

PSY 5133 RESEARCH METHODS IN CLINICAL PSYCHOLOGY

Thursdays, 11:30-2:30; Winter 2010
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The course is designed to increase familiarity with the general principles of psychological research design as they pertain to research conducted with clinical samples or on clinically relevant topics. We will cover experimental, quasi-experimental, and correlational research designs. Additionally, we will discuss specific methodological issues that arise in designing studies and making measurement and sampling decisions. Over the term, we will review issues related to internal and external validity, the generalizability of research, meta-analysis, and the clinical significance and clinical application of research results.

Throughout the course, the emphasis will be on the application of sound methodological principles to concrete research problems. Each class will focus on a specific methodological design or domain, and the readings will provide a general background on the topic. For most classes, at least one of the readings will provide an empirical example of the design or domain. For students who require greater depth in reading on a given topic, a list of further readings is provided in addition to the list of required readings. (This should be particularly helpful in developing the required research proposal for the course and for expanding your knowledge of methodological issues relevant to your dissertation work.)

Accurately recognizing the impact of human diversity on psychological phenomena is critical in the planning and interpretation of research. Accordingly, many of the readings assigned as empirical examples of a research domain or design include some aspects of human diversity (e.g., age, gender, ethnicity, and sexual orientation). In addition, classes focused on measurement and sampling considerations address a range of diversity issues in detail in order to sensitize students to the myriad ways in which diversity affects the valid conduct of empirical investigations.

There are **5** components involved in the evaluation of students in the course:

- A.** Students must submit, by the beginning of class on March 4, a detailed methodological critique (approximately 8 manuscript pages, double-spaced) of an empirical article. Students should select 1 of the 2 articles provided by the instructor to critique. This paper is worth 20% of the final mark.
- B.** Students must submit, by the beginning of class on March 25, a quantitative research proposal on a topic of their choice (previously approved by the instructor). The proposal (approximately 20 manuscript pages, double-spaced, excluding references and appendices) should present a brief review of the relevant literature, the hypotheses to be investigated, the research design (including measures, subjects, and procedure), and a brief description of planned

statistical analyses. Appendices should include copies of measures, coding manuals, or other material necessary to conduct the research (if readily available). As the focus of this course is on methodology, the literature review section of the proposal should be relatively brief (e.g., 4-5 pages).

In most instances, this document *should* be a preliminary version of your planned thesis work. For those of you who have already defended your thesis proposal, the paper *cannot* be your thesis proposal. This paper is worth 40% of the final mark. Please submit 2 copies of the paper— one electronic copy sent to my email address and one paper copy submitted in class. The graded paper will be returned on April 8.

C. Students must submit, by the beginning of class on April 8, methodological critiques of a research proposal submitted by another member of the class. The critique should be briefer than the one described in **A** (approximately 6 manuscript pages each, double-spaced). This paper is worth 15% of the final mark. Please submit 2 copies of each critique— one electronic copy sent to my email address and one paper copy submitted in class (1 for the instructor and 1 for the author of the research proposal).

D. A revised research proposal must be submitted by noon on April 19— sent to my email address. Please take into account the comments made by the 2 reviewers (the instructor and the student) when making your comments. Please include a cover letter indicating how you addressed the comments from the 2 reviewers. The revised paper is worth 25% of your final mark.

E. A letter grade based upon the marks for all assignments will be determined by the instructor. This letter grade will be adjusted by as much as one grade increment based on class participation (e.g., an A- based on the assignments could, depending on class participation, result in a final mark of B+, A-, or A).

Required Text:

Thomas, J. C., & Hersen, M. (Eds.). (2003). *Understanding research in clinical and counseling psychology*. Mahwah, NJ: Lawrence Erlbaum Associates.

The required book is available at the university bookstore. Additionally, for each class, there will be supplemental required readings (provided to you at the beginning of the term).

CLASS TOPIC AND READING LIST

January 7 Organizational meeting/Professional models and values

Chapter 1 Introduction: Science in the service of practice

Additional Resources

American Psychological Association Presidential Task Force on Evidence-Based Practice. (2006). Evidence-based practice in psychology. *American Psychologist*, 61, 271-285.

