February 2024

Organizational Neuroscience

An Interest Group of the Academy of Management

Member "NEU"sletter

Welcome from NEU's Chair

The Organizational Neuroscience Interest Group (NEU) is now in its fourth year! We, as a community, have made incredible strides since the foundation of NEU. Interest in NEU remains strong, and growth of membership is on an upward trajectory. We also boast an increasingly diverse membership, both in terms of our members affiliation with every other division of the AOM, and nationality. Many of our members are doctoral students or are in the early stages of their careers. In addition, more than ten percent of our members are executive members, which is among the higher percentages in the AOM.

In response to our growing membership, the Executive Committee, with support from our members, expanded our domain statement to focus on "broader biologically-based approaches at different levels of analysis in organizations," including generating knowledge "through theoretical propositions and/or empirical evidence pertaining to neural, physiological, and micro-behavioral mechanisms associated with work-related behavior and outcomes." To better align NEUs domain statement and name, we have initiated the process to change our name to "Organizational Neuroscience and Biology" (ONB). We are optimistic that this broadened scope and name change will contribute to introducing new methods to management research, and the translation of research findings into practice (Continued on next page.)

In this Issue:

We are social! Follow NEU on Facebook and LinkedIn for regular updates

Organizational Neuroscience
An Interest Group of the Academy of Management

Member "NEU"sletter

Welcome from NEU's Chair

Established on the aforementioned goals, the NEU held its first specialized regional conference at Erasmus University in Rotterdam in June 2023. Attendees engaged in robust discussions and experienced the application of biological methods in applied management research. Our growing NEU community was also introduced to leading journal editors. The conference, by all accounts, was very successful and suggests that management scholars and practitioners' interest in the application of neuroscience theory and methodology are intact, and spans across multiple fields. It is evident that the varying and intersecting perspectives embodying the NEU community will further facilitate improved understanding of the antecedents motivating human behavior in organizations. These innovations will help the NEU achieve our aim to improve leadership effectiveness, employee wellbeing, and organizational performance.

Looking ahead to the years to come, the NEU has set multifaceted and dynamic strategic goals. These include activities aimed at increasing our membership, providing educational programming about NEU methodologies using varying platforms, developing sponsorship to support our activities, planning regional conferences, and increasing submissions to the annual conference. Furthermore, we will pursue efforts that deepen our linkages to other Divisions and Interest Groups that host scholars pursuing related approaches.

My hope is that we can continue to rely on your continued involvement and contributions, as we embark on implementing our ambitious and exciting strategic goals.

Jemima A. Frimpong
Associate Professor of Management, Stern at NYUAD
Associate Professor of Social Research and Public Policy, NYUAD
Chair, NEU IG

NEU New Research

Personal development: fMRI reveals conflict between Real and Ideal selves

Jack, A. I., Passarelli, A. M., & Boyatzis, R. E. (2023). *Frontiers in Human Neuroscience. 17*:1128209. doi: 10.3389/fnhum.2023.1128209.

METHODOLOGICAL NOTE to NEU Members: The study was designed to use fMRI in a field experiment to test several hypotheses from Intentional Change Theory. It built upon two earlier fMRI studies published in 2012 and 2013, and included a replication
aspect of the 2013 study.

Coaching is a growing development activity in many organizations. Initial research has shown positive impact of coaching without clarifying why some approaches seem to work better than others. Drawing on Intentional Change Theory (ICT), we argue that attention is one such differentiating mechanism. Integrating ICT with theories of attention, we proposed that coaching interactions focused on the ideal self, purpose, and vision would elicit a psycho-physiological state associated with big-picture thinking and global attention. On the other hand, coaching interactions focused on current problems and challenges would elicit a psycho-physiological state and narrowed attention to local details. Using neuroimaging to examine conjunctive cortical activation between these two states during coaching and global/local visual attention, we found robust support for hypotheses related to this proposition.
A pattern of overlapping neural activation was found linking one state based coaching to global attention. This state during coaching and global processing produced activations that were lateralized to the right hemisphere and located in the visual associative cortex (e.g. right precuneus and middle temporal gyrus). Neural activity associated with the other state based coaching and local processing was left lateralized and located in the early visual areas (e.g. left inferior occipital gyrus). This overlap suggests attentional processing is a highly relevant factor in determining how individuals respond to different kinds of coaching.

Questions or comments can be sent to Richard.boyatzis@case.edu

NEU New Research

Neurostrategy: A scientometric analysis of marriage between neuroscience and strategic management

Kaur, V. (2024). *Journal of Business Research*, *170*, 114342.
https://doi.org/10.1016/j.jbusres.2023.114342

Kaur (2024) leads the discussion on conjoining neuroscience and strategic management into a novel specialty of Neurostrategy by undertaking one of the earliest attempts at providing a complete scientometric mapping of the nascent field of Neurostrategy. The study using machine-based algorithms represents a robust and comprehensive mapping of this emerging field of research which is otherwise suffering from incomplete abstractions and lack of implications and directions. This study is significant as it advances the understanding of Neurostrategy by conducting a thematic and semantic analysis of literature to – (a) clarify the dominant concepts at the junction of neuroscience and strategic management domains; (b) identify the ontological and epistemological foundations of Neurostrategy; (c) explain how the scholarly discourse around Neurostrategy has evolved; (d) reveal the trends that are gaining traction within Neurostrategy research; and (e) develop interdisciplinary propositions at the confluence of managerial capabilities, knowledge management, dynamic capabilities, and Neurostrategy to advance empirical assessment in the field. Kaur (2024) uses insights from neuroscience to explain how the road that leads to competitive success passes through the development of neuronally intelligent strategies that not only resolve the battle between the organization and its people, but also the one within an organizational decision-maker.

