	Psy	601	001	Applied Multivariate Statistics

Instructor:

Email:

Office:

Class Meets:

		Online	Summer 2019

Course Objectives:

1)   To review the basic concepts of univariate statistics including scales of measurement, measures of central tendency, indices of variability, shapes and types of distributions, correlations, reliability and validity.

2)   The student will be expected to learn how to read, understand, and interpret modern multivariate research in the fields of counseling and clinical psychology.

3)   The student will be expected to learn how to use SPSS to do the most common forms of analysis of multivariate data using multiple/logistic regression, factor analysis, path analysis, and MANOVA.

4)   The student will be expected to write an APA style research report of the various analyses conducted in objective 3.

Textbooks

This Text is Required: Advanced and Multivariate Statistical Methods (Sixth Edition)

        Earlier editions will probably be fine.

by Craig A. Mertler and Rachel A. Vannatta

Optional: Reading and Understanding Multivariate Statistics (Paperback, any edition)

by Laurence G. Grimm, Paul R. Yarnold (Editor)

Required Software: A version of SPSS that can do MANOVA, factor analysis, and multiple regression

Schedule of Lectures

Date	Topic		Reading Assignment
June 17	Introduction	Reliability Paper Assigned	Mertler Ch. 1-3
	Data Collection		Grimm Ch. 1
	Review: Descriptive Stats, Variance & Standard Deviation, Power & Effect Size		Grimm Ch. 2 Kalichman, 1997 Gleim & Gleim, 2003
	z-scores, Correlation, Regression		Yudko, Lozhkina, Fouts, 2007
June 24	Reliability and Validity paper due for **peer review**	Reliability Paper Peer Review	Kalichman&Rompa, 1995 (SSSS)
	Multiple Regression Examples (Hierarchical, Simultaneous, Stepwise, respectively)	Regression Paper Assigned	Mertler Ch. 7 Kim, et al., 2005a,b Ramos & Yudko 2006
July 1		Reliability Paper Due	
	Path Analysis, Mediators & Moderators Potential Mediators of Cognitive–Behavioral Therapy for Adolescents With Comorbid Major Depression and Conduct Disorder	Regression Paper Peer Review Begin adding Path Analysis (or mediation analysis) to Regression Paper	Kaufman, et al., 2005 Grimm Ch. 3, Mertler Ch. 8
July 8	Factor Analysis lecture	Factor Analysis Paper Assigned	Grimm Ch. 4
			Mertler Ch. 9
			Kim, et al., 2002
July 15		Regression Paper Due	
July 15	**Review ANOVA**		Mertler, Ch. 11
	Logistic Regression	MANOVA Paper Assigned	Grimm Ch. 8
	MANOVA		Mertler Ch. 4-6
	ANOVA		
	MANOVA		
	ANCOVA		
	MANCOVA		
July 22	Factor Analysis Due for **peer review**	Factor Analysis Paper Peer Review	
July 29	Factor Analysis Due	Factor Analysis Due	
Aug 5	MANOVA Due for peer review	MANOVA Due for peer review	
	Meta-Analysis		Grimm Ch. 10 Eysneck and Glass
Aug 9	A Meta-Analysis of the Efficacy of Cognitive Therapy for Depression	Everything Due	Dobson, 1989

Format of Class: Each topic will be divided into six parts. First, a traditional lecture will be given on the scheduled topic. Second, the students will then be required to read a research paper on the topic. Third, online class discussion. Fourth, conduct an analysis. Fifth, write a research report. Sixth, online peer review of the research report. Grades will be based on these research/lab reports (see below).

Lab Reports

All lab reports must be written in APA format and should contain the following:

Abstract—Summary of Paper

Introduction

Methods

Results

Conclusions

Each student will be required to provide a peer review of the work of two other students. An unlimited number of revisions will be allowed.

Grading Policy (average of five reports)

90%-100%   A

80%-89%   B

70%-79%   C

60%-69%   D

59%   F

Advising Statement

Advising is a very important resource designed to help students complete the requirements of the University and their individual majors. Students should consult with their advisor at least once a semester to decide on courses, check progress towards graduation, and discuss career options and other educational opportunities provided by UH-Hilo. Advising is a shared responsibility, but students have final responsibility for meeting degree requirements

Disability Statement

Any student with a documented disability who would like to request accommodations should contact the University Disability Services Office - Campus Center Rm 311, 933-0816 (V), 933-3334 (TTY) - as early in the semester as possible.

References

Keith S. Dobson (1989) A Meta-Analysis of the Efficacy of Cognitive Therapy for Depression Journal of Consulting and Clinical Psychology, Vol. 57, No. 3,414-419

H. J. Eysenck (1957) The Effects of Psychotherapy: An Evaluation. Journal of Consulting Psychology, 16, 319-324.

Stephen E. Finn (1995) Researcher Allegiance and Meta-Analysis: The Case of Cognitive Therapy for Depression. Journal of Consulting and Clinical Psychology, Vol. 63, No. 6, 966-980

E. A. Gaffan, loannis Tsaqusis, and S. M. Kemp-Wheeler (2005) Potential Mediators of Cognitive–Behavioral Therapy for Adolescents With Comorbid Major Depression and Conduct Disorder. Journal of Consulting and Clinical Psychology , Vol. 73, No. 1, 38–46

Gene V Glass (2000) Meta-Analysis at 25.

Noah K. Kaufman Paul Rohde, John R. Seeley, Gregory N. Clarke, and Eric Stice (1995) Researcher Allegiance and Meta-Analysis: The Case of Cognitive Therapy for Depression. Journal of Consulting and Clinical Psychology, Vol. 63, No. 6, 966-980

Bryan S. K. Kim, Lisa C. Li, and Christopher T. H. Liang (2002). Effects of Asian American Client Adherence to Asian Cultural Values, Journal of Counseling Psychology, Vol. 49, No. 3, 342–354

Bryan S. K. Kim, Gladys F. Ng, and Annie J. Ahn (2005a) Effects of Client Expectation for Counseling Success Journal of Counseling Psychology, Vol. 52, No. 1, 67–76

Bryan S. K. Kim, Michael M. Omizo (2005b). Asian and European American Cultural Values. Journal of Counseling Psychology 2005, Vol. 52, No. 3, 412–419

Ramos & Yudko. (2007). Online discussion has no effect on course grades: a double cross-validation study.

Yudko, Lozhkina, Fouts (2007). Comprehensive Review of the Drug Abuse Screening Test (DAST). Journal of Substance Abuse Treatment.