Hayes, S. C., Barlow, D., & Nelson, R. (1999). *The scientist-practitioner: Research and accountability in the age of managed care* (2nd ed.). Needham Heights, MA: Allyn and Bacon. Ch. 1 The scientist-practitioner (pp. 1-28).

Peterson, D. R. (1995). The reflective educator. *American Psychologist*, 50, 975-983.

Stricker, G., & Trierweiler, S. J. (1995). The local clinical scientist: A bridge between science and practice. *American Psychologist*, 50, 995-1002.

January 14 General issues in research design and analysis

Chapter 4 Validity: Making inferences from research outcomes

Wilkinson, L., & the Task Force on Statistical Inference. (1999). Statistical methods in psychology journals: Guidelines and explanations. *American Psychologist*, 54, 594-604.

APA Publications and Communications Board Working Group on Journal Article Reporting Standards. (2008). Reporting standards for research in psychology: Why do we need them? What might they be? *American Psychologist*, 63, 839-851.

Additional Resources

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Boston: Houghton Mifflin Company.

Cohen, J. (1990). Things I have learned (so far). *American Psychologist*, 45, 1304-1312.

Cohen, J. (1994). The earth is round ($p < .05$). *American Psychologist*, 49, 997-1003.

Cook, D. T., & Campbell, D. T. (1979). *Quasiexperimentation: Design and analysis issues for field settings*. Chicago: Rand McNally.

- Cowles, M., & Davis, C. (1982). The origins of the .05 level of statistical significance. *American Psychologist*, *37*, 553-558.
- Dar, R., Serlin, R. C., & Omer, H. (1994). Misuse of statistical tests in three decades of psychotherapy research. *Journal of Consulting and Clinical Psychology*, *62*, 75-82.
- Erceg-Hurn, D. M., & Mirosevich, V. M. (2008). Modern robust statistical methods: An easy way to maximize the accuracy and power of your research. *American Psychologist*, *63*, 591-601.
- Greenwald, A. G. (1975). Consequences of the prejudice against the null hypothesis. *Psychological Bulletin*, *82*, 1-20.
- Kazdin, A. E. (2003). *Research design in clinical psychology* (4th ed). Boston, MA: Allyn and Bacon.
- Leong, F. T. L., & Austin, J. T. (Eds.). (2006). *The psychology research handbook: A guide for graduate students and research assistants* (2nd ed.). Thousand Oaks, CA: Sage.
- McGrath, R. E. (2005). Conceptual complexity and construct validity. *Journal of Personality Assessment*, *85*, 112-124.
- McKay, D. (Ed.). (2007). *Handbook of research methods in abnormal and clinical psychology*. Thousand Oaks, CA: Sage.
- Mook, D. G. (1983). In defense of external invalidity. *American Psychologist*, *38*, 379-387.
- Strauss, M. E., & Smith, G. T. (2009). Construct validity: Advances in theory and methodology. *Annual Review of Clinical Psychology*, *5*, 89-113.

January 21 Case studies, single subject designs, qualitative research

Chapter 7 Single subject designs

- Madill, A., & Gough, B. (2008). Qualitative research and its place in psychological science. *Psychological Methods*, *13*, 254-271.
- Kaysen, D., Lostutter, T. W., & Goines, M. A. (2005). Cognitive processing therapy for acute stress disorder resulting from an anti-gay assault. *Cognitive and Behavioral Practice*, *12*, 278-289.

