## **General Rules for Results Sections**

## **Purpose of Results Sections**

The APA manual describes appropriate strategies for presenting statistical information. These guidelines were established to provide basic minimal standards and to provide some uniformity across studies. In general, your results section should effectively communicate the findings of the study by:

- Providing context for the statistics that will follow by incorporating language about the variable(s);
- Clarifying what you did to analyze the results by identifying the statistical procedures used; and
- Highlighting the implications for the hypotheses by providing simple interpretations of the analyses.

## **Statistical Information to Include**

Significance testing "is but a starting point and that additional reporting elements such as effect sizes, confidence intervals, and extensive description are needed to convey the most complete meaning of the results" (p. 33).

- 1. Descriptive statistics are essential and "such a set usually includes at least the following: the per-cell sample sizes; the observed cell means (or frequencies of cases in each category for a categorical variable); and the cell standard deviations" (p. 33).
- 2. For statistical significance tests, "include the obtained magnitude or value of the test statistics, the degrees of freedom, the probability of obtaining a value as extreme as or more extreme than the one obtained (the exact *p* value)" (p. 34).
- 3. When possible, confidence intervals should be emphasized. "The inclusion of confidence intervals (for estimates of parameters, for functions of parameters such as differences in means, and for effect sizes) can be an extremely effective way of reporting results" (p. 34).
- 4. "For the reader to appreciate the magnitude or importance of a study's findings, it is almost always necessary to include some measure of effect size" (p. 34). These can be in the original (raw) units or in a standardized metric.

## **Information in Text versus Data Displays**

"Statistical and mathematical copy can be presented in text, in tables, and in figures. . . Select the mode of presentation that optimizes understanding of the data by the reader" (p. 116).

- The more analyses you have, the more likely it is that they should be presented in a table or figure. "If you need to present 4 to 20 numbers, first consider a well-prepared table" (p. 116).
- "If you present descriptive statistics in a table or figure, you do not need to repeat them in text, although you should (a) mention the table in which the statistics can be found and (b) emphasize particular data in the narrative when they help in interpretation" (p. 117).
- As a result, it is necessary that the text include a description of the variable(s) under study and a description of the statistical procedures used. The text often includes a description of whether the results support the hypotheses.

**Note:** All quotations pertaining to reporting results are taken from: American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6<sup>th</sup> Ed.). Washington, DC: APA.