Objectives

This course is designed to provide experience in conducting multiple regression analyses of data using SPSS computer software. In addition, you will get experience interpreting the results of multiple regression and correlational analyses. The course also develops awareness of the strengths and weaknesses of various research methodologies and develops an understanding of the threats of valid inference and interpretation of research results. The material presented in this course will provide the necessary foundation for critically analyzing and evaluating research.

Grading

Grades will be based on two examinations worth 60%, participation worth 15% and a project worth 25% of the grade. In addition, you must pass the Human Subjects Certification Test and submit a copy of the official letter certifying this NO LATER THAN APRIL 7. Assignments will be distributed and answer keys distributed on their due dates. I strongly urge you to complete each assignment on time, even though they do not "count" in your grade. Past experience suggests that thoughtful completion of the assignments is related to exam performance, especially if you carefully go over the answer key and compare your responses to those on the key. Students are encouraged to work together on assignments (although you should practice composing your answers yourself, since precise wording is often an issue). The exams will be open book/open notes. Numerical grades will be assigned for the project, participation, and each exam, and then these grades will be totaled to yield your final letter grade.

Required class presentation and participation

Each student is responsible for choosing one published article and presenting it in class for 15 minutes. At least one week prior to the scheduled presentation, a presenting student should make the published article available for reading, and other students will be expected to critically read and discuss it in class for an additional 15 minutes. This class participation will count 15% towards the final grade. Students will select their own presentation dates with no more than two students on any given date.

Required Texts


Class Topics and Assigned Readings (subject to change)
Jan. 20 Course Info and Brief Review

Jan. 27 Data Screening; Multiple Regression Analysis; Significance test of R; shrunken R sq.; Giles ch.5; Skim Meyers et al. ch 2 & ch 3; LAB

Feb. 3 Multiple Regression Analysis; Significance of individual IVs; Assessing their relative importance; ballantines; Meyers et al. ch 5 [skim ch. 4 on bivariate]; Wampold & Freund (1987); [Supplemental: Budescu, Dominance Analysis, first 5 pages] LAB

Feb. 10 Factors Affecting Multiple R: outliers, reliability, restricted range, combining groups, etc. Power/Sample size issues. Review: Meyers et al. and Giles--sections on outliers; C & C sec. 2.11; Shavelson: Misleading Sources; Kaplan-Reliab & Validity. LAB


March 3 Catch Up and Review

Mar. 10 Exam I

Mar. 17 **spring break** no class [but please remember assigned readings for next week]


March 31 Construct validity
Murphy & Davidshofer -- Validity of Measurement: Content & Construct Validity; Katzer et al. ch. 8 and 9; Giles ch. 8

April 7 COPY OF HUMAN SUBJECTS CERTIFICATION TEST DUE Statistical Conclusion Validity and Internal Validity. Fagley (1985); Katzer et al. ch. 6 & 7; Cohen: Things I Have Learned, So Far; Review Kaplan: Reliability and Validity

April 14 *NOTE* I may need to cancel this class depending on when I present at AERA. Once the schedule is finalized, I will let you know.*
External Validity
Locke: Generalizing from lab to field (1);
Anderson (1999) Research in the Psychology Lab: Truth or Triviality;
Campbell: Labs, Fields, & Straw Issues (14); Stone (1984)

April 21 Qualitative Research -- Dooley ch.13
Content Analysis -- Sommer & Sommer, 1991
Single Case Designs -- Kendall & Nay;
Observation -- Wasik & Loven, 1980

April 28 Other Analyses and Issues; Katzer et al. ch. 9, 3, 4; Meyers et al. ch

May 5    Makeup Class if needed (due to April 14th) otherwise Exam II

May 12   *Exam II

Other good resources or supplemental books


Giles, D. C. (2002). *Advanced research methods in psychology*. New York: Routledge. (you will have access to pdf files of chapters 5 and 8)


Kinnear, P. R., & Gray, C. D. (2008). *SPSS 15 Made Simple*. New York: Psychology Press. [if you ever need to conduct other analyses in spss, this could help]


On scale construction:

