

Syllabus for
Meta-Analysis in the Behavioral and Social Sciences
6J:269

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Course Summary:

Meta-analysis is a set of methods for quantitatively integrating findings across studies in the behavioral and social sciences to determine what the overall effect size or correlation is and whether the "conflicting findings" are due to moderators (interactions) or to statistical and measurement artifacts. This course describes procedures for cumulating (1) correlations across studies, (2) effect sizes across studies, and (3) results within studies. Examples are presented for each type of application. The effects of measurement error and restriction in range in systematically attenuating mean study outcomes are explored, and the appropriate procedures and formulas for correcting for these biases are presented. The role of sampling error and differences between studies in reliability of measurement and in range restriction in producing artifactual variation in outcomes across studies are discussed and procedures and formulas for correcting for these artifacts are presented. For those cases in which artifacts do not account for all between study variance in outcome, procedures and formulas are given for properly adjusting correlations between study characteristics and study outcomes for the effect of random (sampling) error in study outcomes. The alternative method of identifying moderator variables by subgrouping of data is also described. Methods of ensuring a thorough literature review are presented, including the question of how to deal with studies having methodological weaknesses.

Importance of the Course:

The research literature on many questions in the behavioral and social sciences consists of numerous studies with apparently conflicting findings. This situation had made the development of cumulative knowledge and general principles nearly impossible. Meta-analysis showed that such conflicting findings are often illusory and artifactual. Its application allows one to determine the true meaning of previous research on a given question, permitting the establishment of cumulative knowledge. An overview of meta-analysis can be found in the American Psychologist (1992, 47, 10, 1173-1181).

The Instructor:

Professor Frank Schmidt, an industrial/organizational psychologist, is a Fellow of the American Psychological Association and the American Psychological Society. In 1982, with Drs. John Hunter and Greg Jackson, he published one of the first books on meta analysis. In 1990, he and Dr. Hunter published their second meta-analysis book, and the 2nd Edition of this book (your text) was published in 2004. In 1994, he and Dr. Hunter were given the Distinguished Scientific Award by the American Psychological Association for their work on meta-analysis methods. In 2007, the Association for Psychological Science gave Frank Schmidt the James McKeen Cattell Award for distinguished contributions to applied psychology for his work on meta-analysis methods. He and his colleagues have applied meta-analysis extensively to employment tests and other selection procedures, resulting in major revisions of earlier conclusions. Before coming to the University of Iowa in 1985, he headed a research program for the U. S.

Office of Personnel Management for 11 years. He has been on the faculties of Michigan State and George Washington University.

Main Text:

Methods of Meta-Analysis: Correcting Error and Bias in Research Findings (2nd Edition), by John Hunter & Frank Schmidt. Sage, 2004. (Paperback)

Supplementary Text:

Synthesizing Research, by Harris Cooper. Sage, 1998. (Paperback)

(Texts are available at Iowa Book and Supply.)

Other Meta Analysis Books:

(Asterisk indicates book on reserve in the Business Library.)

*Cook, D. T. et al. (Eds.). Meta-analysis for explanation: A casebook. NY: Russell Sage Foundation.

*Cooper, H., & Hedges, L.V. (1994). Handbook of research synthesis. NY: Russell Sage Foundation. (The 2nd Edition of this book will be out in Dec. 2007)

Eddy, D. M., Hasselblad, V., & Shachter, R. (1972). Meta-analysis by the Confidence Profile Method: The statistical synthesis of evidence. Boston: Academic Press. (meta-analysis methods for medical research)

*Glass, Gene V., McGaw, Barry, & Smith, Mary L. (1981). Meta-analysis in social research. Sage. (First book published on meta-analysis)

*Hedges, L. V., & Olkin, I. (1985). Statistical methods for meta-analysis. Orlando, FL: Academic Press.

*Hunter, J. E., Schmidt, F. L., & Jackson, G. B. (1982). Meta-analysis: Cumulating research findings across studies. Sage. (2nd book published on meta-analysis)

*Hunter, J. E., & Schmidt, F.L. (1990). Methods of meta-analysis: Correcting error and bias in research findings. (1st Edition). Sage.

