPsych, Eating Disorder Service, The Children’s Hospital Westmead, Sydney, NSW
Lisa Dawson, DPsych, PhD, Eating Disorder Service, The Children’s Hospital Westmead, Sydney, NSW

The Eating Disorder Service at The Children’s Hospital Westmead is the first service in Australia to integrate Multi-Family Therapy (MFT) as a novel enhancement to standard Family Based Treatment (FBT) for AN. The aim of this study was to pilot the implementation of MFT, and assess efficacy of MFT augmenting standard outpatient treatment for AN. Participants were 57 female and 3 male adolescents (age range 10.73 - 17.2) with DSMV diagnosis of AN and their families. This is a case series of the first 2 years of implementation. Patients were selected for MFT if progress was poor in outpatient therapy, mostly determined by poor weight gain, residual issues with food variety, high levels of distress or other comorbid issues impeding progress. The program ran 6 times per year with up to eight families per group. Each group of families worked together in an initial 4-day workshop, followed by 6 one-day workshops over a nine-month period. Measures of outcome include weight change, measures of parental confidence and efficacy, solidarity and hope, as well as retention and satisfaction measures. %EBW increased over the initial 4-day workshop, alongside a statistically significant increase in %EBW from one month prior (M=91.94) to 4-6 months post (M=96.8) initial 4-day workshop. Families reported benefiting from the solidarity and support of the group (up to 94%), noting this as integral to improvements in efficacy and confidence in making change, and building hope. Measures also indicated high levels of satisfaction (up to 92%). Evidence suggests MFT targets families that do not progress in standard FBT for AN by increasing treatment intensity, building solidarity and increasing parental efficacy. The group context of MFT and the opportunity to receive therapeutic input from multiple sources appears to increase a sense of agency, mobilizing family resources to continue to progress in outpatient care.

19.5: Outcomes of Aggressive Oral Refeeding for Adolescents with Anorexia Nervosa

Elizabeth de Klerk, BSc, MD, BC Children’s Hospital, Vancouver, British Columbia
Ana Sofia Lopez, BSc, MSc, MD, BC Children’s Hospital, Vancouver, British Columbia
Pei-Yoong Lam, MD, FRCP, FRACP, MBBS, BC Children’s Hospital, Vancouver, British Columbia

There is large variability in refeeding practices of adolescents with Anorexia Nervosa (AN) requiring hospitalization. This study aims to demonstrate that adolescents with AN have a low incidence of medical complications even when started on oral meal plans of over 1300 calories and reviews the impact on vital signs, weight gain and mid-upper arm circumference (MUAC) change. REB approval was obtained for a retrospective chart review of female patients 10-18 years of age with AN admitted to BC Children’s Hospital for medical stabilization and nutritional rehabilitation from December 1st 2014 to December 1st 2015. Data collected included demographics, vital signs, weight, MUAC, ECG changes, caloric intake/day and length of stay. Electrolytes (including phosphate, magnesium, ionized calcium, glucose, venous pH) and liver function tests were also assessed. To date, 21 out of 42 charts have been reviewed. Mean age was 13.9 years (SD+/−1.4). Initial caloric intake ranged from 1300-4050 kcal/day with median starting caloric intake of 2000. Average weight gain was 0.73 kg/week (SEM +/- 0.06). Average gain in MUAC was 0.28 cm/week (SEM +/- 0.01). As per protocol, all patients were initiated
Cognitive remediation therapy (CRT) is a low intensity treatment adjunct adapted for individuals with severe and complex eating disorders (EDs) who have difficulties with globally-oriented and flexible thinking. CRT focuses on the process rather than the content of thinking and aims to support recovery through the development of cognitive strategies. The evidence base for adults with EDs is supported by four randomised controlled trials (RCTs), but needs strengthening for adults with EDs is supported by four randomised controlled trails (RCTs), but needs strengthening for the group setting and these data suggest an RCT investigating CRT for young people with EDs is warranted.

**Topic: Emotions and Emotion Regulation**

Meeting Hall V, Second Floor

Co-Chairs:

**Jason Lavender**, PhD & **Tiffany Brown**, PhD

**20.1: Do People With Eating Disorders Have Difficulties Recognizing Emotions in Others?**

**Marcela Marin Dapelo**, PhD, King's College London, London, UK

**Kate Tchanturia**, PhD, DClinPsy, FAED, King's College London, London, UK

People with Eating Disorders (ED) often exhibit difficulties in the socio-emotional domain. The ability to recognize emotions in others has been explored in people with ED, but findings have been mixed. Moreover, most studies have used prototypical displays of emotions, which are less comparable to more ambiguous real-life facial expressions. This study aimed to investigate the ability to recognize anger, disgust, fear, happiness, and sadness in ambiguous facial expressions in individuals with AN and BN. 103 women aged 18 to 55 years participated in the study. 35 had a diagnosis of Anorexia Nervosa (AN), 26 had Bulimia Nervosa (BN), and 42 were free from ED symptoms and served as healthy controls (HC). Participants completed an emotion recognition task in which they viewed pictures of faces portraying blended emotions and were requested to select the emotion that best described the facial expression shown in a forced-choice paradigm. Pictures were taken from the Facial Expression of Emotions: Stimuli and Test set of morphed facial expressions. Results indicated that participants with AN and with BN exhibited poorer recognition of disgust, compared to HC (Median (Mdn)AN=79.17; MdnBN=89.58; MdnHC=95.83; pANs. HC<0.01; pBNsHC<0.01), and often misinterpreted it as anger. Even though participants with AN showed the poorest performance, differences with BN were not significant (pANvsBN<0.24). In addition, both AN and BN participants showed a higher preference to interpret non-anxious faces as anger, compared to HC (MdnAN=3.13; MdnBN=2.08; MdnHC=1.04; pANvs. HC<0.01; pBNsHC<0.01; pANVsBN=0.30). Participants
with ED did not differ from HC in the recognition of other emotions. The findings suggest that people with ED do not exhibit major difficulties in emotion recognition, but problems may be specific to the ability to identify and interpret disgust and anger. The study findings may relate to findings on attention and interpretation bias towards anger in people with ED.