Additional Resources

- Ambert, A.-M., Adler, P. A., Adler, P., & Detzner, D. F. (1995). Understanding and evaluating qualitative research. *Journal of Marriage and the Family*, *57*, 879-893.
- Atkins, D. C., Bedics, J. D., McGlinchey, J. B., & Beauchaine, T. P. (2005). Assessing clinical significance: Does it matter which method we use? *Journal of Consulting and Clinical Psychology*, *73*, 982-989.
- Borckardt, J. J., Nash, M. R., Murphy, M. D., Moore, M., Shaw, D., & O'Neil, P. (2008). Clinical practice as natural laboratory for psychotherapy research: A guide to case-based time-series analysis. *American Psychologist*, *63*, 77-95.
- Giacomini, M. K., & Cook, D. J. (2000). Users' guides to the medical literature XXIII. Qualitative research in health care. A. Are the results of the study valid? *Journal of the American Medical Association*, *284*, 357-362.
- Elliott, R., Fischer, C. T., & Rennie, D. L. (2003). Evolving guidelines for the publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology*, *38*, 215-229.
- Kazdin, A. E. (1981). Drawing valid inferences from case studies. *Journal of Consulting and Clinical Psychology*, *49*, 183-192.
- Morgan, D. L., & Morgan, R. K. (2001). Single participant research design: Bringing science to managed care. *American Psychologist*, *56*, 119-127.
- Morley, S., & Adams, M. (1989). Some simple statistical tests for exploring single-case time-series data. *British Journal of Clinical Psychology*, *28*, 1-18.
- Parker, R. I., & Brossart, D. (2003). Evaluating single-case research data: A comparison of seven statistical methods. *Behavior Therapy*, *34*, 189-211.
- Sells, S. P., Smith, T. E., & Sprenkle, D. H. (1995). Integrating qualitative and quantitative research methods: A research model. *Family Process*, *34*, 199-218.

January 28 Quasi-experimental and experimental designs

Chapter 5 Group designs

- Bickman, L. (1996). A continuum of care: More is not always better. *American Psychologist*, *51*, 689-701.
- Weiss, B., Catron, T., Harris, V., & Phung, T. M. (1999). The effectiveness of traditional child

psychotherapy. *Journal of Consulting and Clinical Psychology*, 67, 82-94.

Additional Resources

Campbell, D. T., & Stanley, J. C. (1963). *Experimental and quasi-experimental designs for research*. Boston: Houghton Mifflin Company.

Cook, D. T., & Campbell, D. T. (1979). *Quasiexperimentation: Design and analysis issues for field settings*. Chicago: Rand McNally.

Ellis, M. V. (1999). Repeated measures designs. *The Counseling Psychologist*, 27, 552-578.

Greenwald, A. G. (1976). Within-subjects designs: To use or not to use? *Psychological Bulletin*, 83, 314-320.

Psychology in the public forum. (1997). *American Psychologist*, 52, issue 5 [Responses to the Bickman (1996) article].

Ramsay, C. R., Matowe, L., Grilli, R., Grimshaw, J. M., & Thomas, R. E. (2003). Interrupted time series designs in health technology assessment: Lessons from two systematic reviews of behaviour change strategies. *International Journal of Technology Assessment in Health Care*, 19, 613-623.

Shadish, W. R., & Cook, T. D. (2009). The renaissance of field experimentation in evaluating interventions. *Annual Review of Psychology*, 60, 607-629.

Weiss, B., Catron, & Harris, V. (2000). A 2-year follow-up of the effectiveness of traditional child psychotherapy. *Journal of Consulting and Clinical Psychology*, 68, 1094-1101.

February 4 Advanced correlational designs

Chapter 6 Correlational methods

Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Consulting and Clinical Psychology*, 65, 599-600.

Kaslow, N. J., Thompson, M. P., Meadows, L. A., Jacobs, D., Chance, S., Gibb, B., Bornstein, H., Hollins, L., Rashid, A., & Phillips, K. (1998). Factors that mediate and moderate the link between partner abuse and suicidal behaviour in African American women. *Journal of Consulting and Clinical Psychology*, 66, 533-540.

