Notes and Corrections to the Text

Please email me (tim@tzkeith.com) if you find additional errors in the text! (Thanks especially to Zhi Emily Chai and Jian Pan for spotting so many of these)

Part 1: Multiple Regression

Chapter 1: Simple Bivariate Regression

Page 15, first line that reads "So, using the data from Figures 1.3 and 1.6," should read

"So, using the data from Figures 1.3, 1.4, and 1.7,

Chapter 3: Multiple Regression: More Depth

Pages 45-47, a clarification for the example starting on Page 45 with a zero correlation between IVs: Please note that there are no data on the website to illustrate this condition (a zero-level correlation between these two independent variables). The regression results were produced by inputting a correlation matrix and conducting the regression via syntax. This method isn't explained here but is used several times later in the text (e.g., see the final examples in Chapter 10, starting on p. 221).

Page 52: Near the bottom of the page, the sentence that reads

"If you turn back to Chapter 2, you can compare this number to the Sum of Squares for the residual in Figure 2.4; they are the same (4878.17)" should read

"If you turn back to Chapter 2, you can compare this number to the Sum of Squares for the residual in Figure 2.5; they are the same (4878.17)."

Chapter 5: Three Types of Multiple Regression

Page 89: Bottom 2 lines of Table 5.3 that read

*p<.01

**p<.05

should read

*p<.05

**p<.01

Page 98: Equation in the middle of the page should read:

Grades (predicted)= $a + b_1$HSGrades + b_2HSRank + b_3SAT + …

(there was an extra = sign in the middle of the equation)

Chapter 7: Regression with Categorical and Continuous Variables

Page 147: Line 9, Point 1 currently reads:

"On the graph, this represents the predicted CAT score (677.176) for boys who have a score of zero on the centered CBM score." Should read:

"On the graph, this represents the predicted CAT score (675.571) for boys who have a score of zero on the centered CBM score."

Page 152: Lines 5-7, the *df* values for the interaction follow-ups should be 96, not 48. That is, the sentences should read:

"For those trained in verbal rehearsal as a memory strategy, the slope (b) of the regression line shown in the figure was .514 (b = .514, t [96] = 4.199, p < .001). For those in the visual mapping group, the slope was negative (b = −.544, t [96] = 4.442, p < .001).

Page 160, line 4 should read:

their sexual abuse was the most traumatic event they ever experienced (0=no, 1=yes);

Chapter 8: Testing for Interactions & Curves with Continuous Variables

Page 173, line 9: The reference to Figure 8.17 should be to Figure 8.12.

Chapter 9: Mediation, Moderation, and Common Cause

Page 190, last line (starting on p. 190, continuing to p. 191). Currently reads:

"These effects are also shown in the first two portions of Figure 9.18: X2 has a standardized effect of .36 on Y1…"

Should read: "These effects are also shown in the first two portions of Figure 9.18: X3 has a standardized effect of .36 on Y1…"

Chapter 10: Multiple Regression: Summary, Assumptions, Diagnostics, Power, and Problems

Page 212: Middle of the second full paragraph.

The sentences read: "The values shown are the change in each parameter, if a particular case were removed. A negative value means that the particular case lowered the value of the parameter, whereas a positive value means that the case raised the parameter." The second sentence is correct, the first is a little misleading. It should instead read:

"The values show how each parameter would change if a particular case were removed."

Page 212, the sentence above the section titled Uses: "Cases 21 and 29 had the highest values (.334 and .335)." Note that these two cases are not shown in Table 10.1.

Page 215, line 10 should read: "to an inspection and questioning of the results in Figure 10.12, but not those in Figure 10.11."

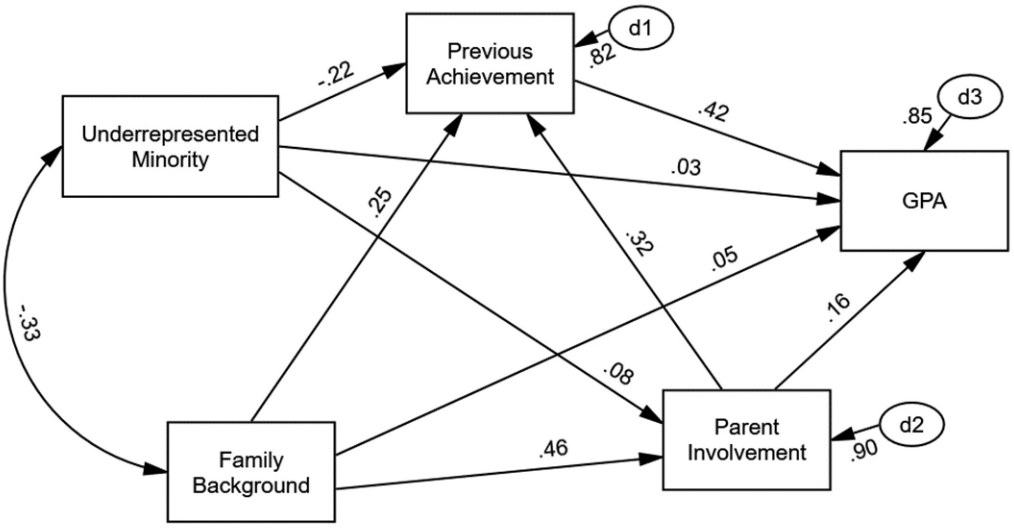
Chapter 11: Related Methods: Logistic Regression and Multilevel Modeling