**20.2: Unique Associations of Affect and Maladaptive Perfectionism with Eating Disorder Symptoms in Women with Bulimia Nervosa**

Jason Lavender, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota

Kathryn Smith, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota

Tyler Mason, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota

Stephen Wonderlich, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota

Ross Crosby, PhD, Neuropsychiatric Research Institute, Fargo, North Dakota

James Mitchell, MD, Neuropsychiatric Research Institute, Fargo, North Dakota

Anna Bardone-Cone, PhD, University of North Carolina, Chapel Hill, Chapel Hill, North Carolina

Thomas Joiner, PhD, Florida State University, Tallahassee, Florida

Marjorie Klein, PhD, University of Wisconsin-Madison, Madison, Wisconsin

Daniel Le Grange, PhD, University of California San Francisco School of Medicine, San Francisco, California

Scott Crow, MD, University of Minnesota, Minneapolis, Minnesota

Carol Peterson, PhD, University of Minnesota, Minneapolis, Minnesota

This study examined theoretically relevant affect (variability and intensity) and personality constructs in relation to a range of eating disorder (ED) symptoms in bulimia nervosa (BN). Adult women with full or subthreshold DSM-IV BN (N=198) completed affect, personality, and ED measures including the Eating Disorder Examination-Questionnaire (EDE-Q), Frost Multidimensional Perfectionism Scale (FMPS), Dimensional Assessment of Personality Pathology (DAPP), and Inventory of Depressive Symptomatology (IDS). A series of multiple regression analyses were conducted with various ED symptoms as dependent variables (i.e., dietary restraint, eating concern, shape concern, weight concern). Covariates included body mass index and age. Predictor variables were maladaptive perfectionism (calculated as the mean of the z-scored FMPS concern over mistakes and doubts about action subscales), depressive symptoms (IDS total score), and affect lability (DAPP affective lability score). Age (β=-.15, p<.05) and depressive symptoms (β=.25, p<.05) were uniquely associated with dietary restraint (R-squared=.14), whereas depressive symptoms (β=.26, p<.01) and maladaptive perfectionism (β=.38, p<.001) were uniquely associated with eating concern (R-squared=.30). For shape concern (R-squared=.31), body mass index (β=.21, p<.001) and maladaptive perfectionism (β=.37, p<.001) were uniquely associated, whereas body mass index (β=.20, p<.01), depressive symptoms (β=.23, p<.05), and maladaptive perfectionism (β=.30, p<.001) were uniquely associated with weight concern (R-squared=.31). Of note, affect lability was not uniquely associated with any ED symptoms in this sample. This pattern of findings suggests potentially distinct roles for maladaptive perfectionism and affect variables in relation to different ED symptoms in BN. These results may have clinical implications in terms of providing guidance for possible treatment targets to address the various ED symptoms experienced by women with BN.

**20.3: Deliberate Expression of Emotions: A Study In Individuals With Anorexia Nervosa And Those Who Have Recovered**

Marcela Marin Dapelo, PhD, King’s College London, London, UK

Sergio Bodas, CPsychol, King’s College London, London, UK

Kate Tchanturia, PhD, DClinPsy, FAED, King’s College London, London, UK

The literature in emotion expressivity indicates that people with Anorexia Nervosa (AN) have difficulties expressing emotions nonverbally. Past studies have looked at spontaneous expressions of emotion, but the deliberate attempt to convey emotions has remained unexplored. Moreover, it has been proposed that the ability to imitate facial expressions contributes to developing control over facial displays, and as such, might relevant for facial emotion expressivity. This study aimed to assess the ability to deliberately pose and imitate facial expressions of emotions in women with acute AN and those who have recovered from the disorder. Participants were 36 women with AN, 16 who had recovered from AN (REC), and 42 who had no history of eating disorders and served as healthy controls (HC). Participants were instructed to pose and to imitate facial expressions of anger, disgust, fear, happiness, and sadness. Facial expressions for the imitation task were taken from the set of Pictures of Facial Affect. The participants’ facial expression was recorded and a blind rater evaluated their accuracy. Results indicated that the AN group had the poorest performance both posing and imitating facial expressions of emotions (Posed emotions: Mean (M) AN=3.34; MHC=4.12; pANvsHC=0.01; d=0.78; Imitation MAN=3.74; MHC=4.31; pANvsHC<0.01; d=0.87). The REC group showed an intermediate profile with scores that were closer to the HC group (Posed emotions: MREC=3.79; pRECvsHC=0.55; d=0.34; Imitation: MREC=4.23; pRECvsHC=0.97; d=0.11), but differences between REC and AN did not reach statistical significance (Posed emotions: pRECvsAN=0.33; d=0.52; Imitation: pRECvsAN=0.06; d=0.72). The study findings are consistent with the literature on spontaneous facial expression of emotions, showing that people with AN have difficulties when attempting deliberately to express emotions through the face, and that REC show an intermediate profile that tends to be more similar to healthy individuals.
**20.4: Alexithymia Predicts Greater Improvement in Emotion Regulation After Dialectical Behavior Therapy**

**Tiffany Brown**, PhD, University of California, San Diego, San Diego, California  
**Jade Avery**, BA, Dartmouth College, Hanover, New Hampshire  
**Michelle Jones**, PhD, University of California, San Diego, San Diego, California  
**Anne Cusack**, PsyD, University of California, San Diego, San Diego, California  
**Julie Trim**, PhD, University of California, San Diego, San Diego, California  
**Leslie Anderson**, PhD, University of California, San Diego, San Diego, California  
**Christina Wierenga**, PhD, University of California, San Diego, San Diego, California  
**Walter Kaye**, MD, University of California, San Diego, San Diego, California

Previous research has demonstrated that eating disorder patients with high alexithymia have less favorable treatment outcomes, which has been attributed to difficulties with emotion regulation. While dialectical behavior therapy (DBT) is an effective treatment for improving emotion regulation, no studies have examined how alexithymia levels may impact patients’ ability to improve emotion regulation over treatment. Thus, the purpose of the present study was to examine alexithymia as a predictor of change in emotional regulation strategies in adults with eating disorders following DBT. Participants were 175 adults (M[SD] age = 26[9] years) who completed assessments at intake and discharge from treatment at the UCSD Eating Disorders Partial Hospitalization Program. Contrary to expectations, results demonstrated that alexithymic patients demonstrated greater improvement in total Difficulties in Emotion Regulation Scale scores (DERS; p-values < .001), DERS emotional clarity (p-values < .002), and DERS emotional awareness scores (p-values < .03) compared to patients with possible alexithymia and non-alexithymia, who did not differ from one another (all p-values > .82). Individuals with alexithymia demonstrated improvements of medium to large effect sizes across measures (d range = 0.67-1.14), while individuals with possible and non-alexithymia demonstrated small effects (d range = 0.22-0.34). Results suggest that, contrary to previous research suggesting that alexithymia may be a negative prognostic factor for treatment, alexithymic patients demonstrated greater improvements in emotional clarity, awareness, and overall emotion regulation after DBT, suggesting that these deficits are malleable. Results also provide further support that DBT results in improvements in emotion regulation and that DBT may be an effective form of therapy for eating disorder patients who are alexithymic and may have difficulty with other treatments.