*Light, Richard J., & Pillemer, David B. (1984). Summing up: The science of reviewing research. Harvard University Press.

Murphy, K. R.. (Ed.) (2003). Validity generalization: A critical review. Mahwah, NJ: Erlbaum.

Rosenthal, Robert (1984). Meta-analytic procedures for social research. Sage.

*Rosenthal, Robert (1991). Meta-analytic procedures for social research (2nd Ed.). Newbury Park, CA: Sage.

Schulze, Ralf. (2004). Meta-analysis: A comparison of approaches. Cambridge, MA: Hogrefe & Huber.

Wachter, K.W., & Straf, M.L. (Eds.). (1990). The future of meta-analysis. NY: Russell Sage Foundation.

Wolf, F. M. (1986). Meta-Analysis: Quantitative methods for research synthesis (56 pp.). Sage.

About the Course:

1. An ideal precursor to this course is 6J:273 (Measurement Methods in the Behavioral and Social Sciences). However, any measurement course would be helpful. The minimum prerequisite would be intermediate statistics.
2. The course is conducted primarily in lecture format. It is very quantitative and requires good note taking skills.
3. Students will work 5 meta-analysis exercises during the course. These exercises are given in your main textbook. The instructor supplies a Windows-based computer program package that could be used for these exercises. This program is described in detail in your main text and in the Appendix to that text. I will ask a student to load these programs on your computer. However, the exercises can also be done using calculators. Completion of these exercises is required to receive a course grade.
4. Near the end of the course, each student will critique two or more published meta-analyses and present their critiques to the class for discussion.
5. As a term project, each student completes an original meta-analysis on a subject of his/her choosing. This project demonstrates the student's mastery of meta-analysis methods. Completion of this term project is required to receive a course grade. More information on this project is provided during the class.
6. The instructor assigns reading material (beyond the two text books) from the reserve book list, as packets to be purchased by the student, and as handouts.
7. Grades are based on the term project meta-analysis, the class exercises, the class critique of published meta-analyses, and class participation and comments. Of these, the term project is the most important. Plus and minus grading can be used. There is no final exam.
8. If you have any disabilities that require special accommodation, please see me after the first class. See the material at the end of this syllabus.

Course Schedule for Semester:

<u>Week</u>	<u>Topic</u>
1	Introduction to Meta-Analysis: Foundation Material
2	Introduction to Meta-Analysis: Foundation Material
3	Meta-analysis of correlations corrected individually
4	Meta-analysis of correlations corrected individually
5	Meta-analysis of correlations corrected individually
6	Meta-analysis of correlations using artifact distributions
7	Meta-analysis of correlations using artifact distributions
8	Meta-analysis of correlations using artifact distributions
9	Meta-analysis methods for d-values
10	Meta-analysis methods for d-values
11	Second order sampling error
12	Cumulating finding <u>within</u> studies
13	Student presentations of meta-analysis critiques
14	Student presentations of meta-analysis critiques

A more detailed outline of topics to be covered can be found in the Table of Contents of the main text (Hunter and Schmidt, 2004).

Student Report to Class

Towards the end of the course, you will present to the class a critical analysis of one or two meta-analyses of your choice in the published literature using the principles and methods learned in this course. All questions of the following type should be addressed in your critique (these are only examples):

1. How were the studies obtained and coded? Were these processes optimal?
2. What decision rules were used? Why? Is the justification for them adequate?
3. What methods were used? Were these the best methods? If not, what methods should have been used? Why
4. What corrections were made? Not made? Why? What are the consequences? What corrections should have been made?
5. What errors were made? What are the biggest weaknesses of the meta-analysis? What effects do they have on results and conclusions? What would you have done differently?
6. What are the strengths of this meta-analysis?
7. What has changed in this field as a result of this meta-analysis? What new facts were revealed?

Completeness is important. Do not make the class ask about things you should have covered in your presentation.