Additional Resources

- Azen, R., & Budescu, D. V. (2003). The dominance analysis approach for comparing predictors in multiple regression. *Psychological Methods, 8*, 129-148.
- Byrne, B. M. (2005). Factor analytic models: Viewing the structure of an assessment instrument from three perspectives. *Journal of Personality Assessment, 85*, 17-32.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cole, D. A., & Turner, J. E. (1993). Models of cognitive mediation and moderation in child depression. *Journal of Abnormal Psychology, 102*, 271-281.
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research and Evaluation, 10*, 1-9.
- Crowley, S. L., & Fan, X. (1997). Structural equation modeling: Basic concepts and applications in personality assessment research. *Journal of Personality Assessment, 68*, 508-531.
- Deal, J. E. (1995). Utilizing data from multiple family members: A within-family approach. *Journal of Marriage and the Family, 57*, 1109-1121.
- DeMaris, A. (1995). A tutorial in logistic regression. *Journal of Marriage and the Family, 57*, 956-968.
- Edwards, J. R. & Lambert, L. S. (2007). Methods for integrating moderation and mediation: A general analytical framework using moderated path analysis. *Psychological Methods, 12*, 1-22.
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods, 4*, 272-299,
- Hoyle, R. H., & Smith, G. T. (1994). Formulating clinical research hypotheses as structural equation models: A conceptual overview. *Journal of Consulting and Clinical Psychology, 62*, 429-440.
- Jaccard, J., Guilamo-Ramos, V., Johansson, M., & Bouris, A. (2006). Multiple regression analyses in clinical child and adolescent psychology. *Journal of Clinical Child & Adolescent Psychology, 35*, 456-479.
- Jackson, D. L., Gillaspay, J. A, Jr., & Pure-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological*

Methods, 14, 6-23.

- Joiner, T. E. (1994). Covariance of baseline symptom scores in prediction of future symptom scores: A methodological note. *Cognitive Therapy and Research, 18*, 497-504.
- Kline, T. J. B., & Dunn, B. (2000). Analysis of interaction terms in structural equation models: A non-technical demonstration using the deviation score approach. *Canadian Journal of Behavioural Science, 32*, 127-132.
- MacCallum, R. C., & Austin, J. T. (2000). Applications of structural equation modeling in psychological research. *Annual Review of Psychology, 51*, 201-226.
- MacCallum, R. C., Zhang, S., Preacher, K. J., & Rucker, D. D. (2002). On the practice of dichotomization of quantitative variables. *Psychological Methods, 7*, 19-40.
- Maguire, M. C. (1999). Treating the dyad as the unit of analysis: A primer on three analytic approaches. *Journal of Marriage and the Family, 61*, 213-233.
- Maxwell, S. E., & Delaney, H. D. (1993). Bivariate median splits and spurious statistical significance. *Psychological Bulletin, 113*, 181-190.
- McDonald, R. P., & Ho, M.-H. R. (2002). Principles and practice in reporting structural equation analyses. *Psychological Methods, 7*, 64-82.
- Meng, X., Rosenthal, R., & Rubin, D. B. (1992). Comparing correlated correlation coefficients. *Psychological Bulletin, 111*, 172-175.
- Olkin, I., & Finn, J. D. (1995). Correlations redux. *Psychological Bulletin, 118*, 155-164.
- Preacher, K. J., Rucker, D. D., MacCallum, R. C., & Nicewander, W. A. (2005). Use of extreme groups approach: A critical re-examination and new recommendations. *Psychological Methods, 10*, 178-192.
- Robins, C. J. (1987). On interpreting results of multiple regression procedures: A cautionary note for researchers and reviewers. *Cognitive Therapy and Research, 11*, 705-708.
- Sherry, A., & Henson, R. K. (2005). Conducting and interpreting canonical correlation analysis in personality research: A user-friendly primer. *Journal of Personality Assessment, 84*, 37-48.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies. *Psychological Methods, 7*, 422-445.
- Streiner, D. L. (2002). Breaking up is hard to do: The heartbreak of dichotomizing continuous

data. *Canadian Journal of Psychiatry*, 47, 262-266.

Ullman, J. B. (2006). Structural equation modelling: Reviewing the basics and moving forward. *Journal of Personality Assessment*, 35-50.

February 11 Measurement issues

Chapter 2 Understanding measurement

Smith, G. T., & McCarthy, D. M. (1995). Methodological considerations in the refinement of clinical assessment instruments. *Psychological Assessment*, 7, 300-308.

Stice, E., Fisher, M., & Lowe, M. R. (2004). Are dietary restraint scales valid measures of acute dietary restriction? Unobtrusive observational data suggest not. *Psychological Assessment*, 16, 51-59.

Additional Resources

Blanton, H., & Jaccard, J. (2006). Arbitrary metrics in psychology. *American Psychologist*, 61, 27-41.

