

Research Design and Analysis I

PSY-Educ 6600 Class Notes and Reading Summaries

Your Name

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Figure 1: Taught by Sarah Schwartz and Tyson Barrett

Prepatory Topics

0.1 APA Style

Optional to write about APA style.

0.2 Chap 1. Intro to Stats

Optional to type in some notes

1 Exploratory Analysis

1.1 Chap 2. Exploration of Data with Plots

1.2 Chap 3. Summarizing Data with Descriptive Statistics

The formula for the *mean* is: $\bar{X} = \frac{\sum X}{n}$. The mean is the basic average. This formula is within a sentence in a paragraph since I used single dollar signs before and after the latex code, but the formula below is on its own line since I surrounded it in double dollar signs.

$$\bar{X} = \frac{\sum X}{n}$$

1.3 Chap 4. Standardized Scores & The Normal Distribution

2 Groundwork for Inference

2.1 Chap 5. Intro to Hypothesis Testing: 1 Sample z-test

2.2 Chap 6. Confidence Interval Estimation: The t Distribution

2.3 Chap 7. Independent Samples t-Test for Means

2.4 Chap 8. Statistical Power & Effect Size

3 Hypothesis Tests for 2 Measures Per Subject

3.1 Chap 9. Linear Correlation

3.2 Chap 10. Linear Regression

3.3 Chap 11. Matched t-Test

4 ANOVA without Repeated Measures

4.1 Chap 12. 1-way Independent Groups ANOVA

4.2 Chap 13. Multiple Comparisons

4.3 Chap 14. 2-way ANOVA

5 ANOVA with Repeated Measures

5.1 Chap 15. Repeated Measures ANOVA

5.2 Chap 16. 2-way Mixed Design ANOVA

6 Categorical Data

6.1 Chap 19. The Binomial Distribution

6.2 Chap 20. Chi-Squared Tests