**20.5: Shame and Eating Behavior in Sample of Russian Women with Eating Disorders**

**Svetlana Ilina-Bronnikova**, MSc, PhD, Center for Intuitive Eating “IntuEat”, Moscow  
**Vladislav Bukhtoyarov**, MD, PhD, PhD ABD, Center for Intuitive Eating “IntuEat”, Saint Petersburg  
**Angelina Chekalina**, PhD, MPsych, Center for Intuitive Eating “IntuEat”, Moscow  
**Ksenia Syrovkhashina**, MD, PhD, Center for Intuitive Eating “IntuEat”, Moscow  
**Zoya Zvyagintseva**, MPsych, Center for Intuitive Eating “IntuEat”, Moscow

The implication of emotional experience on eating behaviour is widely discussed among professionals in the field. Shame is especially important due to cultural and micro social influences on the development of eating disorders and due to an invalidating effect of the environment. The aim of this study was to reveal an impact of shame on eating habits in a sample of 142 Russian female patients with eating disorders (binge eating disorder, bulimia nervosa, unspecified eating disorder). Methods used for assessment of the sample included NVM (Dutch personality inventory, a variation of mini-MMPI), DEBQ (Dutch Eating Behaviour Questionnaire), EAT-26 (The Eating Attitudes Test), IES-2 (The Intuitive Eating Scale-2). Statistical analysis (the Kruskal-Wallis criterion) shows that patients with high level of shame have high disposition to external (χ² = 12.79; p = 0.012) and emotional (χ² = 8.020; p = 0.091) eating. They also have highest scores of occupation with food (χ² = 13.856; p = 0.008). Finally, they have lower ability to follow physical hunger and satiety cues and a higher tendency to eat due to emotional reasons (χ² = 13.212; p = 0.010). Summarizing results of the statistical analysis we can say that shame is an important factor of eating behavior. Shame defines emotional aspects of disordered eating and also affects awareness of physical sensations. Shame is supposed to be one of the key elements of a vicious cycle of dieting. Restrictive eating behavior often leads to uncontrolled overeating and blaming thoughts like “I am lazy and weak, unable to control what I eat”. These thoughts and shame act as a trigger for secondary emotions like guilt, anger, anxiety. Lack of emotion regulation skills leads to the use of food as a way to cope with emotions. In conclusion, our data demonstrate that there are in our sample two ways how shame is connected with disordered eating behavior - it leads to emotional dysregulation and lowers ability to follow bodily signals.

**20.6: Affective Instability in Bulimia Nervosa: Temporal Associations between Volatile Emotion and Dysregulated Eating Behavior**

**Laura A. Berner**, PhD, University of California, San Diego, San Diego, California  
**Ross D. Crosby**, PhD, Neuropsychiatric Research Institute; UND School of Medicine and Health Sciences, Fargo, North Dakota  
**Li Cao**, MS, Neuropsychiatric Research Institute, Fargo, North Dakota
Prior bulimia nervosa (BN) research suggests that increasing negative affect (NA) precedes binge eating and purging (B/P), and that NA decreases following B/P. Despite this evidence supporting a role for NA intensity in BN, fluctuations in affective state, or “affective instability,” may align more closely with the construct of “emotion dysregulation” thought to drive BN symptoms. No study to date has used ecological momentary assessment (EMA) to examine whether NA instability temporally relates to B/P, and therefore potentially precipitates or plays a role in reinforcing these behaviors. In the current study, women with BN (n = 133) logged multiple daily affect ratings and eating disorder behaviors over 2 weeks using portable digital devices. Two state-of-the-art indices quantified affective instability: Probability of Acute Change, which represents the likelihood of extreme increases in NA, and Mean Squared Successive Difference, which represents average NA variability. GEE models compared instability before and after B/P episodes and on B/P days versus non-B/P days. On B/P days, extreme NA increases were less likely after B/P episodes than before them. However, average NA instability was greater on B/P days than non-B/P days, greater after B/P episodes than during the same time period on non-B/P days, and greater after B/P episodes than before them (all ps <0.01). Results lend support to the notion that bulimic behaviors are negatively reinforcing (i.e., via post-behavior reduced likelihood of an acute increase in NA), but indicate that these behaviors are ineffective in promoting ongoing emotional stability. In fact, our findings suggest that B/P ultimately may worsen average NA volatility, potentially precipitating subsequent maladaptive behaviors. Interventions for BN that promote steady affective state maintenance and specifically focus on implementing skills during the post-B/P time period may be particularly helpful.


Lesley Cook. MA, The Butterfly Foundation, Sydney, New South Wales

Qualitative inquiry is offering valuable insights into aspects of recovery from eating disorders. In 2016, the Insights in Recovery research project and three independent qualitative studies in Australia, explored the lived experience of recovery for people with eating disorders using phenomenological interpretive approaches. Participants experienced inconsistencies between their actual experience of recovery and the expectations of recovery they received from their treatment professionals. They understood recovery to be a more complex process than treatment of symptoms, one that moved them towards a satisfying life. Eating disorders occur in the context of a person’s life and their understanding of what is happening to them provides the framework for their experience of treatment and recovery. People want to receive treatment that is based on an integrated understanding of their lives. Person-centred care is the most effective way to treat someone with an eating disorder. Understanding recovery from the person’s perspective is fundamental to being able to develop treatment interventions that better support the transition to recovery. This session will present three key themes that emerged across all four studies: connectedness, including a connected life journey and social connection; dealing with feelings, including fear and shame and mental health issues such as depression; and control, including the commitment to recover, having choices and developing life skills. Participants’ experiences support arguments for integrated care that extends beyond the remission of symptoms to equip people for the longer journey of recovery. Implications for treatment approaches will be discussed. Together, these studies engaged 148 people with lived experience of eating disorders. Opportunities for international multi-agency research to further investigate the commonalities in recovering from an eating disorder will also be discussed.

21.2: Rate, Timing and Predictors of Relapse in Patients with Anorexia Nervosa following a Relapse Prevention Program: A Cohort Study.

Tamara Berends. MSc, RN, Altrecht Eating Disorders, Zeist, Utrecht
Berno van Meijel, PhD, InHolland University of Applied Sciences, Amsterdam, Zuid Holland
Willem Nugteren. MSc, Parnassia Psychiatric Institute, The Hague, Zuid Holland
Mathijs Deen. MSc, Parnassia Psychiatric Institute, The Hague, Zuid Holland
Unna Danner. PhD, Altrecht Eating Disorders, Zeist, Utrecht
Hans Hoek. MD, Parnassia Academy, The Hague, Zuid Holland
Annemarie van Elburg. MD, Altrecht Eating Disorders, Zeist, Utrecht

Purpose of the study: Relapse is common among recovered anorexia nervosa (AN) patients. In leading guidelines there is general consensus that relapse prevention in patients treated for AN is a matter of essence. However, lack of methodological support hinders the practical implementation of relapse prevention strategies in clinical practice. For this reason
we developed the Guideline Relapse Prevention Anorexia Nervosa. In this study we examine the rate, timing and predictors of relapse when using this guideline. Sample and methods: Cohort study with 83 AN patients who were enrolled in a relapse prevention program for anorexia nervosa with 18 months follow-up. Data were analyzed using Kaplan-Meijer survival analyses and Cox regression. Summary data and results: Eleven percent of the participants experienced a full relapse, 19% a partial relapse, 70% did not relapse. Survival analyses indicated that in the first four months of the program no full relapses occurred. The highest risk of full relapse was between months 4 and 16. None of the variables remained a significant predictor of relapse in the multivariate Cox regression analysis. The guideline offers structured procedures for relapse prevention. In this study the relapse rates were relatively low compared to relapse rates in previous studies. We recommend that all patients with AN set up a personalized relapse prevention plan at the end of their treatment and be monitored at least 18 months after discharge. It may significantly contribute to the reduction of relapse rates.

