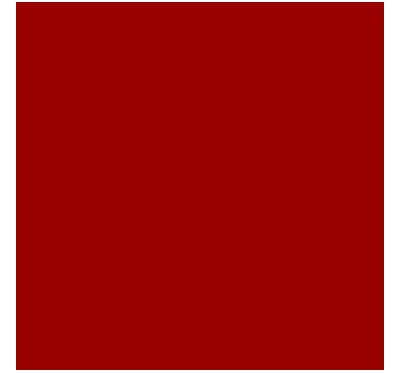




# EDUC 890 Class 7

Chapter 7—Quantitative Participants and Data Collection

# Assignment 3 follow-up



- Line spacing – *double space only*
- Justification – *left only (not right)*
- Reference(s) – *use plural if more than one*
- Plural, possessives, and apostrophes
- Numbers in APA



# Plural, possessives, and apostrophes

- I have six teachers.
- One teacher's classroom is quiet.
- The other teachers' classrooms are noisy.

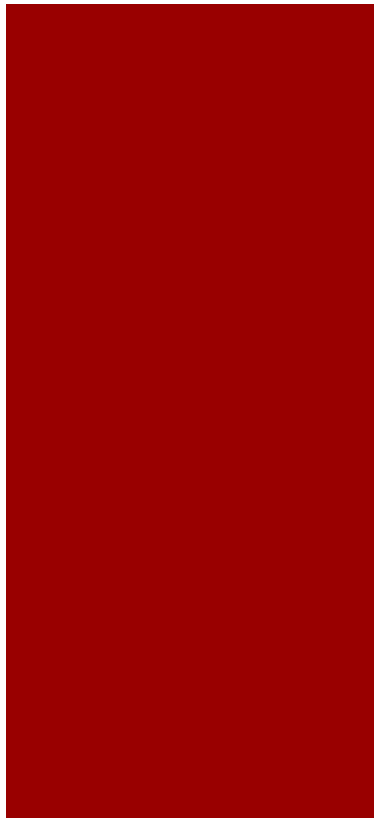


# Numbers in APA

- with errors:
  - There were eighty participants.
  - 40 were in high school.
  - A total of 8 participants were in pre-school.
- *without errors:*
  - There were 80 participants.
  - Forty were in high school.
  - A total of eight participants were in pre-school.
- *Rule:* Use numerals to express numbers 10 and above, and use words to express numbers below 10.
- *Exception:* Use words if the number starts a sentence.

# Assignment #4

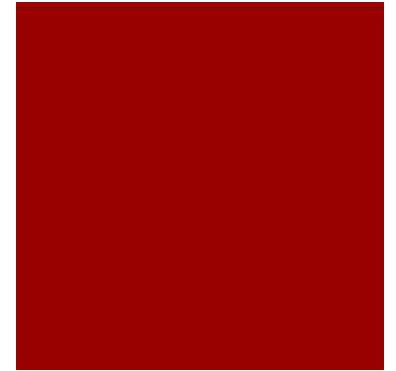
- Write a Topic, Problem, Purpose, and Research Question(s) of interest to you.
- See textbook examples of...
  - problem statements (Ch. 3),
  - purpose statements (p. 173, 180) and
  - research questions (p.175, 182)
- 
- *You do not need to reference literature; I am looking for the careful design and articulation of these introductory elements to a research study.*



# Quantitative

# Chapter 7

## Data Collection



- Participants
- Instruments
- Procedures



# Peer Teaching

Prepare a brief (5-minute) presentation to the class on one of these topics:


1. Population and sample 233-4
2. Probability and nonprobability sampling 235-6
3. Sample size 237-8
4. Types of instruments 239-241
5. Instrument reliability and validity 241-3
6. Ethical and standardized procedures 244-6
7. Internal and external validity 246-8







# *Peer Teaching Prompts*

- 
- Describe/explain the concept and why it matters
  - Provide examples from research studies to help us understand what the concept is all about (*from the textbook OR from your imagination*)
  - *\*If possible...* Create a visualization to help us understand and remember the concept
  - If you use a powerpoint presentation, make the text big enough so we can read it from the....

**back of the room!**



# Group work

## *Data collection*



- Complete 'Understanding Research Article' questions 1-5 on pp. 252-253
- re: Raspa et al. (2010) study on p. 216

# Question 1 – sites and participants

- collected data from families with a child enrolled in an early intervention program in Illinois & Texas
- Used a **nonprobability (convenience) sampling strategy**:
  - chose families who happened to have a meeting scheduled with their service coordinator within a specific time frame
- total sample size was **2,849 families**



## Question 2 – instruments & variables

- **factual information document** – data from existing state records
  - **Variables:** child's date of birth, eligibility category, gender, race/ethnicity, and family income
- **performance measure** – questionnaire assessing families' level of knowledge and use of services...
  - **Variables:** understanding one's child's strengths, needs, and abilities, & knowing one's rights and advocating for services.
- **attitudinal measure** – assessing families' perceptions
  - **Variables:** participant perceptions of the helpfulness and quality of intervention services



## Question 3 – instrument validity & reliability

- instrument was used previously (citation to the original source),
- authors describe survey content, so we can assess if it is appropriate
- authors provide evidence that the scores from the instrument are reliable: they have been found to be consistent with each other (Cronbach's alpha = .90).



# Question 4 ethical & standardized procedures

- **ethical** procedures:
  - not including identifying information on the surveys
  - including a cover letter about the study
  - providing info in both English and Spanish
  - encouraging participants to skip items that make them uncomfortable
- **standardized** procedures :
  - standard survey packets given to all potential participants
  - standard set of procedures used to follow up with individuals to encourage participation
  - *However... authors note in para 13 that not all participants received all survey questions due to a logistical error. ☺*



# Question 5 – internal & external validity

- **a low level of internal validity:**
  - no manipulation of conditions or control for extraneous variables
  - Therefore, cannot make claims of cause and effect
- **a low-to-moderate level of external validity** for families *in the two states*
  - representativeness of sample is enhanced by the systematic way families were selected (all families with appointments at a given time period) & large number of participants.
  - representativeness of sample is limited because probability sampling was not used and the response rate was relatively low (families that chose not to respond may have different opinions from those that did)



# Homework

- Re-read Ch. 8
- Read Ch. 9

