

Psychology 941 **Methods in Social Psychology**

Instructor:

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Office Hours: Tuesday (11:30 AM - 12:30 PM) or by Appointment

Recommended Background Readings:

Reis, H. T., & Judd, C. M. (Eds.) (2000). *Handbook of research methods in social and personality psychology*. New York, NY: Cambridge University Press.

Reis, H. T., & Judd, C. M. (Eds.) (2014). *Handbook of research methods in social and personality psychology* (2nd Ed.). New York, NY: Cambridge University Press.

Reis, H. T., West, T., & Judd, C. M. (Eds.) (2024). *Handbook of research methods in social and personality psychology* (3rd Ed.). New York, NY: Cambridge University Press.

Lilienfeld, S. O., & Waldman, I. D. (Eds.) (2017). *Psychological science under scrutiny*. Chichester, West Sussex, UK: John Wiley & Sons.

Jussim, L. J., Krosnick, J. A., & Stevens, S. T. (Eds.) (2022). *Research integrity*. New York, NY: Oxford University Press.

Course Objectives: To familiarize students with many of the basic methodological challenges and solutions involved in conducting psychology research in general and social-personality psychology research in particular.

Format of Course: This course will be taught in a discussion format. Each week, students will be expected to read several target readings on a specific topic in research methods. Each week, all students will be required to generate 2 to 4 thought questions concerning the readings. These questions will be due one day prior to class. Additionally, each week, half of the class will be responsible for writing a reaction paper (4-5 double spaced pages) about the readings. Each of these papers will address some set of issues specified by the instructor. The topic for each reaction paper will be provided one week in advance. Reaction papers will be due in class. Students will write a total of 4 reaction papers and complete a total of 8 sets of thought questions.

All students will also be required to complete a Research Methods “Replication Grant Proposal” (approximately 10 to 15 double-spaced pages). In 2023, the German Research Foundation sponsored the second phase of a special grant initiative aimed at understanding various aspects of

the replication crisis in psychology. You will be provided with the text of the original call for proposals and your assignment will be to propose a research project that addresses some issue related to a theme in this call for proposals. The proposal should have introduction setting up the question of interest and goals of your project, methods and results sections for each study you propose, and a general discussion summarizing the potential value of your proposed research. This proposal will be due during the final exam period. It is recommended that you discuss your idea with your instructor by the 8th week of the term.

Grading: Thought Questions (10%)
 Reaction Papers (60%)
 Term Paper (30%)

Course Fees: All required readings are available for free via library resources.

Weekly Topics:

Week 1: Types of Validity and Psychology in Crisis (January 6)

Cook, T. D., & Campbell, D. T. (1979). Validity. In T. D. Cook & D. T. Campbell, *Quasi-experimentation: Design and analysis issues for field settings* (pp. 37-94). Chicago, IL: Rand McNally. (**Just 1st 3 pages**)

Brewer, M. B., & Crano, W. D. (2014). Research Design and Issues of Validity. In H. T. Reis C. M. Judd, *Handbook of research methods in social and personality psychology* (2nd Ed., pp. 11-26). New York, NY: Cambridge University Press.

Hughes, B. M. (2018). The Same Again, But Different: Psychology's Replication Crisis. In B. M. Hughes, *Psychology in crisis* (pp. 1-27). London, UK: Palgrave.

Week 2: Construct Validity of Measures and Experimental Manipulations (January 13)

Revelle, W., & Garner, K. M. (2024). Measurement: Reliability, Construct Validation, and Scale Construction. In H. T. Reis, T. West, & C. M. Judd, *Handbook of research methods in social and personality psychology* (3rd Ed., pp. 471-501). New York, NY: Cambridge University Press.

Widaman, K. F., & Grimm, K. J. (2014). Advanced psychometrics: Confirmatory factor analysis, Item Response Theory, and the Study of Measurement Invariance. In H. T. Reis C. M. Judd, *Handbook of research methods in social and personality psychology* (2nd Ed., pp. 534-570). New York, NY: Cambridge University Press.

Flake, J. K., Pek, J., & Hehman, E. (2017). Construct validation in social and personality

research: Current practice and recommendations. *Social and Personality Science*, 8, 370-378.

Hauser, D. J., Ellsworth, P. C., & Gonzalez, R. (2018). Are manipulation checks necessary? *Frontiers in Psychology*, 9, Article 998. doi:10.3389/fpsyg.2018.00998

Chester, D. S., & Lasko, E. N. (2021). Construct validation of experimental manipulations in social psychology: Current practices and recommendations for the future. *Perspectives on Psychological Science*, 16, 377-395.

Week 3: Construct Validity of Implicit Measures and Physiological Measures (January 20)

Sherman, J. W. (2009). Controlled influences on implicit measures: Confronting the myth of process-purity and taming the cognitive monster. In R. E. Petty, R. H. Fazio, & P. Brinol (Eds.), *Attitudes: Insights from the new implicit measures* (pp. 391-426). New York, NY: Psychology Press.

Payne, K. B., Burkley, M. A., & Stokes, M. B. (2008). Why do implicit and explicit attitude tests diverge? The role of structural fit. *Journal of Personality and Social Psychology*, 94, 16-31.

