

ScWk 298

Tips for Writing a “Results” Section

(Also, see Ch. 11, Pycszak & Bruce)

I. Always refer back to your research questions, hypotheses, or (for qualitative) anticipated themes, e.g. arrange the Results section with subheadings matching the research questions or thematic areas.

Quantitative example:

Results
<i>Treatment Effectiveness</i>
For the first research question whether group treatment is effective in improving parenting skills, the independent <i>t</i> -test showed that...
The data fit the multivariate linear regression well...

Note: For the Discussion section, you will make the direct link between the Results and whether or not your hypothesis is partially or fully supported.

Qualitative example:

Results
<i>Thematic Area: Perceptions of Treatment Effectiveness</i>
For the first thematic area about participants’ views of the effectiveness of treatment, participants reported that ...

II. Descriptions of the sample (univariate frequencies, means, etc.) should go in the Methods (Sampling) section. If your study compares two groups, use tables to show the bivariate differences between groups—one table for frequencies (show both the *n* and %) and Chi Square tests, another table for means and *t*-tests. (Remember—all lines in tables should be double spaced.) Don’t repeat the same information in the narrative, except in summary form to highlight aspects of the table.

Example of a two-group description of the sample:

Methods

Sampling (excerpt)

The sample characteristics (frequencies and percentages) are shown below in Table 1.

Note that the two groups differ by gender, but not by ethnicity.

Table 1. *Demographic Characteristics of Participants*

Variable	Experimental Group		Control Group		χ^2
	N	%	n	%	
Gender					3.89*
Female	25	50	15	30	
Male	25	50	35	70	
Ethnicity					1.22
African American	5	10	10	20	
Latino	10	20	10	20	
Chinese	5	10	5	10	
SE Asian	5	10	5	10	
Other Asian	5	10	6	12	
Caucasian	20	40	14	28	

* $p < .05$

Note the layout. All tables should be completely double spaced!

If you only have one bivariate comparison (e.g. for gender), you don't need a table. Just report it in the narrative using the APA Chi Square format (or *t*-test for means).

III. Reporting Statistical Results

- A. Decision to reject Null Hypothesis: no need to restate “we will reject Null...”; readers should know that’s what “statistically significant” means.
- B. In the Results section report “just the facts” and whether or not findings supported research hypotheses research questions. Any further interpretation, implications and limitations go into the Discussion section.
- C. Tables vs. Narrative?
 - 1. For one or two bivariate analyses, report results in narrative form, not tables (see example below, section D.). For more than two analyses, use a table. For more than two separate Chi-Square, *t* – test/ANOVA analyses, use separate tables for each type of analysis (you can combine *t* –test and ANOVA in the same table—see example below).

Example:

Table 2 shows bivariate *t* – test or ANOVA analyses for all independent variables and the dependent variable. As shown in Table 2, the treatment group variable was statistically significant in the ANOVA analysis ($F = 41.425, p < .001$) whereas the anxiety change scores did not differ by gender and ethnicity. From the Tukey *post-hoc* test, the group treatment group’s mean anxiety change score of 22.6 (sd = 1.26) was significantly greater than both the individual treatment group’s mean score of 15.9 (sd = 2.28) and the case management group’s mean score of 17.5 (sd = 1.43). There was no significant difference between the individual treatment and case management group anxiety change scores.

Table 2.
Bivariate Analyses of Co-variates and Anxiety Change Score

Variable	Anxiety change score	<i>p</i> value
		< .001
Group therapy	22.60	
Individual therapy	15.90	
Case management	17.50	
Gender		n.s.
Male	18.30	
Female	19.00	
Ethnicity		n.s.
African American	21.50	
Latino	20.00	
Chinese	21.80	
SE Asian	19.60	
Other Asian	19.80	
Caucasian	18.90	

2. Use tables for all multivariate analyses. (For only two independent variables, a table is not necessary. Just report findings in the narrative Results section. In the table, report all actual *p* values, whether significant or not.

Example:

Results of the multiple linear regression are shown in Table 3. Having been assigned to the treatment group ($\beta = .xx, p = .01$) and severity of anxiety ($\beta = .xx, p < .001$) were

significantly related to improvements in anxiety whereas gender and ethnicity were not.

Table 3.

Multiple Linear Regression of Treatment and Co-Variate Effects on Anxiety Change Scores

Variable	B	S.E.	Standardized β	<i>p</i>
Treatment (1=experimental group)	x.xx	x.xx	.xx	.01
Gender (Female)	x.xx	x.xx	.xx	.56
African American*	x.xx	x.xx	.xx	.78
Latino*	x.xx	x.xx	.xx	.95
Chinese*	x.xx	x.xx	.xx	.76
Southeast Asian*	x.xx	x.xx	.xx	.55
Other Asian*	x.xx	x.xx	.xx	.74
Severity of Baseline Anxiety	x.xx	x.xx	.xx	<.001

*Note: Caucasian is the reference category.

$F(2,58) = 5.87, p = .03, \text{Adjusted } R^2 = .17$

D. Summary of Statistical Reporting (Narrative Examples—if tables are not used)

1. Chi-square

More women (65%) than men (30%) in the group were depression free after the treatment ($X^2 = 0.24, df = 40, p = .06$).

2. *t* - test

Posttest anxiety scores (mean = 27, SD = 5) were significantly lower than pretest scores (mean = 33.5, SD = 10.8) ($t = -2.779, df = 14, p = .015$).

3. ANOVA

From a One-Way ANOVA, a significant difference was found in anxiety change scores among the three treatment groups ($F = 41.425, p < .001$). From the Tukey *post-hoc* test, the group treatment group's mean anxiety change score of 22.6 (sd = 1.26) was significantly greater than both the individual treatment group's mean score of 15.9 (sd = 2.28) and the case management group's mean score of 17.5 (sd = 1.43). There was no significant difference between the individual treatment and case management group anxiety change scores.

4. Pearson *r* Correlation

There was a statistically significant negative correlation between children's Self Esteem Index score and number of behavioral outbursts, $r(280) = -.382, p < .001$.

5. Multiple linear regression

(See example and Table 3 above)

6. Logistic regression

Example:

Table 4 shows results of the logistic regression analysis of the effects of treatment and co-

variates on whether or not clients' anxiety scores improved.

Table 4.

Logistic Regression of Treatment and Co-variates on Improvement in Anxiety

Variable	Odds Ratio	S.E.	<i>p</i>
Treatment (1= experimental group)	x.xx	.xx	.03
Gender (Female)	x.xx.	.xx	.58
African American*	etc.		
Latino*			
Chinese*			
Southeast Asian*			
Other Asian*			
Severity of Baseline Anxiety			

*Note: Caucasian is the excluded reference category.