RESEARCH METHODS
Winter 2017
Psy 300, Sect. 12 and 13
8:30-9:45 and 10:00-11:15

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Office Hours: Tuesday 11:30-12:30pm and Thursday, 11:30- 12:30pm, or by appointment

Readings

Gravetter, F. J. and Forzano, L. B. (2016). *Research Methods for the Behavioral Sciences* (5th ed.). Stamford, CT: Cengage Learning.

Publication Manual of the American Psychological Association (6th ed). Washington, DC: APA.

Tajfel, H. (1982). Social Psychology of Intergroup Relations. In *The Annual Review of Social Psychology*, *33*, 1-39.

Pinto, I. R., Marques, J. M., Levine, J. M. and Abrams, D. (2016). Membership role and subjective group dynamics: Impact on evaluative intragroup differentiation and commitment to prescriptive norms. *Group Processes and Intergroup Relations*, *19*, 570-590.

Hakim, D. (2016, December) Scientists loved and loathed by Syngenta an agrochemical giant. *New York Times*. http://www.nytimes.com/2016/12/31/business/scientists-loved-and-loathed-by-syngenta-an-agrochemical-giant.html?mwrsm=Email&_r=0

Course Format

This course is designed to acquaint the student with the various methods of behavioral research, as well as examine practical and theoretical issues in research design and implementation. After taking course you should have a good grasp of how to design studies, collect and analyze data, and report research findings. Although the course will primarily focus on research methodology, it will also include a healthy amount of statistical methodology -- make sure you have a calculator.

You will be required to write an APA style paper during the course of the semester. The papers will range from 5-6 pages of text and should consist of 10 references. **The project will be an experimental study examining intergroup and intragroup relations in a political context.** The study will focus on how people perceive a person who supports a political candidate from either their own party or a different party. The class will be given two articles which can be used to help frame and understanding the issue; each person will then be responsible for collecting additional literature that will assist in making an educated guess (hypothesis) as to what the results should be.

The paper will be graded based on the correct usage of APA style, grammar and sentence structure, its

content and structure, and your ability to show an understanding of the literature in the area of investigation. My expectations regarding the content and structure of the paper will be high and will become higher with each successive revision. Thus, merely revising the paper will not necessarily result in a higher grade -- an unsatisfactory revision will result in an unsatisfactory grade. **<u>Each day a paper is late 2 points will be deducted from the final grade. Plagiarism or cheating will result in an F, at best, for the course.</u>**

Article Abstract

Read the Foster, Shrira, and Campbell (2006) article and then, **using your own words**, write a 125-150 abstract of the study. Use what we have discussed in class regarding writing abstracts, as well as what you have read in your textbook, and in the APA publication to complete the assignment.

Article Discussion

Write a 125-word paper communicating how an article that you have selected relates to the class project this semester. In addition, discuss how it relates to both the Tajfel (1982) and the Pinto, Marques, Levine, and Abrams (2016) articles? How will it assist you in formulating a hypothesis for the study? Turn in a copy of the article in addition to the paper.

EXAMS

There will be two midterm exams and a final exam in the course. The second exam and the final exam ARE CUMULATIVE. The exams will consist of a multiple-choice section, a short answer section, and an application section. They will cover BOTH lecture material and course readings. In order to do well on the exams, you must **fully** know and understand the material that is covered. The exams are **NOT curved**.

Extra Credit Assignments

There will be 2-3 extra credit assignments over the course of the semester. These assignments will range from two to six points and are optional.

General Rules

A) DO NOT BRING ANY FORM OF COMPUTER TO CLASS.

B) CELL PHONES MUST BE TURNED OFF DURING CLASS. EVERY THIRD TIME THE CLASS IS INTERRUPTED BY A CELL PHONE RINGING OR I AM DISTRACTED BY SOMEONE TEXTING, I HAVE THE OPTION OF GIVING THE CLASS A SNAP QUIZ.

EVALUATION

Your final grade will be based on the items below:

Article Abstract	-- 20 points
Article Discussion	-- 20 points
Exam 1	-- 60 points
Exam 2	-- 60 points
Pop Quizzes	-- 20 points
Final Exam	-- 80 points
Draft of Intro. & Method	-- 50 points
Draft of Abstract, Results & Discussion	-- 50 points
Final Paper	-- 100 points

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460 points

Grade Distribution:

A -- (100 -94%)	A- -- (93.9-90%)
B+ -- (89.9-87%)	B -- (86.9-83%)
B- -- (82.9-80%)	C+ -- (79.9-77%)
C -- (76.9-73%)	C- -- (72.9-70%)
D+ -- (69.9-67%)	D -- (66.9-60%)
F -- (59.9%-->)	

The percentage distribution will be used for all exams and papers.

