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Appendix I. STANDARDIZATION OF STATISTICAL REPORTING

Statistics

The Results section should include the number of individuals or other data units initially eligible for the study, the number at its inception, and the number of individuals who were excluded, dropped out, or were lost to follow-up at each point in the study. Authors should provide descriptive statistics regarding the sample and, if appropriate, the individual subgroups. Primary outcome measures should be discussed after the study population is described, followed by secondary outcome measures. If one statistical test has been used throughout the manuscript, the test should be clearly stated in the Methods section. If more than one statistical test has been used, the statistical tests performed should be discussed in the Methods section and the specific test used reported along with the corresponding results. If multiple statistical tests are used, this should be indicated in a table or figure legend.

Numeric Values

Numbers should be rounded to reflect the precision of the instrument or measurement. Numbers that result from calculations, such as means and standard deviations, should be expressed to no more than 1 significant digit beyond the accuracy of the instrument. Thus, the mean (SD) for a set of quiz scores on a scale accurate to 1 point should, for example, be expressed as "62.5, SD 5.5."

p Values

- When possible, report an *a priori p* value rather than the actual *p* value ($p<.05$ rather than $p<.03$ or $p=.001$). If comparing two samples or groups, use a symbol to indicate that the one sample or group is significant to the other at the *a priori* level rather than adding a column of *p* values.
- Very large and very small *p* values should always be expressed as $p>.99$ and $p<.001$, respectively.
- *P* values should be expressed to 2 digits to the right of the decimal point (regardless of whether the *p* value is significant), unless $p<.01$, in which case the *p* value should be expressed to 3 digits to the right of the decimal point. One exception to this rule is when rounding *p* from 3 digits to 2 digits where the result might lead to *p* appearing non-significant, such as $p=.046$. In this case, expressing the *p* value to 3 places is permitted.
- The smallest *a priori p* value that should be expressed is $p<.001$, since additional zeros do not convey useful information. An *a priori p* value should normally be $p<.05$ unless the author can justify that $p<.001$ is more appropriate given the study design and topic.
- When any *p* value is expressed, it should be clear to the reader what parameters and groups were compared, what statistical test was performed, and whether the test was a one sample, independent, or paired t-test.
- Because the *p* value represents the result of a statistical test and not the strength of the association or the clinical importance of the result, *p* values should be referred to simply as significant or not significant; avoid terms such as *highly significant* and *very highly significant*.

Mean and **Standard Deviation** are most clearly presented in parentheses.

Example: The sample as a whole was relatively young ($M=19.2$, $SD=3.4$).

The average age of students was 19.2 years ($SD=3.4$).

In tables/figures, mean and SD should be presented as: Mean (SD) or Mean (SEM); for eg, 19.2 (3.4).

Percentages are most clearly displayed in parentheses with **no decimal places.**
Example: Nearly half (49%) of the sample was married.

Chi-square statistics are reported, the Pearson chi-square value (rounded to two decimal places), and the significance level.
Example: The percentage of participants that were married did not differ by gender, (χ^2=.89, *p*=.35).

***t*-Tests** are reported similarly to chi-squares. Following that, the *t* statistic (rounded to two decimal places) and the significance level should be reported.
Example: There was a significant effect for gender *(p*<.001) with men receiving higher scores than women (85% vs 72%).

Analysis of Variance (ANOVA)

Both one-way and two-way are reported similarly to the *t*-test.
Example: There was a significant main effect for treatment (*p*=.02), and a significant interaction (*p*=.04).

Correlations

Are reported with the significance level.
Example: The two variables were strongly correlated (*r*=.49, *p*<.01).

Regression

Results are often best presented in a table. In the Results section, present the unstandardized or standardized slope (beta), whichever is more interpretable given the data, along with the *t*-test and the corresponding significance level. It is also customary to report the percentage of variance explained along with the corresponding *F* test.
Example: "Social support significantly predicted depression scores, β =-.34, *p*<.001. Social support also explained a significant proportion of variance in depression scores, R^2=.12, *p*<.001."

Tables

Are useful if a paragraph has almost as many numbers as words. If using a table, do **not** also report the same information in the text.

Effect Sizes

Are useful in characterizing practical significance (eg, treatment effect such as Cohen's D, regression coefficients, odds ratio).
Example: The intervention resulted in a moderate effect (d=0.50).

Significant Digits

For numerical issues, report numbers according to significant digit rules. In general, these should not exceed 3 significant digits.
Rule 1: Non-zero digits are always significant.
Rule 2: Any zeros between two significant digits are significant.
Rule 3: A final zero or trailing zeros in the decimal portion ONLY are significant.
Rule 4: Multiplication or division (eg, average values): use the smallest number of digits in any one number being multiplied or divided.
Example: Average quiz scores (80, 75, 92, 55, average = .76).
Rule 5: With addition or subtraction, the number of decimal places should be the same as the least number of decimal places.
Example: Average quiz scores as proportions (.80, .75, .92, .55, average = .76).