Cacioppo, J. T., & Tassinary, L. G. (1990). Inferring psychological significance from physiological signals. *American Psychologist*, 45, 16-28.

Cacioppo, J. T., Berntson, G. G., Lorig, T. S. Norris, C. J., Rickett, E., & Nusbaum, H. (2003). Just because you're imaging the brain doesn't mean you can stop using your head: A primer and set of first principles. *Journal of Personality and Social Psychology*, 85, 650-661.

Vul, E., & Pashler, H. (2017). Suspiciously high correlations in brain imaging research. In S. O. Lilienfeld & I. D. Waldman (Eds.), *Psychological science under scrutiny* (pp. 196-220). Chichester, West Sussex, UK: John Wiley & Sons.

Week 4: Internal Validity and External Validity (January 27)

Fabrigar, L. R., Vaughan-Johnston, T. I., & Wegener, D. T. (2024). Quasi-experimental design. In H. T. Reis, T. West, & C. M. Judd (Eds.), *Handbook of research methods in social and personality psychology* (3rd Ed, pp. 160-192). New York: Cambridge University Press.

Zhou, H., & Fishbach, A. (2016). The pitfall of experimenting on the web: How unattended selective attrition leads to surprising (yet false) research conclusions. *Journal of Personality and Social Psychology*, 111, 493–504.

Mathur, M. B. (2025). On the statistical analysis of studies with attention checks. *Advances in Methods and Practices in Psychological Science*, 8, 1-16.

Berkowitz, L., & Donnerstein, E. (1982). External validity is more than skin deep: Some answers to criticisms in laboratory experiments. *American Psychologist*, 37, 245-257.

Mook, D. G. (1983). In defense of external invalidity. *American Psychologist*, 38, 776-783.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world. *Behavioral and Brain Sciences*, 33, 61-83. (No need to read beyond page 82)

Week 5: Internal Validity and Construct Validity Revisited (Mediation, Moderation, and Psychological Processes) (February 3)

Spencer, S. J., Zanna, M. P., & Fong, G. T. (2005). Establishing a causal chain: Why experiments are often more effective than mediational analyses in examining psychological processes. *Journal of Personality and Social Psychology*, 89, 845-851.

Wiedermann, W., & von Eye, A. (2015). Direction of effects in mediation analysis. *Psychological Methods*, 20, 221-244.

Bullock, J. G., Green, D. P., & Ha, S. E. (2021). The failings of conventional mediation analysis and a designed-based alternative. *Advances in Methods and Practices in Psychological Science*, 4, 1-18.

Muller, D., Judd, C. M., & Yzerbyt, V. Y. (2005). When moderation is mediated and mediation is moderated. *Journal of Personality and Social Psychology*, 89, 852-863.

Week 6: Statistical Conclusion Validity and Replication I (February 10)

Button, K. S., & Munafo, M. R. (2017). Powering reproducible research. In S. O. Lilienfeld & I. D. Waldman (Eds.), *Psychological science under scrutiny* (pp. 22-33). Chichester, West Sussex, UK: John Wiley & Sons.

Francis, G. (2012). The psychology of replication and replication in psychology. *Perspectives on Psychological Science*, 7, 585-594.

Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2011). False positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychological Science*, 22, 1359-1366.

John, L. K., Lowenstein, G., & Prelec, D. (2012). Measuring the prevalence of questionable research practices with incentives for truth telling. *Psychological Science*, 23, 524-532.

Wagenmakers, E., Verhagen, J., Ly, A., Matzke, D., Steingroever, H., Roulder, J. N., & Morey, R. D. (2017). The need for bayesian hypothesis testing in psychological science. In S. O. Lilienfeld & I. D. Waldman (Eds.), *Psychological science under scrutiny* (pp. 123-138). Chichester, West Sussex, UK: John Wiley & Sons.

Reading Week (February 16-20) NO CLASS!

Week 7: Statistical Conclusion Validity and Replication II (February 24)

Stanley, D. J., & Spence, J. R. (2014). Expectations for replications: Are yours realistic? *Perspectives on Psychological Science*, 9, 305-318.

Maxwell, S. E., Lau, M. Y., & Howard, G. S. (2015). Is Psychology suffering from a replication crisis? What does “failure to replicate” really mean? *American Psychologist*, 70, 487-498.

Wegener, D. T., Fabrigar, L. R., Pek, J., & Hoisington-Shaw, K. (2022). Evaluating research in personality and social psychology: Considerations of statistical power and concerns about false findings. *Personality and Social Psychology Bulletin*, 48, 1105-1117.

Simonsohn, U. (2012). It does not follow: Evaluating the one-off publication bias critiques by Francis (2012a, 2012b, 2012c, 2012d, 2012e, in press). *Perspectives on Psychological Science*, 7, 597-599.

Fiedler, K., & Schwarz, N. (2016). Questionable research practices revisited. *Social Psychological and Personality Science*, 7, 45-52.

