Final Project: Next Steps

ARTSCI 101: From Data to Insight

Adrienne Aiken Morgan, PhD

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Today's Plan

- Check in
- Final Project: Steps 4, (6) & 7
  - Methods
  - A word about Results
    - Dr. C-R will cover Steps 5 & 6 on EDA & Results in more detail tomorrow
  - Discussion & Abstract
- Team work (time permitting)

Step 4: Research Methods

- The next part of your research proposal is the Methods.
  - Should detail the methodology you would follow in order to address your research question and test your hypothesis.
  - Should describe the “who, what, when, where, and how” of your project.
- If you noticed, during our gallery walk, many of our questions were really about your methods.

Step 4: Methods

- *FP Handout: Methods*
- *Student Methods examples (You can ignore Expected Results)*
- Important to note: All student examples are not "perfect;" rather, they are "strong" examples.
  - They all have strengths and weaknesses– **do not feel as though I want you to copy them to the letter**!
  - Use them to get ideas, but be sure to follow the guidelines of our assignment, especially since our proposals will have a different focus.

Step 6: Results

- You might (or not) recall that in my proposal examples, there were sections entitled, “Preliminary Studies” or “Pilot Study.”
  - This is a often an expected (if not required) aspect of successful grant applications.
  - Less expected for academic proposals, where it is expected that the proposed work is part of the educational/training process.

Step 6: Results

- Returning to my research example…
- My “Preliminary Studies” grant section detailed previous research studies I have done (i.e., part one of my research program).
  - Several were not *directly* related to my physical activity intervention proposal.
  - Goal: to show that I am capable of completing the proposed research, if awarded funding

Step 6: Results

- The “Pilot Study” section of my grants detailed work more closely related to my physical activity intervention.
  - Pilot data collected to show an observational or cross-sectional relationship between physical activity and cognitive function in my sample.
  - Provided rationale for why I would expect that intervening would enhance/improve an existing relationship.

Step 6: Results

- With this in mind, you should write your Results in a similar way.
- Take the perspective that your Exploratory Data Analysis represents a *preliminary study*.
  - So, these prelim findings, in conjunction with your literature review, provide the rationale for why your proposed research question should be answered.
  - *Remember: your EDA findings should not answer your research question directly*.

Step 7: Discussion & Abstract

- You will conclude your research proposal with a Discussion section and then draft an Abstract, which is a brief summary of the entire proposal.

- Primary goal:
  - Your Discussion and Abstract should be the only sections that someone can read and get a full (while not detailed) understanding of your proposal.

Step 7: Discussion

- *FP Handout: Discussion & Abstract*

- *Student Discussion examples*
  - Two different examples because they have complimentary strengths.

- *Student Abstract example*

Wrap Up

- Any Questions?
- Review FP handouts and student examples:
  - (Research Topics to Questions & Introduction)
  - Methods
  - Discussion
  - Abstract
- *Remember* to view your EDA and Results as *preliminary findings* to support your proposed research question.

Work Plan & Deadlines:

1. Final RQ & Dataset **Due 7/28 (tonight)**
2. Introduction & Methods Draft 1 **Due 8/2 (Tuesday) by 5 pm**
   - Review 2 teams' drafts for class workshop on 8/3 (Wednesday; I will be giving more instructions).
3. Exploratory Data Analysis, Results, Discussion, & Abstract Draft 1 **Due 8/3 (Wednesday) by 11:55 pm**
   - Review 2 teams' drafts for class workshop on 8/4 (Thursday)
4. Full Proposal Draft **Due 8/5 (Friday) by 11:55 pm**

Team Activity

- In the time we have left, I want you to diagram your research question(s) and study procedure as I have done in my example.