Defense Feedback April 16, 2021

Jeff

- hot.deck is non-parametric, which means it doesn't care about distances. Change my comments on that
- Include a little more on Type I/II errors which one does it increase more than the other? It can't be symmetric, i.e. that both happen equally. Explore that a bit more. Jeff: It's going to be that we're underestimating Type I errors. Type II errors probably won't be affected
- Include a paragraph on the notion that different ordinal categories mean different things to different people, i.e. the subjective perception of 5-point scales isn't the same across people, and whether/how that influences measuring distances between categories
- hd.ord does better, i.e. more on par with the other methods, for MNAR because the methods are all equally bad here. None of them were designed for it, so none of them do well. Make sure to include this point when I adjust the conclusions to make them more positive
- Why did I not get stronger results in the blocking chapter? Why not the results I wanted? (All the other chapters had some form of 'why' in them, so put something here as well)

Ryan

- On p. 33, another example of missing data methods making a political difference is available at http://www.ryantmoore.org/files/papers/wlidd.pdf
- p. 39. For packages that do hot decking, see https://cran.r-project.org/web/views/MissingData.html
- Equation (2.7), the one with the model for the ANES: The predictor variables here predict education. Education is on the left side here, but then becomes the right side for subsequent analysis. Are there potential problems with this in terms of bias?
- Figure 2.4, linear predictor distribution: What if this returns a distribution with big gaps between categories left and right? How would we continue with category reassignment in such a case? Would we still give the new categories sequential numerical values?
- Is there any non-response in the Lucid data? If not, is that because they were required to be completes? (In a normal (?) survey, we'd have some non-response.) Maybe just a little clarification here

Betty

- v2: Figure 2.1: Explain why the sample sizes differ between rows, i.e. 14 for 2 groups, 18 for 3, 25 for 5 etc.
- v2: p. 53, 54 clarify "number of imputations", "1,000"
- v2: p. 54. 57 clarify how interest is included in the polr treatment (confusingly worded)
- v3: bottom p. 90 was there no actual missing data in the experiment?
- v4: On p. 12 the steps for the estimation process with blocking has step 8 repeating steps 1 to 4. Are only 1 to 4 repeated? Or should 1 to 7 be repeated?

Mike

• Conclusions are too negative, there are some cases when my method might work. There might be some substantive situations where the ordinal responses are probably mapping well from the latent variable, while in other situations that mapping may not be straightforward. Adjust diss to sound more like the presentation here. Point conclusion in a more positive direction, i.e. that there is the need for further exploration of this problem to get us to a point where we might have a good diagnostic test for when we should assume the ordinal responses might map well to a latent variable and when they might not