

# Psychology Research Methods - Paper 2

Due Tuesday 4/18 at the start of Lecture (revised deadline)

## Overview

This assignment involves adding on to Paper 1 by including a second study that is a proposed research experiment. This exercise is similar to a mini-thesis proposal or grant application. The proposed experiment must meet the official criteria for classification as a true “experiment,” meaning the study should involve random assignment to conditions that have been manipulated. The experiment should have at least two categorical independent variables, each with at least two conditions (i.e., a minimum of a 2 x 2 design), and at least one continuous dependent variable. The proposed experiment should build in some way on the analyses conducted in Paper 1. For example, if an independent variable in Paper 1 was “happiness,” the proposed experiment could involve a simple mood manipulation. Priming manipulations and educational interventions may be particularly useful. The study must be highly feasible, meaning that it must be possible for you to conduct the study in 3 months using readily available research participants (e.g., Tulane students or patients recruited online via ResearchMatch), the experiment should take no more than 90 minutes per participant, and any pitfalls that might delay IRB approval should be avoided (e.g., manipulating sleep, alcohol, or food intake, examining reactions to sexual stimuli, etc.). If you worked as a pair for Paper 1, you can continue to work together, or go in separate directions. If completing the Writing Intensive, make sure to review those requirements before starting (e.g., no partners).

## Cover Page

- See template and APA Style Manual

## Abstract (maximum of 180 words)

- Update your Paper 1 abstract. Incorporate any feedback provided in the Paper 1 grading process, and incorporate additional information related to your proposed experiment.

## Introduction (typically 500-1000 words)

- Update your Paper 1 Introduction. Incorporate any feedback provided in the Paper 1 grading process. Additional extensive updates are not required, but do incorporate into the final paragraph a description of the intended proposed experiment and hypotheses.

## Study 1

- This contains the Method, Results, and Discussion from Paper 1. Incorporate and feedback provided in the Paper 1 grading process. The only other change is that prior to the Method section, you should add a short paragraph (perhaps 2-3 sentences) summarizing the goals and methods of the research (see template). No extensive changes should be necessary, but do delete or rephrase sentences as needed to increase the flow of the overall paper.

## Study 2

- Opening paragraph (typically 100-300 words)
  - The paragraph should provide a bridge between Study 1 and Study 2. Describe how the proposed experiment extends logically from Study 1. How did you determine the choice of independent variables for Study 2? How did you choose the dependent variable? Did Study 1 have any weaknesses that you might address in Study 2? In some cases, this may be obvious. In other cases, this requires a thoughtful, logical justification, usually incorporating a few additional references. Conclude by summarizing the goals or hypotheses of the proposed research.
- Method (no word limit)
  - Participants. Describe who you will recruit and your expected sample size.

- Procedures. Describe what the experiment entails, including any experimental manipulations used. To get an idea for how this is done, look over the method section of published journal articles. Ideally, a researcher should be able to look at your method section and re-create the experiment
- Measures. Describe any specific measures you plan to use in the study. Cite the measures you will use or make your own, and include all measures in the Appendix. Identifying, tracking down, or drafting measures can be time consuming, so avoid procrastinating.
- Anticipated Results & Discussion (typically 300-500 words)
  - Include how you would analyze the results (*t*-test, ANOVA, etc.)
  - Describe your expected findings.
  - Include at least one graph depicting your expected results. You can make the graph using Excel, or a similar program. Do not just copy/paste something from SPSS because Output is not of professional publication quality.
  - Describe the implications of your study, assuming your proposed results hold true. How could this knowledge benefit society, and what follow-up studies would be helpful?
  - Describe the implications of your study, assuming your proposed results do not hold true. How could this knowledge benefit society, and what follow-up studies would be helpful?
  - Note any methodological limitations of the study, such as potential problems involving validity or reliability.

#### **General Discussion** (typically < 100 words)

- Very briefly, summarize why this area of research is important, what was found in Study 1, and how the proposed experiment in Study 2 would build on those findings

#### **References** (APA style)

- Minimum of 5 references to primary empirical articles (articles that describe methods and results for studies conducted by the authors). Often, more than 5 references would be helpful. Although review articles, books, magazines, and newspapers can be cited, they are not included in the 5-count. Cite appropriately in text.
- Cite a source any time you express an idea that is not your own, unless it is “common knowledge.” Typically, a page number is also included if citing something specific (e.g., figure, statistic, quote) so that the reader can easily go find it. If copying anything directly, also use quotation marks.
- Do not use dictionaries or Wikipedia as sources (common knowledge)
- Do not use any other web sites as sources, without permission from Mike or the lab instructor

#### **Appendix**

- Include all of your proposed measures in the Appendix
- Attach Paper 1, any existing or updated SPSS Output, and the Paper 1 grading sheet so that the lab instructor can easily track changes that were made in response to the prior grading process

#### **Late Papers** (30% off)

- These can be submitted by e-mail before midnight (email your lab instructor and CC Mike) and will be marked 30% off. Bring a hard copy to Mike at the next scheduled lecture. Late papers will not be accepted after midnight. Backup your work by email and/or flash drive to avoid disasters.