Attached is a list of possible studies you may choose from. Others can also be chosen, but check with me first. [Also, see the references at the end of the Hunter and Schmidt (2004) class text.] I will also email you additional references to published meta-analyses. You will probably want to choose a topic in which you have some scientific or professional interest. If you choose a topic on which two meta-analyses have been published, you can work with a partner and the presentation will be joint. However, your team must compare and contrast the two meta-analyses and attempt to explain differences in obtained results (if any). Students typically find errors in the meta-analyses they critique. A major contributor to these errors in the lack of reviewers who are competent to review meta-analyses.

Later in the class, I will distribute a schedule showing when your presentation will be made. You may trade time slots with other students, but be sure to notify me in advance.

At least one week prior to your presentation, please give me a clear copy of the meta-analysis you have chosen so I can have it copied for the class. The class will read your meta-analysis prior to your presentation. Based on their reading, other students and the instructor will ask you questions about the meta-analysis and your presentation. [These questions count as class participation and affect final grades.]

Meta-Analyses in the Published Research Literature
(Note: I will send you additional references electronically.)

- Arthur, W., Jr., Barrett, G. V., & Alexander, R. A. (1991). Prediction of vehicular accident involvement: A meta-analysis. Human Performance, 4, 89-105.
- Assouline, M., & Meir, E. I. (1987). Meta-analysis of the relationship between congruence and well-being measures. Journal of Vocational Behavior, 31, 319-332.
- Barrick, M. R., & Mount, M. K. (1991). The Big Five personality dimensions and job performance: A meta-analysis. Personnel Psychology, 44, 1-26.
- Bettencourt, B. A., & Miller, N. (1996). Gender differences in aggression as a function of provocation: A meta-analysis. Psychological Bulletin, 119, 422-427.
- Bond, C. F., & Titus, L. J. (1983). Social facilitation: A meta-analysis of 241 studies. Psychological Bulletin, 94, 265-292.
- Bond, R., & Smith, P. B. (1996). Culture and conformity: A meta-analysis of studies using Asch's (1952b, 1956) line judgment task. Psychological Bulletin, 119, 111-137.
- Bretz, R. D. (1989). College grade point average as a predictor of adult success: A meta-analytic review and some additional evidence. Public Personnel Management, 18(1), 11-22.
- Brown, S. P. (1996). A meta-analysis and review of organizational research. Psychological Bulletin, 120, 235-255.
- Brush, D. H., Moch, M. K., & Pooyan, A. (1987). Individual demographic differences and job satisfaction. Journal of Occupational Behaviour, 8, 139-155.
- Bullock, R. J., & Tubbs, M. E. (1990). A case meta-analysis of gainsharing plans as organizational development interventions. Journal of Applied Behavioral Science, 26, 383-404.
- Burke, M. J., & Day, R. R. (1986). A cumulative study of the effectiveness of managerial training. Journal of Applied Psychology, 71, 232-245.
- Burt, D. B., Zembar, M. J., & Niederehe, G. (1995). Depression and memory impairment: A meta-analysis of the association, its pattern, and specificity. Psychological Bulletin, 117, 285-303.
- Bycio, P. (1992). Job preference and absenteeism: A review and meta-analysis. Human Relations, 45(2), 193-220.
- Bycio, P., Hackett, R. D., & Alvares, K. M. (1990). Job performance and turnover: A review and meta-analysis. Applied Psychology-An International Review, 39, 47-76.
- Carsten, J. M., & Spector, P. E. (1987). Unemployment, job satisfaction, and employee turnover: A meta-analytic test of the Muchinsky model. Journal of Applied Psychology, 72, 374-381.