Questions or comments can be sent to vkaur@kent.edu

NEU New Research

Consensus-Building Conversation Leads to Neural Alignment

Sievers, B., Welker, C., Hasson, U., Kleinbaum, A., & Wheatley, T.
Forthcoming in *Nature Communications.*
Pre-print available at https://osf.io/r9pm7

The study examines the effects of consensus-building conversation in groups on group members' brain activity. Participants watched ambiguous movie clips during fMRI scanning, engaged in group discussions to reach consensus on the narrative, and then had their brains scanned again while re-watching the same clips as well as new clips from the same movies. Groups showed greater brain activity alignment after conversation because their consensus narrative gave them a shared understanding of the content.

But conversation led to greater neural alignment in some groups than in others. In groups that had participants with high social status, those people spoke more, signaled disbelief, and their groups had unequal turn-taking and lower neural alignment. Conversely, in groups that had someone who was highly central in the real-world social network that the participants were all embedded in, the socially central participant encouraged others to speak, actively sought consensus, and displayed both influence and flexibility, facilitating greater neural alignment. The study points to the important role that network-central people play in orchestrating group consensus and offers neural evidence that espoused agreement does not necessarily reflect true consensus.

Questions or comments can be sent to Adam.M.Kleinbaum@tuck.dartmouth.edu

A Column by David Waldman

The Ubiquitous Survey:
Can Neuroscience Provide an Alternative or Supplemental Approach?

As a management scholar, have you ever wondered about alternatives to the fixation that we as management researchers seem to have on survey-based methods? Specifically, have you ever wondered whether neuroscience might offer an alternative, or at least a supplement, to survey-based methods? There are at least two instances in which such alternatives might come in handy. First, we sometimes delve into constructs that are either socially inappropriate (i.e., as perceived by respondents) or simply not well known to the individual respondent (i.e., whether or not that individual actually engages in the behavior). As an example, consider the Dark Triad concepts of psychopathy and Machiavellianism. Although researchers have attempted to measure them using survey-based measures, those measures have questionable validity. A person with psychopathic or Machiavellian tendencies might not want to reveal, or even be cognizant of, those tendencies.

Second, survey-based psychometric assessment tends to rely on retrospection. In other words, a respondent is asked to think back on a period of time, which may or may not be clearly specified by the survey, and then answer questions based on that period of time. For example, let's say that a person views communication from a leader through either video or in real-time. A researcher may then want to determine how engaged followers were by the communication. One issue is whether or not the respondent can even accurately recall one's level of engagement. Another issue is that perhaps that person's engagement was very state-based, potentially changing on a moment-by-moment basis (e.g., depending on the nature of the leader's communication). It may not have been practical to interrupt the communication process with multiple surveys, and thus, the researcher relies on one overall survey at the conclusion of the leader's communication.

Neuroscientific methods can provide an alternative approach to assessment that can deal largely with the challenges that I have mentioned here. Is neuroscience then a replacement for survey methods? The answer is a resounding no. Surveys have their place, and indeed, could and probably should be used in combination with neural-based methods. I would be happy to have a dialogue with anyone interested in learning more about these issues and potential solutions.

David A. Waldman (waldman@asu.edu)

Organizational Neuroscience

An Interest Group of the Academy of Management

The NEU Interest Group

Chair: Jemima Frimpong - NYU Abu Dhabi (jafrimpong@nyu.edu)

Chair-Elect: David A. Waldman - Arizona State University (waldman@asu.edu)

Past Chair: Yair Berson – McMaster University (bersony@mcmaster.ca)

Program Chair: Constant D. Beugre - Delaware State University (cbeugre@desu.edu)

PDW Chair: Sebastiano Massaro - the Surrey Business School, University of Surrey and The Organizational Neuroscience Laboratory (s.massaro@surrey.ac.uk)

Secretary/Treasurer: Pierre Balthazard - Fairleigh Dickinson University (balthazardp@gmail.com)

Membership Committee Chair: Danni Wang - Rutgers University (dwang@business.rutgers.edu)

Education Committee Chair: Georgios Christopoulos - Nanyang Technological University (CGeorgios@ntu.edu.sg)

Nominations and Awards Committee Chair: Yair Berson – McMaster University (bersony@mcmaster.ca)

Newsletter/Media Committee Chair: Nir Milstein – Bar-Ilan University (nir.milstein@biu.ac.il)

Representative-at-Large: Danni Wang - Rutgers University (dwang@business.rutgers.edu)

Representative-at-Large: Laura Parks-Leduc - James Madison University (leduclm@jmu.edu)

Representative-at-Large: Richard Boyatzis - Case Western Reserve University (eb2@case.edu)

PLEASE GET IN TOUCH & VISIT US

Website: https://neu.aom.org/home

LinkedIn: https://www.linkedin.com/groups/12855687/

Facebook: https://www.facebook.com/groups/NEU.AOM

X (Twitter): https://twitter.com/NEU_AoM