

COM 365: INTRODUCTION TO COMMUNICATION RESEARCH METHODS
Original Communication Research Project – Data Analysis Assignment

You will be responsible for conducting the statistical/data analysis for your research project using the data you collect. Your grade for this assignment will be based on (1) the quality of your data set; and (2) the quality and completeness of your basic statistical/data analysis. More specific information regarding this assignment follows:

- I. List all hypotheses and/or research questions:
 - A. Identify whether each is one-tailed or two-tailed
 - B. Identify the independent and dependent variables in each
 - C. Identify whether each variable is nominal, ordinal, interval, or ratio

- II. Sample characteristics (i.e., gender, age, race, and class, plus any other *relevant* characteristics):
 - A. Total sample size (N)
 - B. Nominal/ordinal variables – number (n) and percent (%) falling into each response category
 - C. Interval/ratio variables – lowest and highest scores (i.e., range), mean (M), standard deviation (SD)

- III. Scale(s):
 - A. Alpha (and number of items deleted, if any)
 - B. Lowest and highest scores (i.e., range), mean (M), standard deviation (SD)

- IV. Independent variable(s):
 - A. Nominal variables – number (n) and percent (%) falling into each response category
 - B. Interval/ratio variables – lowest and highest scores (i.e., range), mean (M), standard deviation (SD)

- V. Dependent variable(s):
 - A. Nominal variables – number (n) and percent (%) falling into each response category
 - B. Interval/ratio variables – lowest and highest scores (i.e., range), mean (M), standard deviation (SD)

- VI(a). Hypothesis testing – **differences between groups**:
 - A. Number (n) in each group (i.e., dependent variable), mean (M) and standard deviation (SD) for each group (i.e., independent variable), t value for each test, degrees of freedom (df) for each relationship, significance level (p) for each relationship (i.e., $p < .05$ or $p > .05$)
 1. Are the data consistent or inconsistent with your hypothesis?

- VI(b). Hypothesis testing – **relationships between variables**:
 - A. Correlation coefficient (r), degrees of freedom (df), and significance level (p) for each relationship (i.e., $p < .05$ or $p > .05$)
 1. Are the data consistent or inconsistent with your hypothesis?

- VII. Two copies of your SPSS data file and one copy of your SPSS output file on diskette:
 - A. “Your Name - Original.sav” (i.e., “Derek Lane- Original.sav”)
 - B. “Your Name - Final.sav” (i.e., “Derek Lane - Final.sav”)
 - C. “Your Name – Output.spo (i.e., “Derek Lane – Output.spo”)

COM 365: INTRODUCTION TO COMMUNICATION RESEARCH METHODS
Original Communication Research Project – Data Analysis Assignment (**Sample**)

- I. List all hypotheses and research questions:
 - A. Males will self-disclose more often than females.
(one-tailed; IV = gender – nominal; DV = amount of self-disclosure – interval)
 - B. There will be a positive relationship between self disclosure and relationship satisfaction.
(one-tailed; IV = self disclosure – interval; DV = relationship satisfaction – interval/ratio).

- II. Sample characteristics:
 - A. Fifty-seven individuals participated in this study.
 - B. Nominal/ordinal variables – The sample was 44.00% female ($n = 29$) and 56.00% male ($n = 28$).
 - C. Interval/ratio variables – The sample ranged in age from 17 to 25 ($M = 21.54$, $SD = 4.70$).

- III. Scale(s):
 - A. Alpha for the six-item self disclosure scale was .84 (no items were deleted from this scale to get this alpha).
 - B. Total self disclosure scores ranged from 1.00 to 4.67 ($M = 2.26$, $SD = .70$).

- IV. Independent variable(s):
 - A. The first independent variable is gender (nominal) – The sample was 44.00% female ($n = 29$) and 56.00% male ($n = 28$).
 - B. The second independent variable is amount of self disclosure (interval) – Total self disclosure scores ranged from 1.00 to 4.67 ($M = 2.26$, $SD = .70$).

- V. Dependent variable(s):
 - A. The dependent variable is amount of relationship satisfaction (interval/ratio)– Research participants reported relationship satisfaction ranging from 0 to 5 ($M = .77$, $SD = 1.35$).

- VI(a). Hypothesis testing – differences between groups:
 - A. Males ($n = 28$, $M = .85$, $SD = 1.38$) reported self disclosing more than females ($n = 29$, $M = .64$, $SD = 1.25$), $t(488) = -1/5$, $p < .05$.
 1. The data *are* consistent with hypothesis one.

- VI(b). Hypothesis testing – relationships between variables:
 - A. There was a significant positive correlation between self disclosure and relationship satisfaction $r(56) = .31$, $p < .05$.
 1. The data *are* consistent with hypotheses two.

- VII. Two copies of your SPSS data file and one copy of your SPSS output file on diskette:
 - A. See attached file entitled “Derek Lane - Original.sav”
 - B. See attached file entitled “Derek Lane - Final.sav”
 - C. See attached file entitled “Derek Lane – Output.spo”