Bossuyt, P. M., Reitsma, J. B., Bruns, D. E., Gatsonis, C. A., Glasziou, P. P., Irwig, L. M., et al. (2003). Towards complete and accurate reporting of studies of diagnostic accuracy: The STARD initiative. *Clinical Chemistry*, 49, 1-6.

Charles, E. P. (2005). The correction for attenuation due to measurement error: Clarifying concepts and creating confidence sets. *Psychological Methods*, 10, 206-226.

De Los Reyes A, & Kazdin A. E. (2005). Informant discrepancies in the assessment of childhood psychopathology: A critical review, theoretical framework, and recommendations for further study. *Psychological Bulletin*, 131, 483-509.

Emons, W. H. M., Sijtsma, K., & Meijer, R. R. (2007). On the consistency of individual classification using short scales. *Psychological Methods*, 12, 105-120.

Feldt, L. S., & Seonghoon, K. (2006). Testing the difference between two alpha coefficients with small samples of subjects and raters. *Educational and Psychological Measurement*, 66, 589-600.

Ferrando, P. J., & Lorenzo-Seva, U. (2005). IRT-related factor analytic procedures for testing the equivalence of paper-and-pencil and Internet-administered questionnaires. *Psychological Methods*, 10, 193-205.

- Floyd, F. J., & Widaman, K. F. (1995). Factor analysis in the development and refinement of clinical assessment instruments. *Psychological Assessment, 7*, 286-299.
- Foster, S. L., & Cone, J. D. (1995). Validity issues in clinical assessment. *Psychological Assessment, 7*, 248-260.
- Fristad, M. A., Emery, B. L., & Beck, S. J. (1997). Use and abuse of the Children's Depression Inventory. *Journal of Consulting and Clinical Psychology, 65*, 699-702.
- Hoyt, W. T., Warbasse, R. E., & Chu, E. Y. (2006). Construct validation in counseling psychology research. *The Counseling Psychologist, 34*, 769-805.
- Hunsley, J., & Mash, E. J. (2007). Evidence-based assessment. *Annual Review of Clinical Psychology, 3*, 57-79.
- Hunsley, J., & Mash, E. J. (2008). Developing criteria for evidence-based assessment: An introduction to assessments that work. In J. Hunsley & E. J. Mash (Eds.), *A guide to assessments that work* (pp. 3-14). New York: Oxford University Press.
- Hunsley, J., & Meyer, G. J. (2003). The incremental validity of psychological testing and assessment: Conceptual, methodological, and statistical issues. *Psychological Assessment, 15*, 446-455.
- Reise, S. P., & Haviland, M. G. (2005). Item response theory and the measurement of clinical change. *Journal of Personality Assessment, 84*, 228-238.
- Rodriguez, M. C., & Maeda, Y. (2006). Meta-analysis of coefficient alpha. *Psychological Methods, 11*, 306-322.
- Schmidt, F. L., & Hunter, J. E. (1996). Measurement error in psychological research: Lessons from 26 research scenarios. *Psychological Methods, 1*, 199-223.
- Schwarz, N. (1999). Self-reports: How the questions shape the answers. *American Psychologist, 54*, 93-105.
- Smith, R. E., Leffingwell, T. R., & Ptacek, J. T. (1999). Can people remember how they coped? Factors associated with discordance between same-day and retrospective reports. *Journal of Personality and Social Psychology, 76*, 1050-1061.
- Streiner, D. L., & Norman, G. R. (2003). *Health measurement scales: A practical guide to their development and use* (3rd ed.). Toronto: Oxford University Press.
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counseling Psychologist, 34*, 806-838.

March 4 Sampling and sample size issues

Chapter 3 Sampling issues

Hallahan, M., & Rosenthal, R. (1996). Statistical power: Concepts, procedures, and applications. *Behaviour Research and Therapy*, 34, 489-499.

Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.

Meyer, I. H., & Wilson, P. A. (2009). Sampling lesbian, gay, and bisexual populations. *Journal of Counseling Psychology*, 56, 23-31.

Additional Resources

Acitelli, L. K. (1997). Sampling couples to understand them: Mixing the theoretical with the practical. *Journal of Social and Personal Relationships*, 14, 243-261.

