Writing APA Style Statistical Results

Rules, Guidelines, and Examples

APA Style Results

- A standardized format for reporting the results of statistical analyses
  - Common ground for communication
  - Replication
  - Verification of experimental results

Guidelines for APA Style

1. Identify reason for analysis
2. Identify analysis
3. Report results
4. Report effect sizes
5. Report means and standard deviations
6. Report main effects followed by *post hocs*
7. Do NOT interpret the results

Identify reason for analysis

- Orient reader to *which* hypothesis your analysis is informing
- Rationale for using conducting this analysis?
  - "In order to assess the relationship between depression and self-focused attention…"
  - "In response to hypothesis 1…"
  - "In line with Nolen-Hoeksema's (1987) Response Styles Theory…"

Identify analysis

- What analysis was conducted?
  - "…a Pearson product-moment correlation was calculated."
  - "…a series of 2 (group) x 2 (pre/post) mixed model analyses of covariance (ANCOVAs) were conducted."
  - "…hierarchical multiple regression analyses were used to explore the relationship between predictor and criterion variables of interest."
- Which variables were IVs? Which were DVs?

Report results

- Report the test statistic
- Was the test statistically significant?
  - "The correlation was found to be statistically significant, $r = .53$, $p < .05$…"
  - "The ANCOVA for men versus women on pre- versus post-test depression scores controlling for SES was found to have no statistically significant main effects, $F(1,243) = 1.35$, $p > .05$, interactions, $F(1,243) = 2.06$, $p > .05$, or covariates, $F(1,243) = 1.03$, $p > .05$…"
  - "This multiple regression analysis was found to be statistically significant, $F(3,140) = 29.72$, $p < .0001$…"

Report effect sizes

- Effect sizes inform the importance of the identified results
- "Real world" impact
  - "This relationship (*d* = .56) was found to exceed Cohen's (1988) convention for a medium effect size (*d* = .50)."
  - "The size of these non-significant relationships (η2 = .01) was found to be less than Cohen's (1988) convention for a small effect size (η2 = .05)."
  - "As indexed by the R2 statistic, this multiple regression analysis accounted for 40% of the total variability in the criterion variable…"

Report means and standard deviations

- Ground the results in the larger body of research for the subject area
- Identify/describe “odd” or unexpected results
  - “…depression (*M* = 13.45; *S.D.* = 3.43)…”
  - “…depression scores for men (*M* = 13.45; *S.D.* = 3.43) versus women (*M* = 18.54; *S.D.* = 6.43)…”

Report main effects followed by *post hocs*

- ANOVA
  - Main effects
  - Interactions
  - *Post hoc* & *a priori* analyses
- Examples to follow…

Do NOT interpret the results

- The results section of the manuscript is for the unbiased reporting of statistical information
- Allow the reader to know *what*, *why,* and *how* you conducted your analyses
- DO NOT MAKE INFERENCES

Examples