- Christensen-Szalanski, J. J. J., & William, C. F. (1991). The hindsight bias: A meta-analysis. Organizational Behavior and Human Decision Processes, 48, 147-168.
- Coggin, T. D., & Hunter, J. E. (1983). Problems in measuring the quality of investment information: The perils of the information coefficient. Financial Analysts Journal, May/June, 3-10.
- Cohen, A. (1991). Career stage as a moderator of the relationships between organizational commitment and its outcomes: A meta-analysis. Journal of Occupational Psychology, 64, 253-268.
- Cohen, A., & Lowenberg, G. (1990). A re-examination of the side-bet theory as applied to organizational commitment: A meta-analysis. Human Relations, 43(10), 1015-1050.
- Collins, N. L. & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. Psychological Bulletin, 116, 457-475.
- Cooper, W. W., Ho, J. L. Y., Hunter, J. E., & Rodgers, R. C. (1985). The impact of the Foreign Corrupt Practices Act on interval control practices (a meta-analysis). Journal of Accounting, Auditing and Finance, 9, 22-39.
- Cotton, J. L., & Tuttle, J. M. (1986). Employee turnover: A meta-analysis and review with implications for research. Academy of Management, 11, 55-70.
- Dallessio, A., Silverman, W. H., & Schuck, J. R. (1986). Paths to turnover: A re-analysis and review of existing data on the Mobley, Horner, and Hollingsworth turnover model. Human Relations, 39, 245-264.
- Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. Academy of Management Journal, 34, 555-590.
- Datta, D. K., & Narayanan, V. K. (1989). A meta-analytic review of the concentration-performance relationship: Aggregating findings in strategic management. Journal of Management, 15, 469-483.
- Dillard, J. P., Hunter, J. E., & Burgoon, M. (1984). Sequential requests, persuasive message strategies: A meta-analysis of foot-in-door and door-in-the-face. Human Communication Research, 10, 461-488.
- Dobbins, G. H., & Platz, S. J. (1986). Sex differences in leadership: How real are they? Academy of Management Review, 11, 118-127.
- Dye, D. A., & Reck, M. (1989). College grade point average as a predictor of adult success: A reply. Public Personnel Management, 18(2), 235-241.
- Eagly, A. H., Ashmore, R. D., Makhijani, M. G., & Longo, L. C. (1991). What is beautiful is good, but...: A meta-analytic review of research on the physical attractiveness stereotype. Psychological Bulletin, 110, 109-128.

- Eagly, A. H., & Carli, L. L. (1981). Sex of researchers and sex-typical communications as determinants of sex differences in influenceability: A meta-analysis of social influence studies. Psychological Bulletin, 90, 1-20.
- Eagly, A. H., & Johnson, B. T. (1990). Gender and leadership style: A meta-analysis. Psychological Bulletin, 108, 233-256.
- Eagly, A. H., & Karau, S. J. (1991). Gender and the emergence of leaders: A meta-analysis. Journal of Personality and Social Psychology, 60, 685-710.
- Eagly, A. H., Karau, S. J., & Makhijani, M. G. (1995). Gender and the effectiveness of leaders: A meta-analysis. Psychological Bulletin, 117, 125-145.
- Eagly, A. H., Makhijani, M. G., & Klonsky, B. G. (1992). Gender and the evaluation of leaders: A meta-analysis. Psychological Bulletin, 111, 3-22.
- Erel, O., & Burman, B. (1996). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. Psychological Bulletin, 118, 108-132.
- Evans, C. R., & Dion, K. L. (1991). Group cohesion and performance: A meta-analysis. Small Group Research, 22, 175-186.
- Farrell, D., & Rusbult, C. E. (1992). Exploring the exit, voice, loyalty, and neglect typology: The influence of job satisfaction, quality of alternatives, and investment size. Special Issue: Research of Hirschman's Exit, Voice, and Loyalty model. Employee Responsibilities and Rights Journal, 5, 201-218.
- Farrell, D., & Stamm, C. L. (1988). Meta-analysis of the correlates of employee absence. Human Relations, 41(3), 211-227.
- Feingold, A. (1994). Gender differences in personality: A meta-analysis. Psychological Bulletin, 116, 429-456.
- Fisher, C. D., & Gitelson, R. (1983). A meta-analysis of the correlates of role conflict and ambiguity. Journal of Applied Psychology, 68, 320-333.
- Ford, J. K., Kraiger, K., & Schechtman, S. L. (1986). Study of race effects in objective indices and subjective evaluations of performance: A meta-analysis of performance criteria. Psychological Bulletin, 99, 330-337.
- Fried, Y. (1991). Meta-analytic comparison of the Job Diagnostic Survey and Job Characteristics Inventory as correlates of work satisfaction and performance. Journal of Applied Psychology, 76, 690-697.
- Fried, Y., & Ferris, G. R. (1987). The validity of the Job Characteristics Model: A review and meta-analysis. Personnel Psychology, 40, 287-322.