#### **Additional Resources**

- The APA style manual provides rules and helpful information related to each of the major sections of the paper, referencing, and tables/figures. In addition to the table of contents (front), the index (back) can be useful for finding specific information in the APA style manual.
- Template, sample papers, and other useful information: [http://www.psychmike.com/apa\\_paper.php](http://www.psychmike.com/apa_paper.php)

- Scoring criteria are provided on the final two pages, which are modeled after the systems used by scientific journals and the National Institutes of Health (NIH) review process

### **Plagiarism Reminder**

Plagiarism means copying another text without using quotation marks and citing appropriately. Mike recommends using quotes if you copy more than five words in a row, though some consider it plagiarism even if you change a couple words here-and-there. The best advice is to avoid copying anything directly. Skilled writers only incorporate quotes of the truly profound, not ordinary sentences from journal articles. Scientific writing that excessively incorporate quotes is often perceived as lazy, unconvincing, and underdeveloped. Moreover, it is a leading cause of plagiarism because amid all of the copying, it can be easy to miss a few quotation marks. Skilled writers look away from their source momentarily, summarize in their own words, verify that they did not copy directly, and cite appropriately.

## PAPER 2 FEEDBACK FORM

### Narrative Summary of the Major Strengths and Weaknesses of the Paper:

#### Fatal Flaws? [check those that apply]

- Plagiarism concerns (copying without using quotation marks and page numbers)
- Major sections are missing or grossly underdeveloped, or nearly impossible to discern what the experiment entails

#### Major Weaknesses? [check those that apply]

- The proposed experiment only includes one IV
- The proposed experiment is in no way a true “experiment” (i.e., no random assignment to any experimental manipulation)
- The proposed experiment is highly infeasible (e.g., highly controversial, huge sample size, time consuming)
- Measures are not included in the Appendix
- Mainly quotes large blocks of text, but uses quotes (low effort, non-plagiarism)
- No references or gross misunderstanding of referencing
- Disregard for APA style

#### Moderate Weaknesses? [check those that apply]

- In the proposed experiment, one of the IVs involves random assignment to an experimental manipulation, but the other IV involves a subject variable like gender, race, or personality type
- The DV in the proposed experiment is a categorical variable
- The proposed experiment is not impossible but probably infeasible (e.g., likely would take longer than three months, requires more than 90 minutes per participant, involves a hard-to-recruit sample, or could easily get held up by the IRB)
- Proposed analyses for the experiment are obviously incorrect
- An Appendix is included, but the measures are underdeveloped or have significant weaknesses
- Figure for the proposed experiment is missing
- Less than 5 references
- Very sloppy writing, appearance, formatting, or organization
- Multiple sections are very difficult to follow (vague, unclear what is meant, poor logic)
- It would be difficult for a different research team to recreate the experiment, given the information provided (low detail)
- Makes little or no effort to update the writing based on problems identified during the grading process of Paper 1, or forgets to attach the graded copy of Paper 1 and obvious issues have gone unaddressed
- Other:

#### Minor Weaknesses? [check those that apply]

- There were two IVs in the experiment but it was very unclear why those variables were chosen or how they connected to Study 1
- The experiment’s proposed analyses have minor problems
- Quotes dull or routine text on more than one occasion, rather than summarizing the ideas using their own words
- Includes at least 5 references, but less than 5 that were empirical research articles
- At least one section is underdeveloped (either too few words or has substantial length but rambles and repeats)
- At least one section is difficult to follow (vague, unclear what is meant, poor logic)
- An inconsequential but peculiar error in understanding APA-style papers (e.g., Abstract is too long, something “weird” in the Method section, excessive unnecessary information in the Anticipated Results & Discussion)
- Misunderstands an important element of APA style, organization, in-text citations, or referencing
- Multiple sentence fragments
- At least one major technical error in writing, or numerous minor technical errors
- Figure is present describing the anticipated results of the experiment but conveys little useful information
- Limited “innovation” – the experiment merely replicates a prior study
- Slightly unresponsive in updating the writing based on problems identified during the grading process of Paper 1
- Other:

#### Negligible Weaknesses? [check those that apply]

- Studies 1 and 2 should have been better connected, or the writing could be improved to enhance clarity, flow, or enthusiasm
- Limited “significance” – unclear how this research relates to health or well-being
- Quotes dull or routine text on at least one occasion
- A few minor and inconsequential APA-style or referencing errors
- A few minor technical errors in writing (e.g., punctuation, grammar, spelling, informality, typos)
- Many of the references were more than 5 years old
- Figure describes anticipated results but could be improved for clarity or aesthetic appeal
- Other:

## PAPER 2 GRADE

NIH Score	Descriptor	Additional Guidance	PSYC Score (%)
1	Exceptional	Exceptionally strong with essentially no weaknesses	95-100
2	Outstanding	Extremely strong with negligible weaknesses	90-94
3	Excellent	Very strong with only one minor weakness	85-89
4	Very Good	Strong but with several minor weaknesses	80-84
5	Good	Strong but with at least one moderate weakness	75-79
6	Satisfactory	Some strengths but also some moderate weaknesses	70-74
7	Fair	Some strengths but with at least one major weakness	60-69
8	Marginal	A few strengths and a few major weaknesses	50-59
9	Poor	Very few strengths and numerous major weaknesses or a fatal flaw	0-49

Percentage = \_\_\_\_\_ %

Initial Grade = \_\_\_\_\_ / 120.00

-10 (if missing Paper 1)

**Final Grade = \_\_\_\_\_ / 120.00**