**Note: Simply "trying" is not sufficient enough to pass this class. Students must show that they are proficient in the various aspects of the course.

Week 1
1/10 - 1/12   Introduction, Writing an APA Style Paper
Explaining Behavior, Forming Hypotheses and Research Ideas
Chapters 1, 2, 4 and 16 by 1/17

Week 2
1/17 – 1/19   Ethics in Research and Writing an APA style paper
Read Hakim (2016) by 1/19
1/18   Article Abstract due

Week 3
1/24 – 1/26   Writing an APA style paper; Overview experimental design and Analysis of Variance
pages 539-550;
watch videos of mean, median and mode;
watch video on standard deviation and variance
1/25   Article Discussion due

Week 4
1/31 – 2/2   Analysis of Variance

Week 5
2/7 - 2/9   Self-report methods and scaling – Ch. 6 by 2/8
                2/11 – Draft of Introduction and Method Due (Include Reference Section)
Week 6
2/14 – 2/16   Self-report methods and scaling
                Chapter 3 pgs. 81-95 by 2/14

Week 7
2/21   Exam 1
2/23   Reliability and Validity
                Chapter 3 pgs. 63-80 by 2/25

Week 8
2/28 – 3/1   Reliability and Validity

Week 9
3/7 – 3/9   Spring break
3/10   **LAST DAY TO DROP WITH A "W"**

Week 10
3/14 -- 3/16   Experimental Design –
                Chapters 7, 8, 9 by 3/16
                3/14 – Draft of Results and Discussion Due (Include Reference Section)

Week 11
3/21 – 3/23   Experimental Design

Week 12
3/28 -- 3/30   Experimental Design
3/28   **Exam 2 -- Ch. 1, 3, 4 (111-122), 5, 6, 9, 10, 11, 12 & 13**

Week 13
4/4 – 4/6   Survey Design -- Chapter 8 by 4/5
4/6   **Final Paper Due**

Week 14
4/11 – 4/13   Data Analysis
4/11   **Take-home portion of exam given**

Week 15
4/18 -- 4/20   Data Analysis
4/18   **Take-home portion of exam due**

Final Exams

Sect. 12   Weds. April 26, 8:00 – 9:50am   **Cumulative Exam**
Sect. 13   Mon. April 24, 10:00 – 11:50am **Cumulative Exam**

Guidelines for an Introduction

In the opening paragraph, did the author(s)

a) discuss <u>in general</u> terms the issue they were studying?

b) communicate the importance and relevance of their research,

c) and the purpose of the study?

Literature Review

a) Did they develop the logic and rationale by discussing and reviewing relevant research <u>and</u> integrating the findings from the literature? **The review should focus on those aspects of the literature that are most relevant to forming the hypotheses for the study**.

b) Do they state how the study addresses the question(s) under consideration?

c) Did they state their hypotheses?

d) Are the hypotheses derived from the review of the literature? Can you link each hypothesis to a particular section of the introduction **(this is very important)**?

Guidelines for Method Section

a) Are the subjects, independent variable(s), dependent variable(s) and control variable(s) (if applicable) specified?

b) Is it difficult to determine where the author(s) have described the items listed in (2).

c) Is enough information presented to allow someone else to replicate the study?

Guidelines for Results Section

a) When appropriate, are results pertaining to manipulation checks presented?

b) Does the author(s) reiterate a particular hypothesis either directly before or after presenting the pertinent results?

c) Are the **most important** results summarized in tables or figures?

d) Does the author(s) go on to test alternative explanations for initial findings?

Guidelines for Discussion Section

a) Does the author(s) state how the findings relate to the hypotheses/predictions?

b) Are the inferences and theoretical statements made in the introduction supported by the findings?

c) Does the author(s) discuss alternative explanations for the findings?

d) Are the limitations of the study discussed

e) Are the empirical and theoretical implications discussed?

f) Are societal level implications discussed?

g) Do the author(s) discuss what future research they believe should be conducted and why?

Examples of Possible Interactions

	Variable B	
	1	2
1	5	3
Variable A		
2	5	7

	Variable B	
	1	2
1	3	7
Variable A		
2	7	3

	Variable B	
	1	2
1	5	5
Variable A		
2	3	7

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A = type of drivers
     A1 = inexperienced
     A2 = experienced

B = time of day
     B1 = day
     B2 = evening
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Dependent variable is the number of steering corrections in a one mile section of road.

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          B1                B2
      4    18          21    33
A1   18    10          14    23
      8    16          19    32
     10    27          26    42
     20    23          28    46
     12    14          36    40


A2    6    11          11    10
      4    15           7     9
     13    20           6    17
      7    15          16    16
      5     8          20    25
      9    17          11    12
```

1. State one hypothesis.

2. Conduct 2 x 2 Anova

3. Discuss findings.