- Frone, M. R. (1990). Intolerance of ambiguity as a moderator of the occupational role stress-strain relationship: A meta-analysis. Journal of Organizational Behavior, 11, 309-320.
- Gaugler, B. B., Rosenthal, D. B., Thornton, G. C., & Bentson, C. (1987). Meta-analysis of assessment center validity. Journal of Applied Psychology, 72, 493-511.
- Gooding, R. Z., & Wagner, J. A. (1985). A meta-analysis review of the relationship between size and performance: The productivity and efficiency of organizations and their subunits. Administrative Science Quarterly, 30, 462-481.
- Guzzo, R. A., Jette, R. D., & Katzell, R. A. (1985). The effects of psychologically based intervention programs on worker productivity: A meta-analysis. Personnel Psychology, 38, 275-291.
- Hackett, R. D. (1989). Work attitudes and employee absenteeism: A synthesis of the literature. Journal of Occupational Psychology, 62, 235-248.
- Hackett, R. D. (1990). Age, tenure, and employee absenteeism. Human Relations, 43(7), 601-619.
- Hackett, R. D., & Guion, R. M. (1985). A reevaluation of the absenteeism-job satisfaction relationship. Organizational Behavior and Human Decision Processes, 35, 340-381.
- Haring, M. J., Okun, M. A., & Stock, W. A. (1984). A quantitative synthesis of literature on work status and subjective well being. Journal of Vocational Behavior, 25, 316-324.
- Harris, M. M., & Schaubroeck, J. (1988). A meta-analysis of self-supervisor, self-peer, and peer-supervisor ratings. Personnel Psychology, 41, 43-62.
- Hays, R. T., Jacobs, J. W., Prince, C., & Salas, E. (1992). Requirements for future research in flight simulation training: Guidance based on a meta-analytic review. International Journal of Aviation Psychology, 2(2), 143-158.
- Heneman, R. L. (1986). The relationship between supervisory ratings and results-oriented measures of performance: A meta-analysis. Personnel Psychology, 39, 811-826.
- Herbert, T. B., & Cohen, S. (1995). Depression and immunity: A meta-analytic review. Psychological Bulletin, 113, 472-486.
- Hom, P.W., Caranikas-Walker, F., Prussia, G., & Griffeth, R. W. (1992). A meta-analytic structural equations analysis of a model of employee turnover. Journal of Applied Psychology, 77, 890-909.
- Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta-analysis. Psychological Bulletin, 97, 251-273.
- Ito, Tiffany A., Miller, N. & Pollock, V. E. (1996). Alcohol and aggression: A meta-analysis of the moderating effects of inhibitory cues, triggering events, and self-focused attention. Psychological Bulletin, 120, 60-82.

