

Important Errors in *Statistical Methods for Communication Science*

All books have typos, verbal hiccups, and other minor problems that slip through the editorial process. *Statistical Methods for Communication Science* is certainly no exception. However, there are a few errors that are significant enough to bring to your attention in order to avoid unnecessary confusion. These are listed below. Corrections are in bold. This document will be periodically updated. This document was posted on the SMCS web page on **July 20, 2011**. Please contact me at hayes.338@osu.edu if you find additional errors that you believe should be changed in the next edition.

Chapter 4, page 61. In the last two sentences prior to section 4.6, “median” should be changed to “upper or lower quartile”. So these two sentences should read “In SPSS (which generated this figure), ‘outliers’ in a box plot are defined as cases with measurements between 1.5 and 3 IQRs from the **upper or lower quartile**. ‘Extreme values’ are defined by SPSS as measurements more than three IQRs from the **upper or lower quartile**.”

Chapter 5, page 92. In the formula for $P(2)$, the numerator should be **3!** instead of 2!

Chapter 5, page 97, Figure 5.4 caption. The caption should read “The proportion of measurements more than one standard deviation **above** the mean of a normally distributed variable.”

Chapter 5, page 97, line 6. “We know that 82 corresponds to a Z-score of one, and **49** corresponds to a Z-score of $(49-70)/12 = -1.75$.” (The book incorrectly says “40” instead of “49”).

Chapter 6, page 120, second sentence in second paragraph. This sentence should read “The **columns** in the table correspond to the judgments of the first coder, and the **rows** correspond to judgments of the second coder.”

Chapter 7, page 141, second to last paragraph. “What about the probability of getting a sample mean of **34 or less**?” (sentence in the book reads “less than 34”).

Chapter 7, page 142. In the top right corner of Figure 7.2, the probability should read “ **$P(\bar{X} > 34) = 0.16$** ” to maintain consistency with the description of the problem on pages 141 and 143.

Chapter 7, page 145. In the middle of the page, the reference to equation 7.6 should refer to equation **7.5**.

Chapter 7, page 147. About half way down the page, the sentence that begins “Instead, the sampling distribution of μ follows...” should read “Instead, the sampling distribution of \bar{X} follows...”

Chapter 7, page 149. At the bottom of the page, the equation should read “**95% CI for μ** = ...” instead of “*c*% CI for μ = ...”

Chapter 9, Table 9.1. The sample size for the Bush row should be $n = 226$, not $n = 225$.

Chapter 10, page 237. In the first paragraph under section 10.3.2, the sentence that begins “The random assignment model of chance...” should read “The random assignment model of chance, in contrast, attributes differences between \bar{X}_1 and \bar{X}_2 to the random assignment process.”

Chapter 11, page 260. In the middle of the page, the second expected value should read ***E*(image-oriented with a fear appeal)** and the third expected value should read ***E*(issue-oriented without a fear appeal)**.

Chapter 11, page 269. In reference to Cramer’s *V*, the section just under equation 11.10 should read “...where χ^2 is the value of χ^2 from a test of independence and $\min(r-1, c-1)$ is the smaller of two values: one less than the number of rows in the table, and one less than the number of columns in the table. For instance, in a 3×4 table, $\min(r-1, c-1) = 2$, and in a 6×4 table, $\min(r-1, c-1) = 3$. Using the data from section 11.2.4, $\chi^2 = 9.190$, $n = 435$, and $\min(r-1, c-1) = 1$, so...”

Chapter 12, page 281. In Figure 12.5, the residual associated with the case $X = 17$, $Y = 20$, is incorrect. The residual is 6.143, not -6.997.

Chapter 12, page 297, the sentence that begins “For example, the smallest score in a distribution...” should read “For example, the smallest **residual** in a distribution of 20 **residuals** should have a **standardized value no larger than -1.65**, because...”

Chapter 12, page 298, last sentence in the first full paragraph. This sentence should read “Additionally, the assumption of normality applies to the conditional errors in estimation, not to the **outcome** variable itself.”

Chapter 13, page 327, footnote 3. This footnote is potentially confusing, as mediation is conceptually introduced on page 326. Ignore this footnote.

Chapter 13, page 329. About 1/3rd of the way down the page, the sentence that begins “The mathematics of regression...” should end “..are linearly uncorrelated **with W**”

Chapter 13, page 330. “political interest” in the last sentence before the beginning of the first full paragraph should be changed to “**newspaper use**.” Similarly, in the next paragraph, “differences in news use” should be “differences in **newspaper use**.”

Chapter 13, page 331. In the second full paragraph, about half way down the page, the sentence that begins “That information is contained in the partial regression equation...”

should read “That information is contained in the partial regression **coefficient for discussion and its test** of significance.”

Chapter 13, page 345, about the middle of the page. $PR^2_{YX.Z}$ should be $PR^2_{YX.W}$.

Chapter 13, page 356. The last sentence of the second paragraph should end “will have little or no effect on standard errors or tests of significance for **Q**.”

Chapter 13, page 359, bottom of page. The change in the regression coefficient when the coding of sex is changed is incorrect. This sentence should read “We could have used 0 for females and 5 for males, and that would change the coefficient for sex from **1.952 to 0.3904**.”

Chapter 14, page 374, end of first full paragraph. The reference to equation 14.9 should be a reference to equation **14.10**.

Chapter 14, page 397, a third of the way down the page. The phrase in parentheses should read “(now with sample sizes of 196 and **147**)”.

Chapter 15, page 415, two thirds down the page. “If those covariates are unrelated to **group membership (i.e., the X variable)**, $SS_{effect(X)}$ will be largely unaffected....”

Chapter 16, page 465, top of the page. “By testing the null hypothesis that both of these regression coefficients are zero, ~~differing from each other in the sample just by chance~~, we are testing the null hypothesis that....” (cut “differing from each other in the sample just by chance”)