Page 228, second paragraph, third line should read: "cigarettes smoked per day), F1S78a (In lifetime, number of times had alcohol to drink), and…"

Part 2: Beyond Multiple Regression: Structural Equation Modeling

Chapter 13: Path Analysis: Assumptions and Dangers

Page 290: Figure 13.8 shows a path pointing from Previous Achievement to Parent Involvement, when (according to the caption and text) it should be reversed. In addition, the path between GPA and Parent Involvement is reversed when it should go from PI to GPA. The caption is correct, but the figure is incorrect. Here is the corrected Figure 13.8:



General note concerning SEM results (Chapter 14 and beyond):

Different SEM programs will give slightly different results. If you compare the output of the same model in Amos and Mplus you will see minor differences in model fits and parameter estimates. Other programs may show still different results. This is noted parenthetically in Exercise 1, chapter 14, and in the section "Differences Across Programs" Chapter 23, p. 580. These minor differences are generally not errors on your part or my part. "The differences should be minor, however, especially with large samples. If you get substantially different results, double-check your analyses, because one of us is in error!" (p. 580). And if you see substantial differences, please let me know!

Chapter 14: Analyzing Path Models Using SEM Programs

Page 299: Figures 14.2 and 14.3 have the Parent Involvement to GPA path in the wrong direction. Here are the correct figures:

Figure 14.2 (Standardized estimates):