21.3: Definition of Recovery from Multiple Perspectives: Qualitative Study of Patients with Eating Disorders, their Parents, and Multi-Disciplinary Clinicians

Tracy Richmond, MD, MPH, Boston Children’s Hospital, Boston, Massachusetts
Alice Woolverton, Student, Boston Children’s Hospital, Boston, Massachusetts
Kathy Mammel, MD, University of Michigan Mott Children’s Hospital, Ann Arbor, Michigan
Allegra Spalding, Student, Boston Children’s Hospital, Boston, Massachusetts
Rollyn Ornstein, MD, Penn State University, Hershey, Pennsylvania
Amanda Bryson, BA, Penn State University, Hershey, Pennsylvania
Grace Kennedy BA, Florida State University, Tallahassee, Florida
Ellen Rome, MD, Cleveland Clinic, Cleveland, Ohio
Elizabeth Woods, MD, MPH, Boston Children’s Hospital, Boston, Massachusetts
Sara Forman, MD, Boston Children’s Hospital, Boston, Massachusetts

In order to understand the definition of recovery from an eating disorder from the perspective of patients, their parents, as well as clinicians, we recruited a convenience sample of patients with eating disorders diverse in age, gender, and eating disorder diagnosis (n=24, age 12-23, anorexia nervosa n=16, bulimia nervosa n=5, binge-eating disorder n=3, avoidant/restrictive food intake disorder n=3), their parents (n=20), as well as dietitians (n=11), and mental health (n=14) and primary care providers (n=9) from three sites. Boston Children’s Hospital, University of Michigan C.S. Mott Children’s Hospital, and Penn State Hershey Children’s Hospital. In-depth, semi-structured, qualitative interviews with participants focused on several domains, including recovery (“Most people look at weight restoration but we think that recovery is much more complex than that. How would you define recovery?”). Interviews were performed by uniformly trained research assistants following a standardized interview guide. Recordings were transcribed and analyzed using thematic analysis. Only clinicians reported resumption of menses as key to recovery (n=3); 4/6 respondents who identified non-weight biological signs (e.g., heart rate) as important were clinicians. The most commonly reported aspect of recovery was self-acceptance, reported by 8 each of patients (“Just a healthy perspective on how we look and how you feel”), parents (“It’s the whole person. Not just the weight but how they perceive themselves and their self-esteem”), and providers. Other commonly reported definitions were living without an unhealthy focus on food and overall happiness/quality of life. Our study demonstrates the difference in perspectives between patients, parents and clinicians when defining eating disorder recovery. Clinicians should incorporate markers of recovery beyond weight restoration and resumption of menses, including quality of life or positive self-image, when treating patients with eating disorders.

21.4: Early Response in the Treatment of Eating Disorders: A Systematic Review and Diagnostic Test Accuracy Meta Analysis

Bruno Nazar, MSc, MD, PhD, Federal University of Rio de Janeiro, Rio de Janeiro, Brazil
Louise Gregor, BA, MSc, King’s College London, London, UK
Gaia Albano, BA, King’s College London, London, UK
Valentina Cardi, CPsychol, PhD, King’s College London, London, UK
Janet Treasure, OBE, MD, FRCP, FAED, King’s College London, London, UK

The early response to Eating Disorders treatment is thought to predict a later favourable outcome. We have reviewed the literature and used a diagnostic test accuracy meta-analysis to examine the robustness of this concept. We followed PRISMA guidelines and summarized the criteria used to define early and late response across studies. We used a diagnostic test accuracy meta-analysis to estimate the size of the effect. We synthesised results from 29 studies. Fifteen studies were used in the meta-analysis. In anorexia nervosa (AN), the diagnostic odds ratio (DOR) of early responders to predict remission was 4.85 (95%CI: 2.94-8.01) and the summary Area Under the Curve (AUC)=77(SE=0.3). For bulimia nervosa (BN), DOR was 2.75 (95% CI:1.24-6.09) and the AUC=67(SE=0.04). while for binge eating disorder (BED), DOR was 5.01 (95% CI: 3.38-7.42) and the AUC=71 (SE=0.03). Early behaviour change predict later symptom remission for AN and BED but there is less predictive accuracy for BN treatment as heterogeneity of studies is high and other accuracy measures such as sensitivity and specificity are low and presented significant bias.
Residential eating disorder treatment centers have experienced rapid growth in the U.S. in the past decade with the advent of the Affordable Care Act and increases in behavioral health coverage. Often these centers have extensive marketing strategies, involving online and community promotional materials. Marketing targets clinicians, patients, families, and communities, exhibiting the center, their approach to treatment, and their conceptualization of recovery. In addition to providing valuable treatment services, these centers necessarily shape the discourse around who gets, who can benefit from treatment for, and who recovers from eating disorders. In this exploratory qualitative study, we examine promotional materials (i.e. brochures, websites, and promotional merchandise) of 32 leading eating disorder treatment centers in North America. The purpose of this study is 1) to better understand the breadth of conceptualizations of eating disorders 2) to discover what archetypes of eating disorders are promoted within materials and 3) to examine how centers differentiate themselves and promote their specific approach to eating disorder treatment. We draw on critical feminist and critical race theories as a framework and employ critical discourse analysis of words and images. Our analysis suggests that there are several issues with the representation of eating disorders in promotional materials, including the ways in which eating disorders are framed as the purview of young, female, cisgender, white, thin, and middle/upper-class people. Exceptions exist, particularly amongst treatment centers that differentiate themselves as more diversity-welcoming places. Promotional materials also provide information about the consequences of eating disorders and their approaches to surmounting the challenges associated with eating disorders but remain tethered to dominant constructions of health that suggest that there is one “best” way to be a healthy citizen in North America. The implication of this narrow representation of eating disorders may be that those who do not fit the stereotype may not feel welcome in treatment settings and may struggle to find services that adequately meet their needs. Further, these narrow representations may reinforce damaging stereotypes present in society at large.