Aronson, T. A. (1987). A follow-up of two panic disorder-agoraphobia study populations: The role of recruitment biases. *Journal of Nervous and Mental Diseases*, 175, 595-598.

Clark-Carter, D. (1997). The account taken of statistical power in research published in the British Journal of Psychology. *British Journal of Psychology*, 88, 71-83.

Cook, T. D. (1993). A quasi-sampling theory of the generalization of causal relationships. In L. B. Sechrest & A. G. Scott (Eds.), *Understanding causes and generalizing about them* (pp. 39-82). San Francisco: Jossey-Bass.

Cotter, R. B., Burke, J. D., Loeber, R., & Navratil, J. L. (2002). Innovative retention methods in longitudinal research: A case study of the Developmental Trends Study. *Journal of Child and Family Studies*, 11, 485-498.

D'Amico, E. J., Neilands, T. B., & Zambarano, R. (2001). Power analysis for multivariate and repeated measures designs: A flexible approach using the SPSS MANOVA procedure. *Behavior Research Methods Instruments & Computers*, 33, 479-484.

Fagley, N. S. (1985). Applied statistical power analysis and the interpretation of nonsignificant results by research consumers. *Journal of Counseling Psychology*, 32, 391-396.

Graham, J. W. (2009). Missing data analysis: Making it work in the real world. *Annual Review of Psychology*, 60, 549-576.

Halbreich, U., Bakhai, Y., Bacon, K. B., Goldstein, S., Asnis, G. M., Endicott, J., & Lesser, J. (1989). The normalcy of self-proclaimed "normal volunteers." *American Journal of Psychiatry*, 146, 1052-1055.

- Hoffman, S. G., & Roth, W. T. (1996). Issues related to social anxiety among controls in social phobia research. *Behavior Therapy, 27*, 79-91.
- Hsu, L. M. (1988). Random sampling, randomization, and equivalence of contrasted groups in psychotherapy outcome research. *Journal of Consulting and Clinical Psychology, 57*, 131-137.
- Karney, B. R., Davila, J., Cohan, C. L., Sullivan, K. T., Johnson, M. D., & Bradbury, T. N. (1995). An empirical investigation of sampling strategies in marital research. *Journal of Marriage and the Family, 57*, 909-920.
- Kazdin, A. E., & Bass, D. (1989). Power to detect differences between alternative treatments in comparative psychotherapy outcome research. *Journal of Consulting and Clinical Psychology, 57*, 138-147.
- Kelley, K., & Maxwell, S. E. (2003). Sample size for multiple regression: Obtaining regression coefficients that are accurate, not simply significant. *Psychological Methods, 8*, 305-321.
- MacCallum, R. C., Widaman, K. F., Zhang, S., & Hong, S. (1999). Sample size in factor analysis. *Psychological Methods, 4*, 84-99.
- Maxwell, S. E. (2004). The persistence of underpowered studies in psychological research: Causes, consequences, and remedies. *Psychological Methods, 9*, 147-163.
- Maxwell, S. E., Kelley, K., & Rausch, J. R. (2008). Sample size planning for statistical power and accuracy in parameter estimation. *Annual Review of Psychology, 59*, 537-563.
- Rogers, J. L., Howard, K. I., & Vessey, J. T. (1993). Using significance tests to evaluate equivalence between two experimental groups. *Psychological Bulletin, 113*, 553-565.
- Rosenthal, R., & Rosnow, R. L. (1975). *The volunteer subject*. New York: Wiley.
- Sedlmeier, P., & Gigerenzer, G. (1989). Do studies of statistical power have an effect on the power of studies? *Psychological Bulletin, 105*, 309-316.
- Sturm, R., Unutzer, J., & Katon, W. (1999). Effectiveness research and implications for study design: Sample size and statistical power. *General Hospital Psychiatry, 21*, 274-283.
- West, S. G. (2001). New approaches to missing data in psychological research: Introduction to the special section. *Psychological Methods, 6*, 315-316.

March 11 Designing survey studies

Scheuren, F. (2004). *What is a survey*. <http://www.whatisasurvey.info/> (From American Statistical Association <http://www.amstat.org/sections/SRMS/index.html>) Chapters 1, 2, and 3 (pp. 3-26)

Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust web-based studies? A comparative analysis of six preconceptions about Internet questionnaires. *American Psychologist*, *59*, 93-104.

