**Betsy’s Writing Hints (with add-ons from Russell)**

September, 2011

**Avoid passive voice (i.e., don’t use “There are ...” or “There is...”**).

**NO:** There were 192 combinations of parameters for which the data were simulated.

**YES:** Data were simulated for 192 combinations of parameters.

**Be consistent in the tense you use.**

Often it is best to use past tense when reporting results. However for proposals, where you are saying what you *will* do, use future. Some people like to use present tense when writing about what other authors have said (e.g., “Brown (1992) argues that the effect size is better than chocolate.” vs. “Brown (1992) argued that the effect size is better than chocolate.”), but whatever you do be consistent!

**Be aware of the difference between *affect* and *effect*.**

Affect is both a noun (typically meaning something like emotions or emotional state) and it is also a verb, and effect is a noun.

**NO:** Conformity was found to effect confidence in all subject groups.

**NO:** The researcher was interested in cause-and-affect designs.

**YES:** Conformity affected confidence in all subject groups.

**YES:** The effect of the intervention was to create a new classroom atmosphere.

**YES:** His affect appeared inappropriate.

**Match plural and singular subjects and verbs.**

This one is particularly tricky when you are using singular forms such as “group of students” or “set of parameters”.

**NO:** The group of students were observed for twenty minutes by one observer.

(If you are looking at this file in Word, it has underlined the mismatched text in green (“group of students were” is underlined) and Word will suggest a correction if you right-click the underlined text.)

**YES:** The students were observed for twenty minutes by one person. OR

**YES:** The group of students was observed for twenty minutes by one researcher.

**Don’t forget “data” is a plural noun (but “data set” is singular).**

**NO:** The data comes from a study by Allison and Ciccheti (1976).

**YES:** The data come from a study by Allison and Ciccheti (1976).

**YES:**The data set comes from a study by Allison and Ciccheti (1976).

**Make proper use of “between” and “from”.**

**NO:** The values ranged between *X* to *Y*.

**YES:** The values ranged between *X* and *Y*. OR

**YES:** The values ranged from *X* to *Y*.

**Don’t use “broken down by”.**

**NO:** The students were broken down by grade and sex.

**YES:** The students were classified by grade and sex.

**YES:** The students were grouped by grade and sex.

**Avoid using the word “prove.”**

Statistics don’t prove anything, so unless you are providing a real mathematical proof, use “support” or “suggest” when discussing results.

**Using between and within.**

Use the plural form when referring to variation *between* units: “We tested between students differences.” This is because you can’t have a difference “between” one case.

Use the singular for within unit references: “the variation within student was great.” Whatever you are studying varies within *each* case.

**NO:** We examined variation both between student and within students.

**YES:** We examined variation both between students and within student.

**Check APA format for punctuation of references and citations, particularly for things like usage of et al. and i.e. and e.g. (This is Betsy’s PET PEEVE!!)**

i.e. means “that is” or “specifically”,

e.g. means “for example”, and

et al. means et alia (roughly “and so on”) and is used when referring to articles written by many authors.

The first two abbreviations are always followed by a comma and are used inside of parentheses:

... school subjects (e.g., reading, writing, arithmetic) may be taught in classrooms...

... three students in the class (i.e., Charlotte, Meng-Jia, and Wei) went to AERA...

If you want to use an example or specific case in *text*, use words (like “such as”) or a dash symbol instead:

... school subjects such as reading, writing, arithmetic may be taught in classrooms...

.. three students in the class – Charlotte, Meng-Jia, and Wei – went to AERA...

.. three students in the class, specifically Charlotte, Meng-Jia, and Wei, went to AERA...

Typically one uses et al. with no comma before or after it, if it is in the text:

Moore et al. (1992) showed that research ...

There are additional rules for the use of et al. -- see the APA manual.

**Check your reference list against your text.**

Be sure each reference you cite is in your reference list. Also, don’t list references you do not use just because they are somehow related to the topic. Each item in the reference list must appear in your text someplace.

**List citations properly within the text.**

When citing several references, *alphabetize* them and separate with semi-colons unless they are articles by the same author(s) with different dates. Also be sure to list all authors or use “et al.” If the study is by “Becker & your-name-here” you don’t want people to refer to it as Becker’s study, right? Also use “&” not “and” inside parentheses, but use “and” in text. Both of these examples are okay:

Many authors (Becker, 2000; Cooper & Hedges, 1994; Olkin, 1999, 2000) discuss meta-analysis.

Becker (2000) and Cooper and Hedges (1994) discuss meta-analysis.

**If you begin a sentence with a number, write it out.**

**NO:** 23 studies reported effects for depression.

**YES:** Twenty-three studies reported effects for depression.

**Define EVERY symbol you use, and do not use the same symbol for two different things. However, do us the same symbol for the same thing (i.e., don’t change the symbol you are using for a particular thing.**

I suggest that you make a list of all symbols you are using and their definitions.

Then if you have two symbols for the same thing, you will see two identical definitions.

Similarly if a symbol shows up in your list with two different definitions you need to change one. For instance suppose the standard deviation of *X*1 is called *S*X1 in one place and *S*1 someplace else. Choose one of the names and use it everyplace.

Also, it is not necessary when you use a formula from a published paper to use the exact notation used there. So say you find *Q* =  *wi* (*Ti - T.*)2 in a paper but you are using *di* as the effect size. It is fine to cite the original paper and still use *Q* =  *wi* (*di - d.*)2 in your paper.

