

Statistics in Psychosocial Research Reading List

Session 1: Introduction to Measurement

No Reading

Session 2: Measuring Association and Dimensionality

Required:

- o Netemeyer. Pages xiii-xiv and 1-40.

Additional:

- o Pagano, Gauvreau. Correlation. In: Principles of Biostatistics. Belmont, CA: Duxbury Press, 1993; 363-378.
- o Digby PGN. Approximating the tetrachoric correlation coefficient. Biometrics 1983;39:753-757.

Session 3: Principles of Psychometrics: Reliability I

Required:

- o Netemeyer. Pages 41-59.

Additional:

- o DeVellis. Pages 18-42
- o Anastasi A. Reliability. In: *Psychological Testing*, 6th edition. New York: Macmillan, 1988.
- o Carmines EG, Zeller RA. *Reliability and Validity Assessment*. Beverly Hills, CA: Sage, 1979.
- o Bohrnstedt G. Measurement. In: Rossi PH, Wright JD, Anderson AB, eds. *Handbook of Survey Research*. Orlando, FL: Academic Press, 1983.
- o Shrout PE, Fleiss JL. Intraclass Correlations: uses in assessing rater reliability. *Psychological Bulletin* 1979;86:420-428.

Session 4: Principles of Psychometrics: Reliability II

No Reading

Session 5: Principles of Psychometrics: Validity I

Required:

- o Netemeyer. Pages 71-94.

Additional:

- o DeVellis. Pages 43-50.
- o Anastasi A. Validity: basic concepts. In: *Psychological Testing*, 6th edition. New York, Macmillan, 1988.
- o Carmines EG, Zeller RA. *Reliability and Validity Assessment*. Beverly Hills, CA: Sage, 1979.
- o McCrae RR, Costa PT. Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology* 1987;52:81-90.
- o Bohrnstedt G. Measurement. In: Rossi PH, Wright JD, Anderson AB, eds. *Handbook of Survey Research*, Orlando, FL: Academic Press, 1983.

Session 6: Principles of Psychometrics: Validity II

No Reading

Session 7: Scale Development

Required:

- Netemeyer. Pages 94-107.
- Streiner DL, Norman GR. From items to scales. In: *Health Measurement Scales: A Practical Guide to Their Development and Use*. 2nd edition. New York: Oxford University Press, 1995; 96-102.
- Murphy JM, et al. Performance of screening and diagnostic tests. *Archives of General Psychiatry* 1987;44:550-555.

Session 8: Factor Analysis I

Required:

- Netemeyer. Pages 115-170.

Additional:

- DeVellis. pages 91-109.
- Kim J-O, Mueller CW. *Factor Analysis: Statistical Methods and Practical Issues*, Beverly Hills, CA: Sage Publications, 1988.
- Everitt B, Dunn G. Factor analysis. In: *Applied Multivariate Data Analysis*. London: Arnold Press, 2001.

Session 9: Factor Analysis II

Additional:

- Everitt B, Dunn G. Principal components analysis. In: *Applied Multivariate Data Analysis*. London: Arnold, 2001.
- Fisher LD, Van Belle G. Principal component analysis and factor analysis. In: *Biostatistics: A Methodology for the Health Sciences*, New York: John Wiley & Sons, 1993; 692-762.
- Johnson RA, Wichern DW. Principal components analysis (Chapter 8) and Factor Analysis and Inference for Structured Covariance Matrices (Chapter 9) In: *Applied Multivariate Statistical Analysis*, 2nd edition. Englewood Cliffs, NJ: Prentice Hall, 1988.
- Long JS. *Confirmatory Factor Analysis: A Preface to LISREL*. Beverly Hills, CA: Sage, 1983.
- Muthen B. A general structural equation model with dichotomous, ordered categorical, and continuous latent variable indicators. *Psychometrika* 1984;49:115-132.
- Eaton WW, Bohrnstedt GW, eds. *Latent Variable Models for Dichotomous Outcomes: Analysis of Data from the NIMH Epidemiologic Catchment Area Program*. Newbury Park: Sage Publications, 1989

Session 10: Factor Analysis III

Required:

- Shapiro, Lasarev, McCauley. Factor Analysis of Gulf War Illness: What does it add to our understanding of possible health effects of deployment. *Am J Epidemiol* 2002;156:578-585.

- Lakka, Laaksonen, Lakka, Niskanen, Kumpausalo, Tuomilehto, Salonen. The metabolic syndrome and total and cardiovascular disease mortality in middle-aged men. *JAMA* 2002;288:2709-2716.
- Hoodin, Kalbfleisch. Factor analysis and validity of the Transplant Evaluation Rating Scale in a large bone marrow transplant sample. *Journal of Psychosomatic Research* 2003;54:465-473.
- Costa PT, McCrae RR Four ways five factors are basic. In: *Personality and Individual Differences* 1992;13:653-665

Session 11: Latent Class Analysis I

Required:

- McCutcheon A. Chapters 1 and 2. *Latent Class Analysis*, Newbury Park: Sage, 1987.

Recommended:

- Uebersax J. [LCA Frequently Asked Questions](#).

Session 12: Latent Class Analysis II

Required:

- McCutcheon A. Chapter 3. In: *Latent Class Analysis*, Newbury Park, Sage, 1987.

Session 13: Latent Class

Required:

- Nestadt, Addington, Samuels, Liang, Bienvenu, Riddle, Grados, Hoehn-Saric, Cullen. The Identification of OCD-Related Subgroups Based on Comorbidity. *Biological Psychiatry* 2003;53:914-920.
- Eaton WW, Dryman A, Sorenson A, McCutcheon A. DSM-III major depressive disorder in the community. A latent class analysis of data from the NIMH epidemiologic catchment area programme. *British Journal of Psychiatry*. 1989;155:48-54.
- Sullivan PF, Kessler RC, Kendler KS. Latent class analysis of lifetime depressive symptoms in the national comorbidity survey. *Am J Psychiatry* 1998;155:1397-1406.
- Reboussin BA, Song E-Y, Shrestha A, Lohman KK, Wolfson M. A latent class analysis of underage problem drinking : Evidence from a community sample of 16-20 year olds. *Drug and Alcohol Dependence* 2006;83:199-209.

Session 14: Sample Size in Reliability and Factor Analysis

Required:

- MacCallum RC, Widaman KF, Shaobo Z, Hong S. Sample size in factor analysis. *Psychological Methods* 1999;4:84-99.