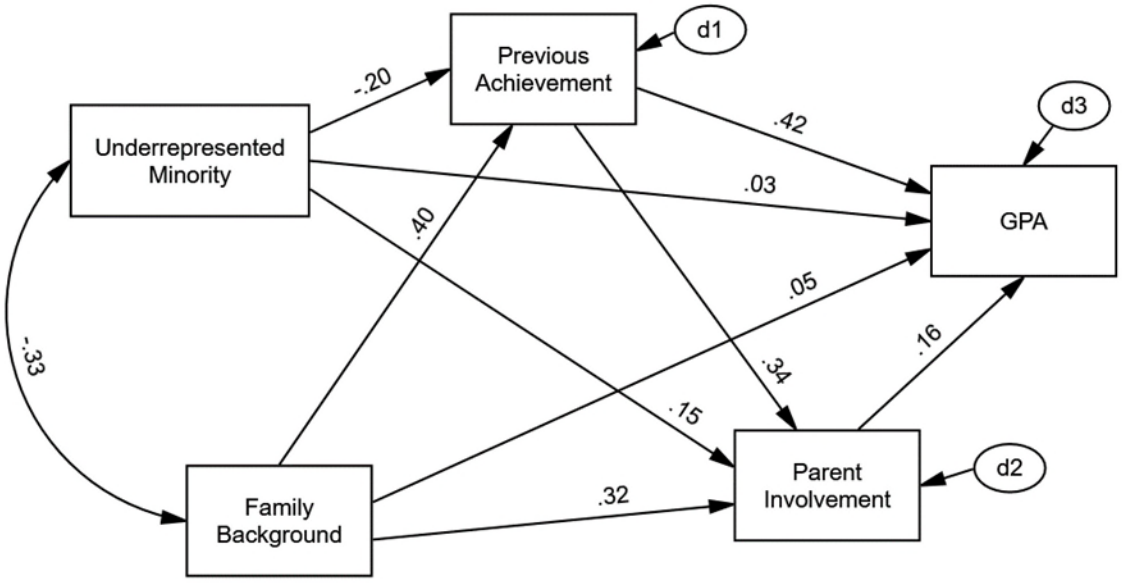
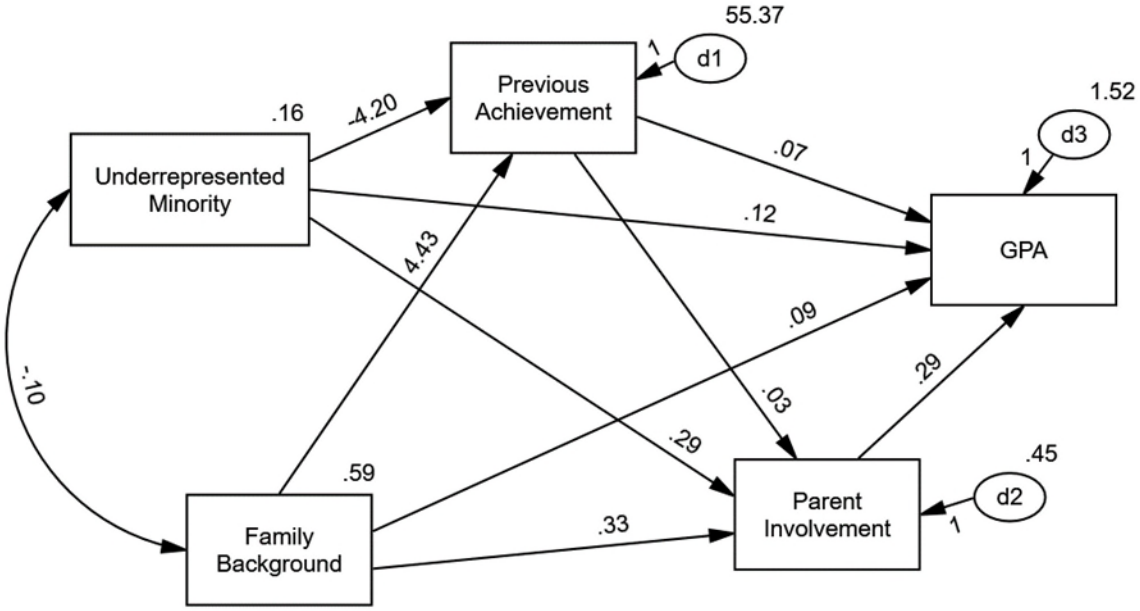
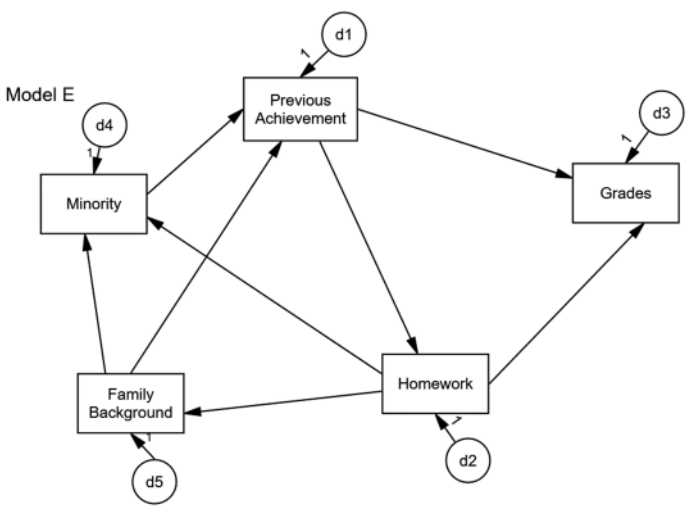
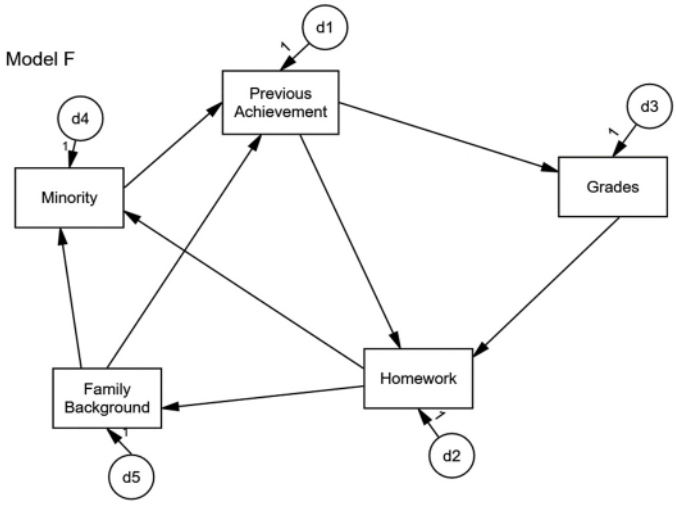


Figure 14.3 (Unstandardized estimates):



Page 319: Models E and F are incorrect. Model E should have the Minority-Homework path going from Homework to Minority. Model F should have the Homework-Grades path reversed (so it goes from Grades to Homework). The correct Figures are shown below.





