# Undergraduate Research Methods Curriculum: An Examination of Student Anxiety and Confidence Towards Research

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# Chinese Proverb

"Tell me and I forget. Show me and I remember. Involve me and I understand".

#### The dreaded course....

- \* Faculty often dread teaching the research methods course.
- \* Students frequently lack interest in the topics and overall course.
- \* Students often view it as "the dreaded course", approaching it with lack of interest and questions about why they need to know "this stuff" (Rushing & Winfield, 1999, p. 159).

# My take on teaching social science research...

- \* I emphasize that research is important in their everyday life as well as their future careers
- \* I challenge students to explore topics which they are passionate about, to ask questions, and to seek answers
- \* Learning must be relevant for the students allowing them to relate the things they are learning in the classroom environment to their reality

### I learn each student's name...

- \* I make a point to learn each student's name
- \* I make a point to notice who is in class and who is absent

### In the classroom...

- Use a mixture of teaching and learning methodology
- Active learning and student led dialogue are integral in helping students to develop analytic and critical thinking skills
- \* Lecture has a place
  - \* I provide fill in the blank slides

### Use of videos

- \* Stanford Prison Experiment
- \* You Tube videos
  - Make sure you screen the entire video before showing
  - \* I incorporate a couple videos into most lectures

# Student learning styles

- \* Students learn and demonstrate their capabilities differently some are intuitive learners, some are logical, some demonstrate their capabilities best orally, some in written work, etc.
- \* Given these differences, assignments, classroom activities, and exams are diverse

# Grades are based on...

- \* 3 exams
- \* 17 lab activities
- \* 4 part research project

#### Lab activities

- \* In-class activities and out-of-class activities provide students the opportunity to "practice" methods learned in class.
- \* Examples
  - Human subject certification
  - \* Brainstorming a research topic
  - Reading a professional journal article
  - Survey design and Qualtrics
  - Quantitative data analysis using SPSS
  - \* Qualitative data analysis
  - Content analysis of social media (Facebook, Twitter, or a blog)

# Out-of-class lab activity

- \* Observational research
- \* Students make an ethnomethodology video on unspoken assumptions
  - \* Videos are shown in class
  - Students compete to have the "best" video

# Bonus Lab

A creative project that represents what they learned in the research class







# Research Project

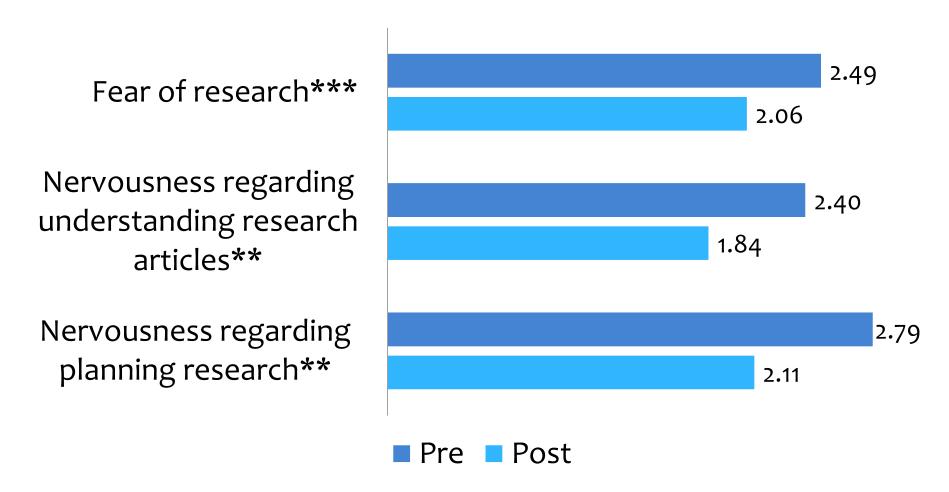
- \* Can be completed individually or in small groups (2-3 students)
- \* I allow for some class time to work on the project
- \* Part 1
  - \* Introduction, research question, and 3 hypotheses
- \* Part 2
  - \* Literature review (minimum 15 scholarly sources) and theory
- \* Part 3
  - Research methods, conclusions, and implications
- \* Final Project
  - \* Combine parts 1, 2, and 3 use the feedback to make it better

How do students feel about research from the beginning of the semester to the end of the semester?