Outcome studies for eating disorder recovery regularly measure only pathology change as an outcome. Researchers, patients and recovered individuals highlight the importance of using additional criteria for measuring eating disorder recovery. There is, however, no clear consensus on which criteria to use. The aim of this study was to find fundamental criteria for eating disorder recovery according to individuals who were considered recovered. A systematic review and a qualitative meta-analytic approach were used. Eighteen studies with recovered patients and meeting various quality criteria were included. Results of the included studies were analyzed using a meta-summery technique where the frequency of the found criteria was examined. Several dimensions of psychological well-being and self-adaptability were found to be fundamental criteria for eating disorder recovery, besides the absence of pathology. The most frequently mentioned criteria were: self-acceptance, positive relationships, personal growth, decrease in eating disorder behavior/cognitions, self-adaptability/resilience and autonomy. Recovered patients rate the presence of aspects of psychological of psychological well-being as important aspects of recovery in addition to the absence of pathology. Supplementary criteria are needed to understand and measure recovery. We recommend to include instruments measuring psychological well-being and self-adaptability in monitors and guidelines for the measurement of eating disorder recovery.

Topic: Treatment of Eating Disorders (Adult) III
Terrace Room 2, Second Floor
Co-Chairs:
Anthea Fursland, PhD, FAED &
Heather Thompson-Brenner, PhD, FAED

22.1: Emotional Expression Predicts Treatment Outcome in Focal Psychodynamic and Cognitive Behavioural Therapy for Anorexia Nervosa: Findings from the ANTOP study
Timo Brockmeyer, DiplPsych, PhD, University Hospital Heidelberg, Heidelberg, Baden-Württemberg
Hans-Christoph Friederich, MD, Heinrich Heine University, Düsseldorf, Baden-Württemberg
Wolfgang Herzog, MD, University Hospital Heidelberg, Heidelberg, Baden-Württemberg

This study adopted a computational psychotherapy research approach to examine the potential impact of in-session emotional expression by patients with eating disorder recovery.
anorexia nervosa (AN) on treatment outcome in outpatient psychotherapy. Verbal emotional expression was assessed by means of computerised quantitative text analysis. Verbatim transcripts of audio recorded therapy sessions from the initial, early, middle, and late phase of treatment from n = 89 AN outpatients were obtained from a large randomised controlled trial that investigated manualised Focal Psychodynamic Therapy and Cognitive Behavioural Therapy for AN. Greater verbal expression of negative but not positive emotions by patients in the middle phase of treatment predicted favourable treatment outcomes, i.e. a higher body mass index at the end of treatment and lower observer-rated eating disorder psychopathology at the end of treatment and at 12-months follow-up. The effects were independent of treatment condition, BMI at baseline, AN subtype, illness duration, and completer status, and specific to the middle phase of treatment. The main finding suggests that, irrespective of treatment condition, high levels of negative emotional expression in the middle phase of treatment constitutes an important active ingredient of successful psychotherapy for AN.

22.2: Acceptance in Eating Disorder Treatment at the Higher Levels of Care: A Naturalistic Effectiveness Study

Keegan Walden, BA, MS, PhD, Eating Recovery Center, Denver, Colorado
Jamie Manwaring, PhD, Eating Recovery Center, Denver, Colorado
Emmett Bishop, MD, FAED, Eating Recovery Center, Denver, Colorado
Alan Duffy, MS, Eating Recovery Center, Denver, Colorado
Gabriela Hurtado, PhD, Eating Recovery Center, Austin, Texas
Craig Johnson, PhD, FAED, Eating Recovery Center, Denver, Colorado

The treatment of severe and enduring eating disorders has received increased attention in the last decade, with many studies examining treatment outcomes and predictors of outcome. More recently, Dingemans and colleagues called for more naturalistic outcome studies with less stringent inclusionary and exclusionary criteria, and greater ecological validity and generalizability. Accordingly, using a transdiagnostic sample of adult participants (N = 1,135) and no systematic exclusions, this study 1) evaluates the effectiveness of Acceptance and Commitment Therapy (ACT)-based eating disorder treatment at higher levels of care (i.e., partial hospital, residential, and inpatient) in terms of individual and group level psychological change, and 2) evaluates changes in acceptance, a central concept underlying ACT, as a predictor of outcome. Participants completed measures of eating disorder related psychopathology, depression, personality, and acceptance upon admission and discharge. Indices of clinically significant change and effect size were computed to evaluate individual and group level change, respectively. Regression models evaluated predictors of reduced eating disorder psychopathology in the context of personality variables. The majority of participants (58.2%) were treatment responders on at least one measure of eating disorder psychopathology, with participants with bulimia nervosa showing a higher treatment response rate than participants with anorexia nervosa (restricting type). In addition, treatment responders and non-responders did not differ in terms of treatment history, which suggests that prior treatment at a higher level of care facility does not reduce the likelihood of a successful outcome in the future. Effect sizes of all outcome measures ranged from d = .29 to d = 1.29.

In addition, increased acceptance over the course of treatment both differentiated treatment responders and non-responders, and robustly predicted decreased eating disorder risk, regardless of diagnostic category.

22.3: Weight Change over the Course of Binge Eating Disorder Treatment: Relationship to Eating Behavior and Psychological Factors

Carly Pacanowski, PhD, RD, University of Delaware, Newark, Delaware
Tyler Mason, PhD, The Neuropsychiatric Research Institute, Fargo, North Dakota
Ross Crosby, PhD, The Neuropsychiatric Research Institute, Fargo, North Dakota
James Mitchell, MD, The Neuropsychiatric Research Institute, Fargo, North Dakota
Scott Crow, MD, The University of Minnesota, Minneapolis, Minnesota
Steve Wonderlich, PhD, The Neuropsychiatric Research Institute, Fargo, North Dakota
Carol Peterson, PhD, The University of Minnesota, Minneapolis, Minnesota

A Treatment for Binge Eating Disorder (BED) has not typically produced a significant change in weight despite reducing frequency of binge eating; both excess adiposity and psychological distress and impairment associated with binge eating increase risk for serious chronic health conditions. Individual variability in weight change may help to explain overall nonsignificant weight changes during treatment. Participants were 189 adults with DSM-IV BED who participated in a randomized clinical trial evaluating the efficacy of five months of cognitive-behavioral therapy for BED. Measures included anthropometric assessments of height and weight at baseline, mid-treatment, and end of treatment (EOT) and the Eating Disorder Examination Interview at baseline and EOT. Data were analyzed using multilevel models and bivariate correlations. During treatment, there was a mean weight gain of 1.9 ± 14.5 pounds. Twenty-five percent of the sample lost ³ 5 pounds and 25% of the sample gained ³ 8 pounds. Results showed that baseline objective binge episodes (OBE) moderated the trajectory of weight over the course of treatment. Individuals with greater baseline OBEs gained weight over the course of treatment, whereas those with lower OBEs maintained or lost weight. Higher baseline levels of objective overeating episodes (OEE) and restraint were significantly associated with baseline weight, although, they did not influence weight trajectory.
Individuals engaging in more OOE weighed more. Conversely, individuals higher in restraint weighed less. Changes in OBEs from baseline to EOT was associated with a decrease in BMI gain from admission to discharge. Greater reductions in OBEs were associated with more weight loss. Given this unexpected finding that greater reductions in OBEs were associated with more weight gain, further investigation of eating behavior during BED treatment to understand the energetic contributions to weight change or stability is warranted.

