

1. INTRO (3 -4 paragraphs)

a. State what the problem or task is for this week, for example, "A [type of] analysis does [what]. In the case this week, we examine [the issue/concern/problem]."

b. Place the study in the context of something bigger and describe similar studies that you found in your research. Orienting myself to the issue helped me recognize important features of the data or odd outcomes for which I should look. I made sure that I started with at least three good academic journal articles about the topic and/or procedure. I'd pull these early in the week from NUCat Library so I could have their ideas in the back of my head while completing the reading and running the code. I usually added a few more references in the process of writing the paper; to answer questions that popped into my head; or to provide back-up for the assumptions I needed to establish.

Answer:

- What do we already know (a priori studies)?
- Who cares (relevance)?
- What's the purpose of THIS study (and perhaps its broader impact)?

2. DATA- (3-5 paragraphs depending on number and complexity of tables)

This is a pretty rote section to write. I'd often include a summary table and point out things I found interesting. I would just go down the variable list and make a comment about the simple stats, (mean, range, skewness, etc.) as well as any odd features of the data that would impact the study. Excel pivot tables came in handy here for creating simple explanatory graphs. The nice part is that you are orienting yourself to the data and a few insights are bound to jump out given what you already know about the subject.

Answer:

- What generalities/specifics about the data
 - fit with expectations,
 - is especially useful to know,
 - or will be a focus of interest in the analysis?
- What was left out of the details?
- What assumptions do I have to make? (Try to back these up with a reference.)

3. METHODOLOGY- (4-5 paragraph unless you can incorporate a well written bullet list)

Again, this is a pretty rote section where you describe the basic steps for analysis by this technique. This was often a step-by-step 'how to' in my own words, based on the text.

Answer: -

- How will the data be prepared in advance? (missing data if any and transforms)
- What software will you use? (Excel, SAS, JMP)
- What procedures or functions will you employ? Why are these appropriate or preferred?
- How will you tell if the model worked properly-- what tests will be checked?

4. RESULTS- (Longest section, often 8-10 paragraphs plus tables and graphs.)

- a. Just work your way through the output and talk about what you learned at each step. Highlight points that support/refute any assumptions made in the analysis. Try to link your findings with a priori work if possible.
- b. Use the output tables and graphs. Be sure to refer to them in the narrative and tell why they are relevant-- don't just pile in a bunch of tables and leave it to the reader to figure out where to look. It's OK to use the Word tools to add a highlight, arrow, or other visual aids to show the reader what to look at-- but be judicious about it.

Note: Timewise, I found this section a pain in the &## because of the issues of getting SAS output into microsoft Word so that it looked professional. (Also Word "add caption" to a figure stinks.) I had success for tabular data by saving the output as spreadsheet, opening it with excel, and pasting into word. For graphs in the pdf output, I could highlight in adobe and cut/paste into word. Otherwise I had to resort to a screenshot that I cropped in Paint and saved as a jpg. These were low- resolution junk that would never fly for a final product but it worked well enough for these weekly reports.

5. CONCLUSION & NEXT STEPS. (This was always the shortest section—usually 1-3 paragraphs.)

You're probably pretty tired by now/ This is the where you wrap it up with those valuable insights. ☺

Answer: -

- Yeh? SO WHAT! Restate the original purpose and what it means. “*We were trying to do A, to learn B, so we could influence C. We did X, and learned Y, and now can do Z.*” If you can make an informed business or policy recommendation based on your findings—do it.
- What might the study have missed? State all of your limitations, qualifications, and reservations about the data collection, methodology, analysis etc.... This is full disclosure and CYA!
- What else can be done to
 - improve the model,
 - expand its applicability,
 - and/or better address the issue/problem given?

6. LIST of CITED REFERENCES