- Jackson, S. E., & Schuler, R. S. (1985). A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. Organizational Behavior and Human Decision Processes, 36, 16-78.
- Johnson, D. W., Maruyama, G., Johnson, R., Nelson, D., & Skow, L. (1981). Effects of cooperative, competitive, and individualistic goal structures on achievement: A meta-analysis. Psychological Bulletin, 89, 47-62.
- Jorgensen, R. S., Johnson, B. T., Kolodziej, M. E., & Scheer, G. E. (1996). Elevated blood pressure and personality: A meta-analytic review. Psychological Bulletin, 120, 293 -320.
- Kluger, A. V., & DeNisi, A. (1996). The effects of feedback interventions on performance: An historical review, a meta-analysis, and a preliminary feedback intervention theory. Psychological Bulletin, 119, 254-284.
- Knight, G. P., Fabes, R. A., & Higgins, D. A. (1996). Concerns about drawing causal inferences from meta-analyses: An example in the study of gender differences in aggression. Psychological Bulletin, 119, 410-421.
- Kraiger, K., & Ford, J. K. (1985). A meta-analysis of ratee race effects in performance ratings. Journal of Applied Psychology, 70, 56-65.
- Kraiger, K., & Ford, J. K. (1990). The relation of job knowledge, job performance, and supervisory ratings as a function of ratee race. Human Performance, 3(4), 269-279.
- Linn, R. L., Harnisch, D., & Dunbar, S. B. (1981). Validity generalization and situational specificity: An analysis of the prediction of first year grades in law school. Applied Psychological Measurement, 5, 281-289.
- Loher, B. T., Noe, R. A., Moeller, N. L., & Fitzgerald, M. P. (1985). A meta-analysis of the relations of job characteristics to job satisfaction. Journal of Applied Psychology, 70, 280-289.
- Lord, R. G., DaVader, C. L., & Alliger, G. M. (1986). A meta-analysis of the relation between personality traits and leadership perceptions: An application of validity generalization procedures. Journal of Applied Psychology, 71, 402-410.
- Mabe, P. A. III, & West, S. G. (1982). Validity of self-evaluation of ability: A review and meta-analysis. Journal of Applied Psychology, 67, 280-296.
- Martocchio, J. J. (1989). Age-related differences in employee absenteeism: A meta-analysis. Psychology and Aging, 4(4), 409-414.
- Martocchio, J. J., & O'Leary, A. M. (1989). Sex differences in occupational stress: A meta-analytic review. Journal of Applied Psychology, 74, 495-501.
- Martocchio, J. J., & Whitener, E. M. (1992). Fairness in personnel selection: A meta-analysis and policy implications. Human Relations, 45(5), 489-506.

- Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. Psychological Bulletin, 108, 171-194.
- McDaniel, M. A., & Jones, J. W. (1986). A meta-analysis of the validity of the Employee Attitude Inventory theft scales. Journal of Business and Psychology, 1(1), 31-50.
- McDaniel, M. A., Schmidt, F. L., & Hunter, J. E. (1988). A meta-analysis of the validity of methods for rating training and experience in personnel selection. Personnel Psychology, 41, 283-314.
- McDaniel, M. A., Whetzel, D. L., Schmidt, F. L., & Maver, S. (1994). The validity of employment interviews: A comprehensive review and meta-analysis. Journal of Applied Psychology, 79, 599-616.
- McEvoy, G. M., & Cascio, W. F. (1985). Strategies for reducing employee turnover: A meta-analysis. Journal of Applied Psychology, 70, 342-353.
- McEvoy, G. M., & Cascio, W. F. (1987). Do good or poor performers leave? A meta-analysis of the relationship between performance and turnover. Academy of Management Journal, 30, 744-762.
- McEvoy, G. M., & Cascio, W. F. (1989). Cumulative evidence of the relationship between employee age and job performance. Journal of Applied Psychology, 74, 11-17.
- McLeod, P. L. (1992). An assessment of the experimental literature on electronic support of group work: Results of a meta-analysis. Special Issue: Computer-supported cooperative work. Human Computer Interaction, 7(3), 257-280.
- Mento, A. J., Steel, R. P., & Karren, R. J. (1987). A meta-analytic study of the effects of goal setting on task performance: 1966-1984. Organizational Behavior and Human Decision Processes, 39, 52-83.
- Miller, K. I., & Monge, P. R. (1986). Participation, satisfaction, and productivity: A meta-analytic review. Academy of Management Journal, 29, 727-753.
- Miller, T. Q., Smithe, T. W., Turner, C. W., Guijarro, J. L. (1996). A meta-analytic review of research on hostility and physical health. Psychological Bulletin, 119, 322-348.
- Mitra, A., Jenkins, G. D., & Gupta, N. (1992). A meta-analytic review of the relationship between absence and turnover. Journal of Applied Psychology, 77, 879-889.
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- Murphy, K. R., Herr, B. M., Lockhart, M. C., & Maguire, E. (1986). Evaluating the performance of paper people. Journal of Applied Psychology, 71, 654-661.
- Nathan, B. R., & Alexander, R. A. (1988). A comparison of criteria for test validation: A meta-analytic investigation. Personnel Psychology, 41, 517-535.