22.4: Impact of Residential Treatment on Eating Disorder Symptoms

Scott Crow, MD, University of Minnesota and The Emily Program, Minneapolis, Minnesota
Jillian Lampert, MPH, PhD, The Emily Program, St. Paul, Minnesota
Nicole Siegfried, PhD, Castlewood Treatment Centers, Birmingham, Alabama
Kourtney Gordon, RD, Fairwinds Treatment Center, Lutz, Florida
Aimee Arikian, PhD, The Emily Program, St. Paul, Minnesota
Craig Johnson, PhD, Eating Recovery Center, Denver, Colorado
Ann Erickson, BA, Neuropsychiatric Research Institute, Fargo, North Dakota
Ross Crosby, PhD, Neuropsychiatric Institute, Fargo, North Dakota

The purpose of this study was to examine the impact of residential eating disorder treatment on eating disorder (ED) symptoms, mood, anxiety, and quality of life. Participants were 393 consecutive adults or adolescents with anorexia nervosa, bulimia nervosa, or another ED entering residential eating disorder treatment at 17 centers. Participants completed the EDE-Q, PHQ-9, Spielberger State/Trait Anxiety Inventory, and the Eating Disorders Quality of Life Scale at admission and discharge. Statistically significant improvements were seen in nearly all measures from admission to discharge, and effect sizes were large. Average weight restoration in the anorexia nervosa group was 1.53 lb. per week. In this large sample, clinically and statistically significant improvements were seen with treatment. These results support the acute benefit of residential ED treatment. Although the results are encouraging, more research on the long-term outcome is needed.

22.5: Evaluation of Hospitalisation for Anorexia Nervosa: the EVHAN Study

Malaika Lasfar, MD, University Hospital of Rouen, Rouen, France
Sylvie Berthoz, MD, PhD, CESP, Inserm, University Paris-Sud, UVSQ, Université Paris-Saclay, Villejuif, France
Christophe Lalanne, MD, PhD, CESP, Inserm, University, Paris-Sud, UVSQ, Université Paris-Saclay, Villejuif, France

Priscille Gérardin, MD, PhD, University Hospital of Rouen, Rouen, France
Nathalie Godart, MD, PhD, CESP, Inserm, University Paris-Sud, UVSQ, Université Paris-Saclay, Villejuif, France
Evhan Group, MD, CESP, Inserm, University Paris-Sud, UVSQ, Université Paris-Saclay, Villejuif, France

Anorexia Nervosa is complicated by psychological, bodily or social difficulties that can be life-threatening for the individuals concerned. In the most severe cases one or several long periods of hospitalisation may be required. International guidelines define inpatients treatment main aims. However treatment modalities are sometimes different from one centre to another and not enough is known about the way in which the health of these individuals evolves during and after hospitalisation, nor about factors that might contribute to favourable or unfavourable outcomes. Likewise little is known about the reasons why almost half of the hospitalisations for Anorexia Nervosa are terminated prematurely (dropout) or about the factors that could explain the varying length of hospitalisations. We will describe here a French multicentre research project the EVHAN study (Eudract number: 2007-A01110-53, Clinical trials). This study was conducted between March 2009 and December 2012. The aims were to assess 1-the different modalities of treatment in 11 French Eating Disorders impatient unit and 2-their impact on outcome at discharge and 12 months later 3-predictive factors of dropout and length of stay. The primary hypothesis is that the different treatment types impact outcome of patients at discharge from inpatient treatment and at one year follow-up, even after adjustment for confounding factors (age, length of illness, number of previous hospitalizations, clinical state at intake). We will summarize the first results of the study: description of the organisation of the care offered in the 11 centers and how there varies in terms of modalities; the impact of inpatient treatment at discharge and one year later). We will also describe how this study contributed to open exchanges and partnerships among the eleven centres specialised in the care of eating disorders, and has enabled the establishment of a collaborative network between researchers and clinicians working on Anorexia Nervosa, both nationally and internationally.

22.6: Demystifying the Refeeding Process: Implementation of an Aggressive Weight Restoration Protocol

Heather Gallivan, PsyD, Park Nicollet Melrose Center, St. Louis Park, Minnesota
Deborah Mangham, MD, Park Nicollet Melrose Center, St. Louis Park, Minnesota
Alicia Phillips, RD, Park Nicollet Melrose Center, St. Louis Park, Minnesota
Dawn Taylor, PsyD, Park Nicollet Melrose Center, St. Louis Park, Minnesota
Concern about the refeeding syndrome has long dictated the rate of weight restoration in eating disorder treatment. Experience after World War II and in other situations of extreme malnutrition showed that rapid calorie repletion could result in serious fluid and electrolyte complications, including heart failure and death. As a result the eating disorder community has for decades adopted the mantra “Start low and go slow”. This practice however is not evidence based, and furthermore prolongs the duration of treatment, increases the expense of treatment and possibly delays the patients’ response to therapy. We embarked upon a quality improvement project to test the viability of a rapid refeeding protocol. Our study included all patients admitted to an inpatient eating disorders unit with a diagnosis of AN or OSFED and with a BMI between 14 and 18. There were a total of 51 patients. All patients were given a refeeding meal plan designed to attain a weight gain of 4 pounds per week. Patients were monitored daily for signs of refeeding complications. They received psychological support to manage anxiety about weight gain and to ensure program compliance. Four months of data suggest that the average weight restoration of these 51 patients was 4.0 lbs per week. Medical complications were minor and easily corrected. There were no episodes of hypophosphatemia. We also found that between admission and discharge, 31% of the patients had improvement by at least one score category in their PHQ-9 score, 41% had improvement in their EDE-Q score and 28% had improvement in their GAD-7 score. Our experience has shown that a more aggressive approach to refeeding is both safe and doable. Studies like ours will likely help change the landscape of eating disorder treatment, from the slow and costly to a more rapid, more effective and less expensive approach to refeeding.
The ACUTE Center for Eating Disorders at Denver Health is the country’s only specialized medical stabilization program for adults with severe eating disorders. Led by Drs. Philip S. Mehler and Margherita Mascolo, ACUTE is uniquely tailored to help both males and females who cannot seek care in a traditional inpatient or residential treatment setting due to the severity of their weight loss and/or other medical complications (<70% of their ideal body weight, severe malnutrition, electrolyte/fluid problems, organ failure, cardiac irregularities, gastrointestinal complications, severe laxative/diuretic abuse, etc.) Patients receive specialized medical care from the industry’s leading experts, a highly individualized treatment plan, daily dietary and therapeutic support and thorough discharge planning to help them on their path to recovery. ACUTE is contracted with most major insurance companies and uses the patient’s medical insurance benefit for stabilization.