Wegener, D. T., Pek, J., & Fabrigar, L. R. (2024). Accumulating evidence across studies: Consistent methods protect against false findings produced by p-hacking. *PLOS ONE*, 19(8), e0307999.

Week 8: Case Study I in Non-Replication (March 3)

Wagenmakers, E., Beck, T., Dijkhoff, L., Gronau, Q. F., Acosta, A., Adams, R. B., ... Zwaan, R. A. (2016). Registered replication report: Strack, Martin, and Stepper (1988). *Perspectives on Psychological Science*, 11, 917-928.

Strack, F. (2016). Reflection on the smiling registered replication report. *Perspectives on Psychological Science*, 11, 929-930.

Noah, Y., T., Schul, & Mayo, R. (2018). When both the original study and its failed replication are correct: Feeling observed eliminates the facial-feedback effect. *Journal of Personality and Social Psychology*, 114, 657-664.

Wagenmakers, E.-J., & Gronau, Q. (2018, May 10). *Musings on preregistration: the case of the facial-feedback effect*. Retrieved from <https://www.bayesianspectacles.org/musings-on-preregistration/>

Coles, N. A., Larsen, J. T., & Lench, H. C. (2019). A meta-analysis of the facial feedback literature: Effects of facial feedback on emotional experience are small and variable. *Psychological Bulletin, 145*, 610-651.

Marsh, A. A., Rhoads, S. A., & Ryan, R. M. (2019). A multisemester classroom demonstration yields evidence in support of the facial feedback effect. *Emotion, 19*, 1500-1504.

Week 9: Case Study II in Non-Replication (March 10)

Ebersole, C. R., Atherton, O. E., Belanger, A. L., Skulborstad, H.M., Allen, J. M., Banks, J. B., . . . Nosek, B. A. (2016). ManyLabs 3: Evaluating participant pool quality across the academic semester via replication. *Journal of Experimental Social Psychology, 67*, 68-82.

Petty, R. E., & Cacioppo, J. T. (2016). Methodological choices have predictable consequences in replicating studies on motivation to think: Commentary on Ebersole et al. (2016). *Journal of Experimental Social Psychology, 67*, 86-87.

Luttrell, A., Petty, R. E., & Xu, M. (2017). Replicating and fixing failed replications: The case of need for cognition and argument quality. *Journal of Experimental Social Psychology, 69*, 178-183.

Ebersole, C. R., Alaei, R., Atherton, O. E., Bernstein, M. J., Brown, M., Chartier, C. R., . . . Nosek, B. A. (2017). Observe, hypothesize, test, repeat: Luttrell, Petty, & Xu (2017) demonstrate good science. *Journal of Experimental Social Psychology, 69*, 184-186.

Week 10: Understanding Failures to Replicate (March 17)

Fabrigar, L. R., Wegener, D. T., & Petty, R. E. (2020). A validity-based framework for understanding replication in psychology. *Personality and Social Psychology Review, 24*, 316-344.

Baumeister, R. F., Tice, D. M., & Bushman, B. J. (2023). A review of multisite replication projects in social psychology: Is it viable to sustain any confidence in social psychology's knowledge base? *Perspectives on Psychological Science, 18*, 912-935.

Landy, J. F., Jia, M. L., Ding, I. L., . . . Uhlmann, E. L. (2020). Crowdsourcing hypothesis tests: Making transparent how design choices shape research results. *Psychological Bulletin, 146*, 451-479.

Nosek, B. A., Hardwicke, T. E., Moshontz, H., ... Vazire, S. (2022). Replicability, robustness, and reproducibility in psychological science. *Annual Review of Psychology*, 73, 719-748.

Week 11: Preregistration (March 24)

Nosek, B. A., Ebersole, C. R., DeHaven, A. C., & Mellor, D. T. (2018). The preregistration revolution. *Proceedings of the National Academy of Sciences*, 115, 2600-2606.

Simmons, J. P., Nelson, L. D. & Simonsohn, U. (2021). Preregistration: Why and how. *Journal of Consumer Psychology*, 31, 151-162.

Klonsky, E. D. (2025). Campbell's law explains the replication crisis: Preregistration badges are history repeating. *Assessment*, 32, 224-234.

Bak-Coleman, J., & Devezer, B. (2024). Claims about scientific rigour require rigour. *Nature Human Behaviour*, 8, 1890-1891.

Gelman, A. (2024). *What's the story behind that paper by the Center for Open Science team that just got retracted?* Retrieved from <https://statmodeling.stat.columbia.edu/2024/09/26/whats-the-story-behind-that-paper-by-the-center-for-open-science-team-that-just-got-retracted/>

Week 12: Scientific Fraud (March 31)

Leveld Committee, Noort Committee, & Drenth Committee. (2012). *Flawed science: The fraudulent research practices of social psychologist Diederik Stapel*. Technical Report.

Drenth, P, Leveld, W., & Noort, E. (2013). Rejoinder to commentary on Stapel fraud report. *The Psychologist*, 26, 80-81.

Stroebe, W., Postmes, T., & Spears, R. (2012). Scientific misconduct and the myth of self-correction in science, *Perspectives on Psychological Science*, 7, 670-688.