- Neter, E., & Ben-Shakhar, G. (1989). The predictive validity of graphological inferences: A meta-analytic approach. Personality and Individual Differences, 10(7), 737-745.
- Neuman, G. A., Edwards, J. E., & Raju, N. S. (1989). Organizational development interventions: A meta-analysis of their effects on satisfaction and other attitudes. Personnel Psychology, 42, 461-489.
- Newcomb, A. F., & Bagwell, C. L. (1995). Children's friendship relations: A meta-analytic review. Psychological Bulletin, 117, 306-347.
- Niemiec, R. P., Sikorski, M. F., Clark, G., & Walberg, H. J. (1992). Effects of management education: A quantitative synthesis. Evaluation and Program Planning, 15(3), 297-302.
- Norton, S. M. (1992). Peer assessments of performance and ability: An exploratory meta-analysis of statistical artifacts and contextual moderators. Journal of Business and Psychology, 6(3), 387-399.
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- Premack, S. L., & Wanous, J. P. (1985). A meta-analysis of realistic job preview experiments. Journal of Applied Psychology, 70, 706-719.
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- Rolton, J., & Kelly, I. W. (1985). Much ado about the full moon: A meta-analysis of Lunar-Lunacy research. Psychological Bulletin, 97, 286-306.
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- Rothstein, H. R., Schmidt, F. L., Erwin, F. W., Owens, W. A., & Sparks, C. P. (1990). Biographical data in employee selection: Can validities be made generalizable? Journal of Applied Psychology, 75, 175-184.
- Schaubroeck, J., & Muralidhar, K. (1991). A meta-analysis of the relative effects of tabular and graphic display formats on decision-making performance. Human Performance, 4(2), 127-145.
- Schmidt, F. L., & Hunter, J. E. (1977). Development of a general solution to the problem of validity generalization. Journal of Applied Psychology, 62, 529-540.
- Schmidt, F. L., Hunter, J. E., Pearlman, K., & Shane, G. S. (1979). Further tests of the Schmidt-Hunter Bayesian validity generalization procedure. Personnel Psychology, 32, 257-381.
- Schmitt, N., Gooding, R. Z., Noe, R. A., & Kirsch, M. (1984). Meta-analyses of validity studies published between 1964 and 1982 and the investigation of study characteristics. Personnel Psychology, 37, 407-423. (This is a bare bones meta-analysis.)
- Schuler, H., Funke, U., & Baron-Boldt, J. (1990). Predictive validity of school grades: A meta-analysis. Applied Psychology-An International Review, 39, 89-103.
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Required Boilerplate

If you have a disability that may require some modification of seating, testing, or any other class requirement, please let me know as soon as possible so that appropriate arrangements can be made. Similarly if you have any emergency medical information about which I should know, or if you need special arrangements in the event the building must be evacuated, please let me know. Please see me after class hours or during my scheduled office hours or schedule an appointment. I would also remind you that the Office of Student Disability Services is available to assist you.

It is my sincere hope that no student in this class submits work which is not his or her own. However, it seems prudent to clarify in advance the policy on cheating. If I determine that any assignment was not written solely by the student whose identification number appears on the project, the student will receive a zero (0) for the project and may receive an "F" for the class.

All incidents of cheating will be reported to the appropriate Deans (e.g., the Associate Dean for the Undergraduate Program in the College of Business or Liberal Arts and Sciences) and the student may be placed on disciplinary probation for the remainder of his or her undergraduate work at the University of Iowa.

In general, the decision of the Professor may be appealed to the College of Business' Judicial Board, then to the Associate Dean for the Undergraduate Program. The Honor Code for the Tippie College of Business will determine the appropriate appeal process. The Honor Code may be found at <http://www.biz.uiowa.edu/upo/honorcode.html>

The Tippie College of Business and the University of Iowa are committed to providing students with an environment free from sexual harassment. If you feel that you are being or have been harassed or you are not sure what constitutes sexual harassment, we encourage you to visit the University [website](http://www.sexualharassment.uiowa.edu/index.php), <http://www.sexualharassment.uiowa.edu/index.php>, and to seek assistance from department chairs, the Dean's Office, the University Ombuds Office, or the Office of Equal Opportunity and Diversity.