Aurora Behavioral Health
www.auroracenter.org

Aurora Behavioral Health is NYC’s first mindfulness yoga-therapy based eating disorder treatment center. We offer holistic treatment, customized to the individual at all levels of outpatient care. Aurora is the only center in the area specializing in the treatment of Binge Eating Disorder, offering a separate IOP treatment track and outpatient groups for those with BED. We provide individual therapy, nutrition counseling, skills coaching, DBT groups, cooking classes, yoga therapy, IOP & day treatment, weekend programming, wellness retreats, and NYC’s only college-student intensive recovery program. Find out more at: www.auroracenter.org.

Cambridge Eating Disorder Center (CEDC)
617-547-2255
info@cedcmail.com
www.eatingdisordercenter.org

At the Cambridge Eating Disorder Center (CEDC), we have developed a comprehensive system of care for adolescents and adults battling eating disorders. CEDC offers a complete spectrum of recovery services to support the continuity of care and help clients achieve lasting recovery:

- Residential Program
- Adolescent and Adult Partial Hospital Program (Day)
- Adult Intensive Outpatient Program (Day and Evening programs available)
- Adolescent Intensive Outpatient Program (Day and Evening programs available)
- Transitional Living
- Outpatient Programs

The Center for Eating Disorders Care at University Medical Center of Princeton
877-932-8935
www.princetonhcs.org/eatingdisorders

The Center for Eating Disorders Care at University Medical Center of Princeton offers inpatient and partial hospital treatment, combining a psychosocial approach with the latest advances in nutritional and medical care. A multidisciplinary team provides comprehensive services, including monitored meals, regular weight checks, intensive individual, group, and family therapy, medical management, nutritional therapy, relaxation training, yoga, and a multi-family program.
Children’s Hospital Colorado Eating Disorders Program
Intake – 720-777-6452
www.childrenscolorado.org

The Eating Disorders Program at Children’s Hospital Colorado has provided a comprehensive, multidisciplinary approach for the treatment of eating disorders since 1988. We manage medically complicated patients, male and female, with severe eating disorders from ages 6-21. Our specialized multidisciplinary team focuses on the needs of children, adolescents, young adults and their families utilizing a family-centered approach which spotlights a parent-supported nutrition model. Services span all levels of care – inpatient, partial, IOP and outpatient services.

Families Empowered and Supporting Treatment of Eating Disorders (F.E.A.S.T.)
info@feast-ed.org
www.feast-ed.org

Families Empowered and Supporting Treatment of Eating Disorders is an international organization of and for caregivers of eating disorder patients. F.E.A.S.T. serves families by providing information and mutual support, promoting evidence-based treatment, and advocating for research and education to reduce the suffering associated with eating disorders. We provide peer support through our online forum, Around the Dinner Table, and through our closed Facebook group, ATDTfb.

F.E.A.S.T. believes that empowered caregivers are essential to the recovery process and to advocating for evidence-based treatment and research. F.E.A.S.T. has over 6,000 members on four continents and is run entirely by volunteers and supported through individual donations.

International Association of Eating Disorders Professionals (iaedp)
1-800-800-8126
blanche@iaedp.com
www.iaedp.com

Established in 1985, iaedp is well recognized for its excellence in providing first-quality education and high level training standards to an international multidisciplinary group of various healthcare treatment providers and helping professions, who treat the full spectrum of eating disorder problems. iaedp offers a highly respected certification process for those professionals who wish to receive specialized credentials in their work with eating disorders.

Society of Adolescent Health & Medicine (SAHM)
847-753-5226
www.adolescenthealth.org

The Society for Adolescent Health and Medicine (SAHM) is a multidisciplinary association with over 1,200 members devoted to advancing the health and well-being of adolescents. Membership is open to all health professionals throughout the world who are involved in service, teaching, or research concerned with the health and well-being of all adolescents and young adults.

Joan Riederer, Founder
262-271-3948
Riederer_j@sbcglobal.net

SOCKIT to ED, established in 2015 by the Erin Riederer Foundation USA, SOCKIT to ED is a global campaign to raise awareness and fundraise for eating disorder charities and foundations around the world. Groups or individuals wear their craziest, most colorful socks, invite friends and take photos of only their feet. Donations are accepted to be given to the participants favorite eating disorder charity. Photographs of these crazy feet are posted on the Sockit to ED Facebook page to show the truly international extent of eating disorders. Fun with a cause! A worldwide effort for a common goal.
Timberline Knolls Residential Treatment Center
877-257-9611
info@timberlineknolls.com
www.timberlineknolls.com

Timberline Knolls Residential Treatment Center is located on 43 acres just outside Chicago, offering a nurturing environment of recovery for women and girls ages 12 and older struggling with eating disorders, substance abuse, mood disorders, trauma and co-occurring disorders. Our multi-disciplinary integrated program provides individualized treatment utilizing clinical approaches that include the Recovery Principles, Dialectical Behavioral Therapy (DBT), expressive therapies, spirituality and family systems. At TK Academy, our award-winning on-campus school, adolescent residents attend classes with a curriculum from their home school. Women and girls seeking Christian treatment can opt for our specialized Christian-based programming.

Veritas Collaborative
919-908-9730
admissions@veritascollaborative.com
www.veritascollaborative.com

Veritas Collaborative is a specialty hospital system for the treatment of eating disorders. Providing a range of services for individuals of all ages, Veritas offers inpatient, acute residential, partial hospitalization, intensive outpatient, and outpatient levels of care. Delivering individualized, evidence-based care in a gender-diverse and inclusive environment, Veritas envisions a world in which all persons with eating disorders and their families have access to best-practice care and hold hope for a cure.

WILEY

Wiley
www.onlinelibrary.wiley.com

It's the knowledge age – and it's Wiley's customers who lead the world's knowledge economy. Our customers drive progress by providing quality education, the right skills to fulfill global demand and scientific research to fuel innovation. Our customers care, their organizations succeed and the world benefits.

Wiley develops digital education, learning, assessment and certification to help universities, businesses and individuals bridge between education and employment and achieve their ambitions.

We partner with learned societies and support researchers to communicate discoveries that make a difference. Our digital content, books and 1600 online journals build on a 200 year heritage of quality publishing.
Eating Disorders Rarely Occur Alone.

Most women and girls enter treatment with a diagnosis of anorexia or bulimia. When ED behaviors are curtailed, other addictions and disorders often manifest.

This is why Timberline Knolls treats co-occurring disorders simultaneously.

Visit our booth to learn more.
Hope for young women suffering from anorexia, bulimia, BED, and co-occurring psychiatric conditions

• Compassionate clinical care for females ages 16 to 26*

• Evidence-based treatment for co-occurring psychiatric conditions which include depression, trauma and PTSD, OCD and anxiety disorders, personality disorders, substance use disorders, and diabulimia.