# Pilot Study

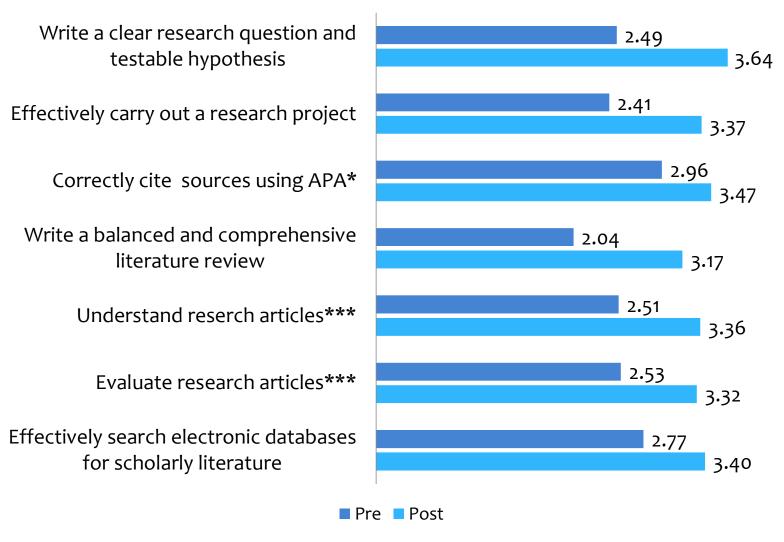
- \* Conducted during the fall 2014 semester
- \* N=47
- \* Pre/Post test
- \* Paired-samples t tests

#### Fear and Nervousness



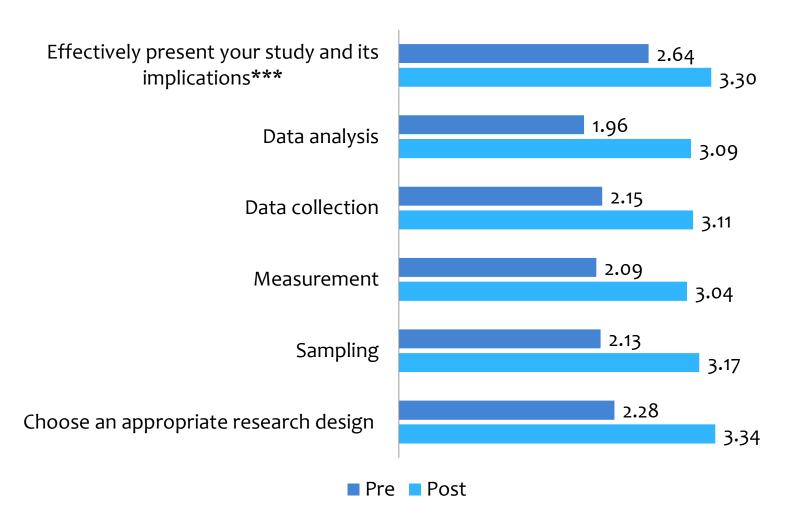
Note: \*=p<.05; \*\*=p<.01; and \*\*\*=p<.001

#### Confidence



Note: \*=p<.05; \*\*=p<.01; and \*\*\*=p<.001

## Confidence

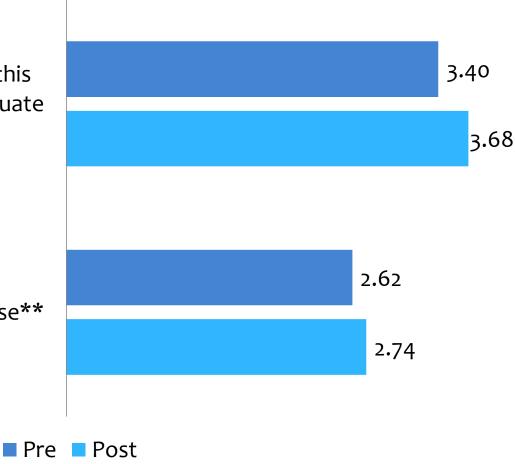


Note: \*\*\* = p < .001

# Usefulness and Interest

Perception of how useful you think this research course will be to you in graduate school and/or your career\*\*\*

Interest in taking this research course\*\*



Note: \*=p<.05; \*\*=p<.01; and \*\*\* = p < .001

# Anonymous Student Feedback

- \* This course was incredible! It is very applicable to my daily life and future career. I didn't even realize how great research could be until Dr. Gillen showed me!
- \* I loved the course despite all the work we had to complete, at the end of the semester I said to myself WOWWWW I needed to know all of this information for grad school.
- \* I really enjoyed getting to create a research project based on what I wanted to study and follow it through to the end. Seeing my results and actually have some statistically significant results was the highlight of the class for me and really got me excited about research.
- \* It was a challenge but it was an amazing learning experience.

# Questions or Comments

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