Weissman, M. M., Verdeli, H., Gameroff, M. J., Bledsoe, S. E., Betts, K., Mufson, L., et al. (2006). National survey of psychotherapy training in psychiatry, psychology, and social work. *Archives of General Psychiatry*, *63*, 925-934.

Additional Resources

Asch, D. (1997). Response rates to mail surveys published in medical journals. *Journal of Clinical Epidemiology*, *50*, 1129-1136.

Birnbaum, M. H. (2004). Human research and data collection via the Internet. *Annual Review of Psychology*, *55*, 803-832.

Dillman, D. A., Smyth, J. D., & Christian, L. M. (2009). *Internet, mail, and mixed-mode surveys: The tailored design method* (3rd ed.). New York: John Wiley & Sons.

Edwards, P., Roberts, I., Clarke, M., DiGiuseppi, C., Pratap, S., Wentz, R., & Kwan, I. (2002). Increasing response rates to postal questionnaires: Systematic review. *British Medical Journal*, *324*, 1183-1191.

Fowler, F. J. (2002). *Survey research methods* (3rd ed.). Thousand Oaks, CA: Sage.

Gravel, R., & Béland, Y. (2005). The Canadian Community Health Survey: Mental health and well-being. *Canadian Journal of Psychiatry*, *50*, 573-579.

Henderson, A. S., & Jorm, A. F. (1990). Do mental health surveys disturb? *Psychological Medicine*, *20*, 721-724.

Kraut, R., Olson, J., Banaji, M., Bruckman, A., Cohen, J., & Couper, M. (2004). Psychological research online. Report of the Board of Scientific Affairs Advisory Group on the Conduct of Research on the Internet. *American Psychologist*, *59*, 105-117.

Skitka, L. J., & Sargis, E. G. (2006). The Internet as psychological laboratory. *Annual Review of Psychology*, *57*, 529-555.

Tourangeau, R. (2004). Survey research and societal change. *Annual Review of Psychology*, *55*,

775-801.

Tourangeau, R., & Yan, T. (2007). Sensitive questions in surveys. *Psychological Bulletin*, *133*, 859-883.

March 18 Issues in psychopathology research

Cicchetti, D., & Rogosch, F. A. (1999). Conceptual and methodological issues in developmental psychopathology research. In P. C. Kendall, J. N. Butcher, & G. N. Holmbeck (Eds.), *Handbook of research methods in clinical psychology* (2nd ed., pp. 433-465). New York: Wiley.

Alloy, L. N., Abramson, L. Y., Ranieri, D., & Dyller, I. M. (1999). Research methods in adult psychopathology. In P. C. Kendall, J. N. Butcher, & G. N. Holmbeck (Eds.), *Handbook of research methods in clinical psychology* (2nd ed., pp. 466-498). New York: Wiley.

Saigh, P. H., Yasik, A. E., Oberfield, R. A., Halamandaris, P. V., & Bremner, J. D. (2006). The intellectual performance of traumatized children and adolescents with or without posttraumatic stress disorder. *Journal of Abnormal Psychology*, *115*, 332-340.

Additional Resources

Capaldi, D. M., Conger, R. D., Hops, H., & Thornberry, T. P. (2003). Introduction to the special section on three-generation studies. *Journal of Abnormal Child Psychology*, *31*, 123-125.

Garber, J., & Hollon, S. D. (1991). What can specificity designs say about causality in psychopathology research? *Psychological Bulletin*, *110*, 129-136.

Iacono, W. G. (1991). Control groups in schizophrenia research: A neglected source of variability. In D. Cicchetti & W. M. Grove (Eds.), *Thinking clearly about psychology: Essays in honor of Paul E. Meehl* (Vol. 1, pp. 430-450). Minneapolis, MN: University of Minnesota Press.

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April 1 Meta-analysis and clinical research

Chapter 9 Meta-analysis

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April 8 Conducting research, from start to finish

Chapter 11 Review the literature and evaluating existing data

Chapter 12 Planning data collection and performing analyses

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