Chapter 16: Confirmatory Factor Analysis I

Page 372: Near the center of the page, the calculation of the degrees of freedom is not correct. It should be $\frac{4x(4+1)}{2} = 10$

Chapter 18: Latent Variable Models II: Multigroup Models, Panel Models, Dangers and Assumptions

Page 412: The first two endnotes for this chapter did not make it into the textbook. Note 1, referring to the end of the first paragraph on p. 412 should read: "Should Family Background be a traditional latent variable? If you see this variable as a composite of various income and status measures, then probably not. If so, it should likely be a simple composite, or, alternatively, a formative construct (with arrows pointing to the latent variable rather than from the latent variable). See, for example, Kenny's SEM web pages. If, on the other hand, you see this variable as an imperfectly measured home characteristic of parents and families that cause them to seek further education, higher paying jobs, etc, then it makes sense to think of it as a traditional latent variable. Obviously, I can argue it both ways, but tend toward the latter, which is why I also use the label "Family Background"."

Page 427: Note 2 at the end of the first sentence of the first full paragraph on page 427 should read "Or we could analyze the model and compare the results from each of five separate ethnic groups delineated in the NELS data. For the sake of illustration we will focus on a two-group comparison, however."

Page 429, Figure 18.15. Figure caption should read: "Unstandardized output for the unconstrained multigroup homework model. These results are for White students."

Page 442, Exercise 4. The sentence that reads

"3. A model in which the path from Ach8 to Locus8 is constrained to be equal across groups." should read

"3. A model in which the path from Ach8 to Locus10 is constrained to be equal across groups."

Chapter 21: Confirmatory Factor Analysis II: Invariance and Latent Means

Page 532, exercise 2, part b should read:

> "b. You may need to constrain the error variance for Adol1 to zero (to avoid a negative value). What happens to the fit of this model? (This constraint will also be needed for the conditional model with explanatory variables.)"

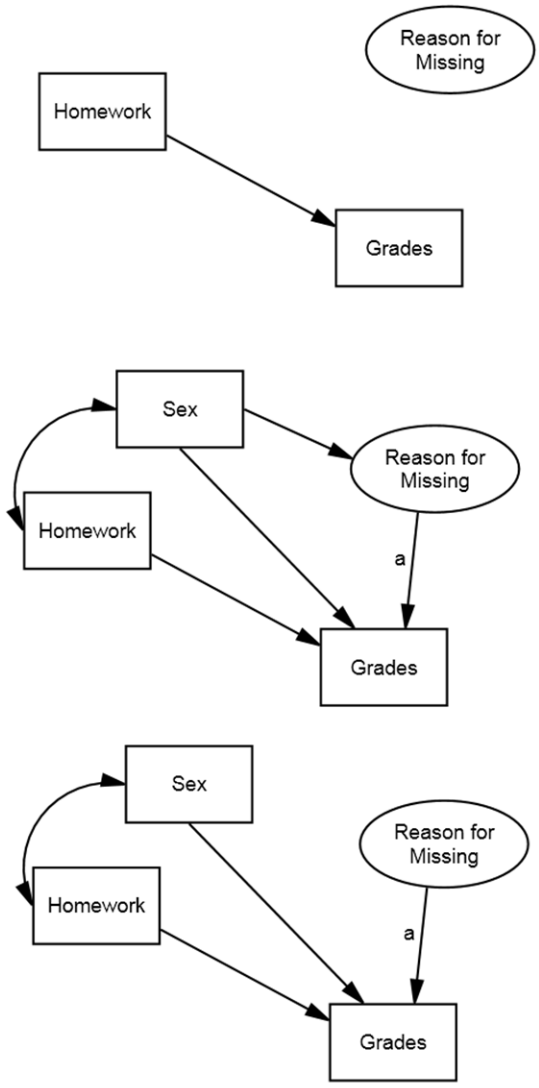
Chapter 22: Latent Variable Interactions and Multilevel Modeling in SEM

p. 534: Chapter title should be "Latent Variable Interactions and Multilevel Modeling in SEM." I tried to use "modeling" (US spelling) instead of "modelling" (UK) throughout the text, but here

is one I missed. Same with the Table of Contents. There are three other instances that I found throughout the text.

Chapter 23: Summary: Path Analysis, CFA, SEM, Mean Structures, and Latent Growth Models

p. 575: The third figure in Figure 23.10 is incorrect. Here is the correct version of Figure 23.10.



Appendix B: Review of Basic Statistics Concepts

p. 599: Formula should be $t = \frac{r\sqrt{N-2}}{\sqrt{1-r^2}}$. In the text the initial *r* is missing from the numerator.