

# Assessing a new Psychological Methods Supplemental Session

---

**Daniel Mello & Paul Carroll**

Graduate Students of Psychological Science

UNIVERSITY OF CALIFORNIA, MERCED





# Overview

---

- **Introduction**
  - *Why doesn't psychology have discussion sections?!*
  - Goals for the Optional Section
- **Methods**
  - Direct & Indirect Sources of Evidence
  - Analytic Strategy
- **Results**
  - Quantitative & qualitative student learning findings
- **Discussion**
  - How can the psychology program benefit?
  - How did we benefit as budding educators?



# Introduction

---

## Discussion Sections in Psychology

- **Why aren't we included?!**
  - Are we too small of a program?
  - Would students even benefit?
  - Discussion section design?
- **Where to start: Research Methods!**
  - Knowledge of research methods is *essential!*
  - Undergraduate Psychology Research Methods could use a discussion section...



# Introduction

## Goals for the Optional Section in Psychology

- **First Goal: find creative ways to reinforce Learning Outcomes from Psychological Research Methods course.**
  - 2 course section L.O.'s overlapped
  - Employed 'active learning' strategies (Niemi, 2002):
    - Think-Pair-Share, Buzz Groups, etc.
- **Second Goal: assess value of a discussion section for psychology research methods**
  - Must supplement IoR's course layout *without* burdening Instructor
  - Must be worth the student's time commitment



# Methods

---

## Sources of Evidence

- **Direct (measuring student performance)**
  - Needs Assessment survey (includes content mini-quiz)
  - Mid-Semester Assessment (includes content mini-quiz)
  - Term Exams
- **Indirect (measuring quality of learning process)**
  - Qualitative questions
  - Framed around students' self-assessment of competence

## Analytic Strategy

- Between-group comparison of direct evidence
- Content analysis of indirect evidence



# Results

## Sample Overview

- 2 groups:
  - T.A. Office Hours: Attended ( $n = 6$ ) or Did Not Attend ( $n = 17$ )
  - Optional Section: Attended ( $n = 4$ ) or Did Not Attend ( $n = 19$ )

## Quantitative Analyses

- Attending O.H.s or Optional Section *not associated* with competence
- BUT, Attending O.H.s ( $t = 3.131, p = .004$ ) or Optional Section ( $t = 2.362, p = .033$ ) *linked to better scores on the content mini-quiz*