**Do not mix words and symbols in equations or sentences.**

**NO:** The variance = 0.

**YES:** The variance 2 = 0. OR The variance equals zero.

**Do not begin a sentence with a symbol.**

**NO:**  represents the standardized mean difference.

**YES:** The symbol  is used to represent the standardized mean difference.

**Don’t use unprocessed computer output.**

No example is needed!!

**Italicize all variables, whether they are in text, tables, subscripts, or wherever.**

However, do not italicize number subscripts. So you’d have *Ti* but also *T*2.

The only exception to italicizing variables is that you use unitalicized boldface for vectors and matrices, such as **T** = (*T*1, *T*2, *... , Tk* ).

**Don’t report just a *p* value.**

This needs little discussion, because of course we all know that the effect size or test statistic that produced the *p* value is needed as well. Also NEVER, NEVER, **NEVER** write *p* = .000 !!!! It is never equal to zero, regardless of what is printed by some dumb computer program. Add a 5 to the end of the printed string of zeros, and make *p* less than the value: *p* < .0005.

**Don’t make a table for a single value of a statistic; write it into the text instead.**

**Write displays and equations into sentences, and punctuate them as if they were part of the sentence (which they are!!). Do not put a comma after “where” when it is defining the components of an equation.**

**NO:** The *Q* statistic tests homogeneity:

*Q* =  *wi* (*Ti - T.*)2

**YES:** The *Q* statistic is defined as

*Q* = *wi* (*Ti - T.*)2,

where *wi* is the weight for study *i, Ti* is the *i*th study effect, and *T.* is the weighted mean effect.

**Let Word help you – pay attention to the red and green underlining!!**

Sometimes the Word program is very irritating because it numbers things for you and capitalizes things you may not want to capitalize. However, it is usually pretty good at finding typos, extra spaces between words and grammar errors, except in sentences where you are using symbols, which it often interprets as representing grammar errors. Words underlined in red are often typos. However, Word does not have some technical terms in its dictionary, so for instance the word univariate will be underlined whether it is spelled right nor not. Word underlines phrases where it thinks the grammar is wrong (and places with extra spaces between words) in green. It may underline the word “are” if it thinks “is” should be used. By right-clicking the green underlined words you will see the suggested change.

Word is not always right (for example, it always recommends rewriting passive voice, even when the passive voice is used to correctly shift the emphasis of the sentence), but it is always worth checking the words and phrases it flags. Sometimes Word’s grammar parser fails because the sentence is too complex. In this case, the sentence is likely unclear to the reader as well. Consider breaking any complex sentence into two simpler sentences, or dropping unnecessary detail.

**Use dates and page numbers.**

If you are writing something that will undergo revisions (as most things do) put a date on it – usually on the first page - or another approach is to put both the file name and date in a footer. Just be sure if you do that, that you revise the date when you revise the file!

**Hyphenation rules.**

This is something Word will not catch. APA rules for hyphenation are as follows. Use a hyphen between words if you are using a noun as a modifier. For instance “effect size” is a noun. However if you write “effect-size analyses” you should use the dash because “effect-size” modifies (is an adjective for) analyses. You would not hyphenate the words if you wrote “we next did an analysis of effect sizes.”

Similarly here are a few more:

**NO:**  The *t*-test showed a gender difference with a *p*-value of .024.

**YES:** The *t* test showed a gender difference with a *p* value of .024.

**Check your headers for level and format.**

I suggest that you make a separate file of the headers you are using. This allows you to check that you are using proper APA header formatting for each level. You can do this as you write, or often I do this when the paper is nearly done. You can see if the headers are properly nested and at the right levels. Also you can make sure you have at least two subheaders under each section – you are not supposed to use them at all if you have only one subheader within a particular higher level header. Also be consistent in capitalizing. APA format uses title case for some upper level headers but first-word-caps for lower levels.

**Use colons properly.**

Colons belong right after the word they follow, to separate a statement from a sub-statement or an example. Do not put any space between the last word before the colon and the colon – see where it is placed after NO and YES in my examples.

**NO:** The researchers examined three variables :motivation, self-concept, and anger.

**YES:** The researchers examined three variables: motivation, self-concept, and anger.

**Avoid interpreting things for the reader.**

**NO:** It is interesting to note that the variance between students is large.

**YES:** The variance between students is large.

Even though you find it interesting, this fact may or may not interest your reader. So let the reader decide!

**Don’t use “significant” except to talk about formal statistical tests.**

The word “significant” has a technical meaning in statistical research. It implies that a formal test of significance was performed.

**NO:** The results of this study are significant because they could have a broad impact on the lives of many students.

**YES:** There was a significant difference (*t*(58)=2.28*, p*=.026) in the pretest-to-posttest gain between the experimental curriculum group and the business-as-usual control group.

**For reports of meta-analyses, don’t call the work a study.**

In a meta-analysis you will need to use specific terms for the reports or documents collected, the studies (and there may be several studies per document), and the like. Call your work a review or a meta-analysis, not a study (even though technically it is a study in the most general sense).

**Use “research” or “research studies” not “researches”.**

Suppose you want to say that a lot of research has been done.

**NO:** Many researches have shown that the mean is a great statistic.

**YES:** Much research has shown that the mean is a great statistic.

**YES:** Many research studies have shown that the mean is a great statistic.