• Highly individualized treatment

• Acute residential treatment and 12 hour, seven day per week step down partial hospital treatment program

*Admission is considered on a case by case basis for women over age 26.
ICED 2017
Accreditation and Financial Disclosure Information

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of PeerPoint Medical Education Institute and the Academy for Eating Disorders. PeerPoint Medical Education Institute is accredited by the ACCME to provide continuing medical education for physicians.

PeerPoint Medical Education Institute designates the live format for this educational activity for a maximum of 23.25 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Financial Disclosures

The following presenters, planners, editors, or staff have relevant financial relationships to disclose:

“I, or an immediate family member, have at present or have had within the last 12 months, the following affiliation with one or more organizations that could be perceived as a real or apparent conflict of interest in context to the design, implementation, presentation, evaluation, etc. of CME Activities.”

<table>
<thead>
<tr>
<th>Financial Disclosures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandra Pike, DPhil, Student</td>
</tr>
<tr>
<td>Elsevier Reference Module in Neuroscience and Biobehavioral Psychology</td>
</tr>
<tr>
<td>Review Editor, Reviewing Articles in Psychiatry Section for Currency</td>
</tr>
<tr>
<td>Honorarium</td>
</tr>
<tr>
<td>Amy Baker Dennis, PhD, FAED</td>
</tr>
<tr>
<td>Springer Publishers</td>
</tr>
<tr>
<td>Book Editor</td>
</tr>
<tr>
<td>Royalties</td>
</tr>
<tr>
<td>EDCare</td>
</tr>
<tr>
<td>Scientific Advisory Board</td>
</tr>
<tr>
<td>Consulting</td>
</tr>
<tr>
<td>Carolyn Becker, PhD, FAED</td>
</tr>
<tr>
<td>Body Project Collaborative</td>
</tr>
<tr>
<td>Co-Director/Co-Owner</td>
</tr>
<tr>
<td>Partnership Payment</td>
</tr>
<tr>
<td>Kelly Bhatnagar, PhD</td>
</tr>
<tr>
<td>The Emily Program</td>
</tr>
<tr>
<td>Employment</td>
</tr>
<tr>
<td>Salary</td>
</tr>
<tr>
<td>Timothy Brewerton, MD, FAED</td>
</tr>
<tr>
<td>Shire Pharmaceuticals</td>
</tr>
<tr>
<td>Speaking/Teaching</td>
</tr>
<tr>
<td>Honoraria</td>
</tr>
<tr>
<td>Monte Nido &amp; Affiliates</td>
</tr>
<tr>
<td>Consulting, Contracted Research, Speaking/Teaching</td>
</tr>
<tr>
<td>Consulting Fees</td>
</tr>
<tr>
<td>Springer Publishing</td>
</tr>
<tr>
<td>Author</td>
</tr>
<tr>
<td>Book royalty</td>
</tr>
<tr>
<td>Sunovion Pharmaceuticals</td>
</tr>
<tr>
<td>Consulting</td>
</tr>
<tr>
<td>Consulting fees</td>
</tr>
<tr>
<td>Silver Hill Hospital</td>
</tr>
<tr>
<td>Speaking/Teaching</td>
</tr>
<tr>
<td>Honoraria</td>
</tr>
<tr>
<td>Center for Change</td>
</tr>
<tr>
<td>Speaking/Teaching</td>
</tr>
<tr>
<td>Honoraria</td>
</tr>
<tr>
<td>Cynthia Bulik, PhD, FAED</td>
</tr>
<tr>
<td>Shire</td>
</tr>
<tr>
<td>Research, Advisory Board</td>
</tr>
<tr>
<td>Grant, Consulting Fee</td>
</tr>
<tr>
<td>Pearson</td>
</tr>
<tr>
<td>Author</td>
</tr>
<tr>
<td>Royalties</td>
</tr>
<tr>
<td>Douglas Bunnell, PhD, FAED</td>
</tr>
<tr>
<td>Monte Nido &amp; Affiliates</td>
</tr>
<tr>
<td>Employment and Management</td>
</tr>
<tr>
<td>Stock Options</td>
</tr>
<tr>
<td>Philippa Diedrichs, PhD</td>
</tr>
<tr>
<td>Dove Self Esteem Project</td>
</tr>
<tr>
<td>Consulting</td>
</tr>
<tr>
<td>Consulting Fees</td>
</tr>
<tr>
<td>Elizabeth Donovan, PhD</td>
</tr>
<tr>
<td>BodiMojo, Inc.</td>
</tr>
<tr>
<td>Director of Research and Evaluation</td>
</tr>
<tr>
<td>Salary</td>
</tr>
<tr>
<td>Alan Duffy, MS</td>
</tr>
<tr>
<td>Eating Recovery Center</td>
</tr>
<tr>
<td>Employment</td>
</tr>
<tr>
<td>Salary</td>
</tr>
<tr>
<td>Body Project Collaborative</td>
</tr>
<tr>
<td>Contracted Trainings, Management</td>
</tr>
<tr>
<td>Ownership Interest, Consulting Fees</td>
</tr>
<tr>
<td>Kamryn Eddy, PhD, FAED</td>
</tr>
<tr>
<td>Cambridge University Press</td>
</tr>
<tr>
<td>Author</td>
</tr>
<tr>
<td>Royalties</td>
</tr>
<tr>
<td>Name</td>
</tr>
<tr>
<td>-------------------------------------</td>
</tr>
<tr>
<td>Guido Frank, MD, FAED</td>
</tr>
<tr>
<td>Leah Graves, RD, FAED</td>
</tr>
<tr>
<td>Jennifer Henretty, PhD</td>
</tr>
<tr>
<td>Marcia Herrin, EdD, MPH, RD, FAED</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Dr. Tom Hildebrandt</td>
</tr>
<tr>
<td>Debra Katzman, MD, FAED</td>
</tr>
<tr>
<td>Jillian Lampert, MPH, PhD</td>
</tr>
<tr>
<td>Jocelyn Lebow, PhD</td>
</tr>
<tr>
<td>Daniel Le Grange, PhD, FAED</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Katharine L. Loeb, PhD, FAED</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>James Lock, MD, PhD</td>
</tr>
<tr>
<td>Caitlin Martin-Wagar, PhD, Student</td>
</tr>
</tbody>
</table>
AED UPCOMING EVENTS

2018 ICED
April 19–21, 2018
Clinical Teaching Day and Research Training Day
April 18, 2018
Chicago Marriott Downtown Magnificent Mile
Chicago, Illinois, USA

2019 ICED
March 14–16, 2019
Clinical Teaching Day and Research Training Day
March 13, 2019
Sheraton Times Square
New York, New York, USA

Academy for Eating Disorders
Reston, Virginia | USA
P: 703.234.4137 | F: 703.435.4390 | E: info@aedweb.org
www.aedweb.org