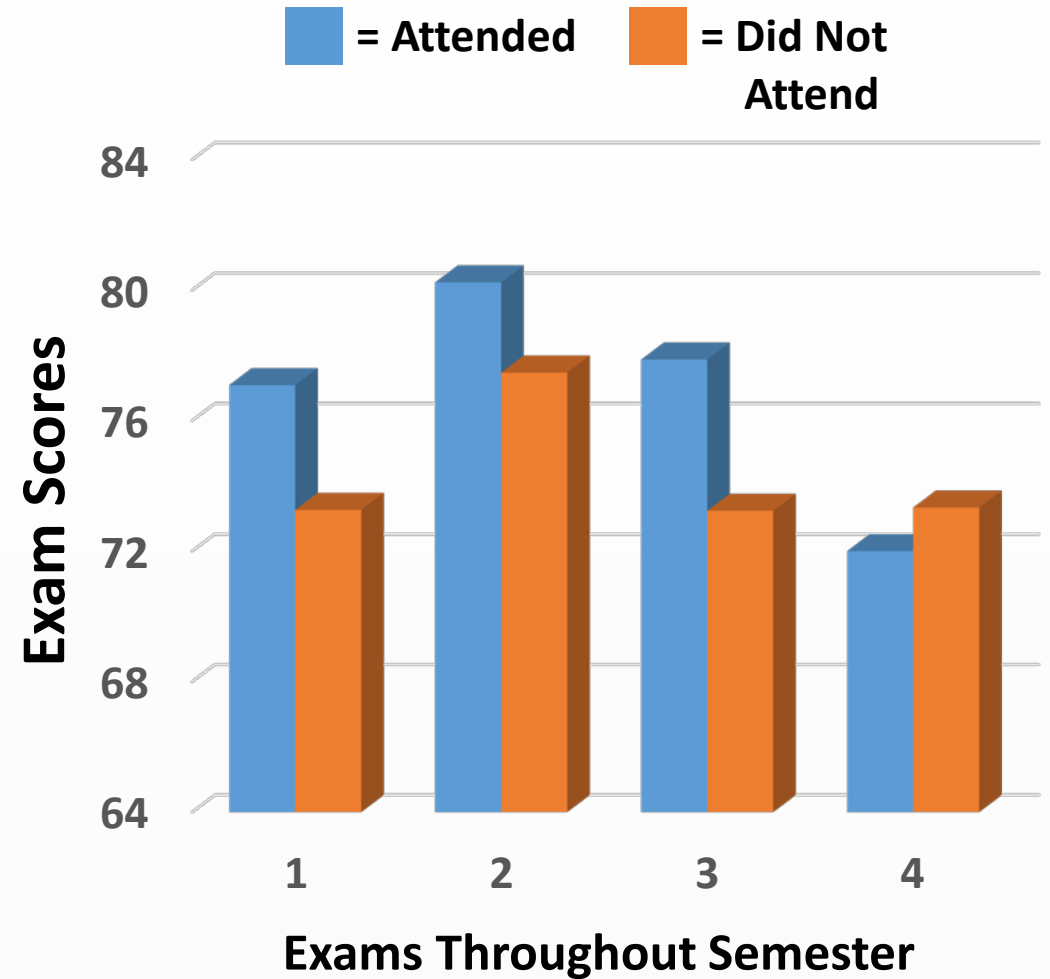
# Results



## Quantitative Analyses cont.

Students who attended the supplemental session:

- Higher mean scores on exams 1, 2, and 3, but not exam 4
- For exams 1, 2, and 3: difference was approx. 3 to 4 points each, or 1/3 of a standard deviation
- *All differences non-significant*





# Results

## Qualitative Analyses (from Attended Optional Section group)

- Q: “In what ways [was the optional section] helpful, or how could [it] be improved?”
- **Responses by Content:**
- Helpfulness
  - “I find it helpful because they're challenging.”
  - “Helps me to understand more the lecture concepts by expanding more on them.”
  - “They were helpful because the concepts we have been learning in the course we go over and discuss them thoroughly.”



## Qualitative Analyses cont.

- Clarity
  - “When I do attend, it [becomes] clear to me if I understand something or if I need to go over it more.”
  - “The subjects we learn in the Optional Section relates strongly to what we are learning/will be learning in lectures.”
  - “I am less afraid of asking questions, and have understood the concepts more clearly.”
- Application
  - “And better yet, I feel like in class we learn the material but not so much of how we are going to use it as psychologists. In these section[s], we actually apply what we learn.”



# Discussion

## How can Psychology @ UCM Benefit?

- P.L.O.s are reinforced by attending both O.H.s *AND* the Optional Section
  - Optional Section are more feasible choice to fit students' schedules?
- Optional Section -> chance to apply concepts to real-world situations
  - Students use psychology education from UCM in their daily lives
- Optional Section was *efficacious*
  - 50-min sessions were short, sweet, and to the point!

## How did we benefit as budding educators?

- Course creation!
  - Overall lesson plan, learning outcomes, session activities
- Illuminated difference between *providing* info, and helping students *process* the info

## Limitations

- 1) Causal generalizability could be enhanced by randomization to conditions in future I-T-T research
- 2) Unequal sample sizes & small  $N$  reduced power, but could be easily overcome in future designs

## Future Directions

- A Research Methods Optional Section is of *Practical Significance!*
- Psychological Science could easily implement an optional discussion section
- Could allow students to choose when they want to attend, what fits into their schedule

***Thank You!***

***Questions or Comments?***

**For references & other correspondences, contact: [dmello2@ucmerced.edu](mailto:dmello2@ucmerced.edu)**