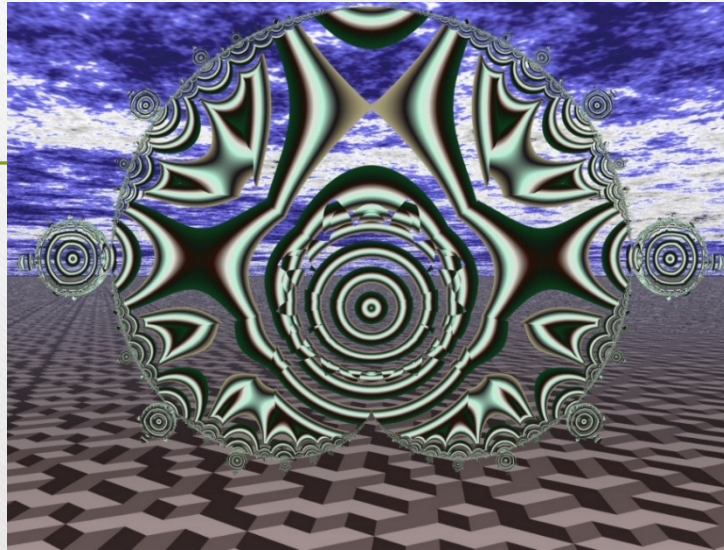


Randy Larkins, PhD, University of Northern Colorado

# Mixed Methods Research



Email: [randy.larkins@unco.edu](mailto:randy.larkins@unco.edu)



# What is Mixed Methods Research?

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QUAL  $\longleftrightarrow$  QUAN

# Mixed Methods Research

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- Mixed method research studies use qualitative and quantitative data collection and analysis techniques in either parallel or sequential phases.
- Mixing occurs in the final methods of a study.



# Mixed Research Questions



Umbrella Question

RQ - Quan

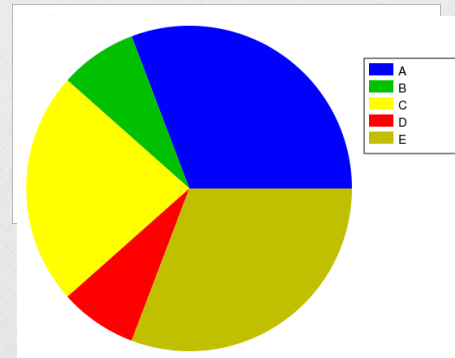
RQ - Qual



# Purpose of Mixed Methods Studies

QUAN  
(Quantitative)  
Examines Who  
and What  
Characteristics?

Variable	1	2	3	4	5
1) Positive experiences	-	-0.34*	.331*	.325*	.563***
2) Negative experiences		-	0.07	-0.025	-0.006
3) Understanding			-	.6***	.462***
4) Field experience support				-	.778***
5) Assignment assistance					-
Note. *p<.05, **p<.01, ***p<.001					



# Purpose of Mixed Methods Studies

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QUAL  
(Qualitative)  
Examines Why  
or How?



# Five Purposes (Greene)

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- Triangulation
- Complementarity
- Development
- Initiation
- Expansion

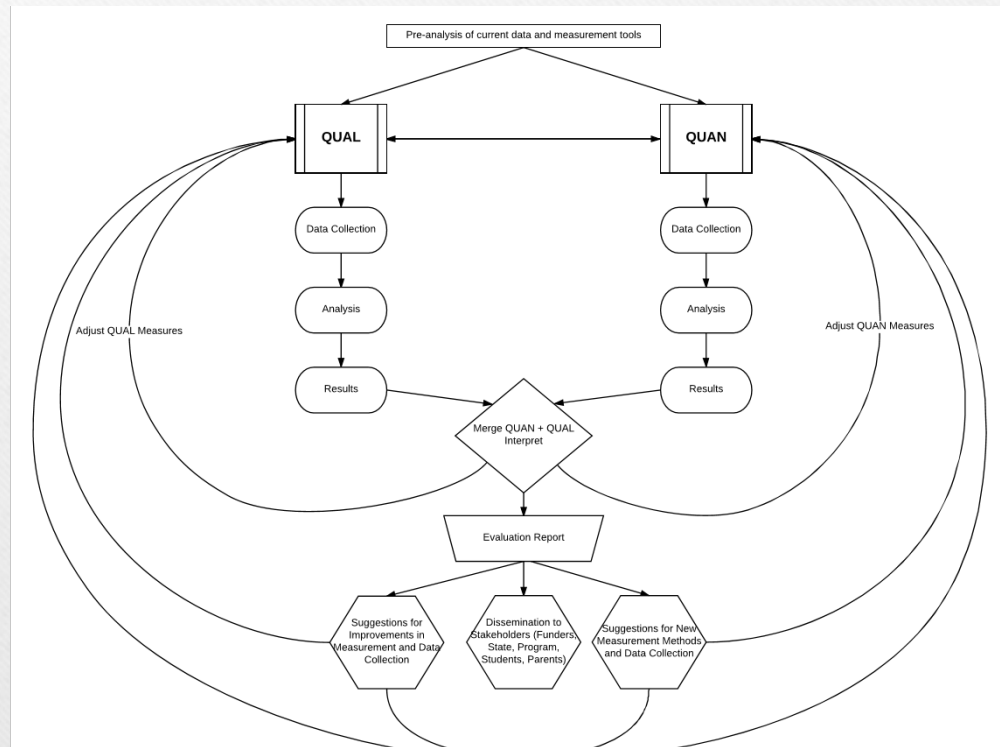
# Methodological Concept Maps

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- Mixed methods studies are usually used to study complex phenomenon.
- The studies themselves are complex.
- Visual diagrams are often used to describe mixed methods study.
- One visual diagram method is the “Methodological Concept Map”



# Example of a Concept Map



# Six Major Types of MM Designs

Sequential Explanatory  
Sequential Exploratory  
Sequential Transformative

-

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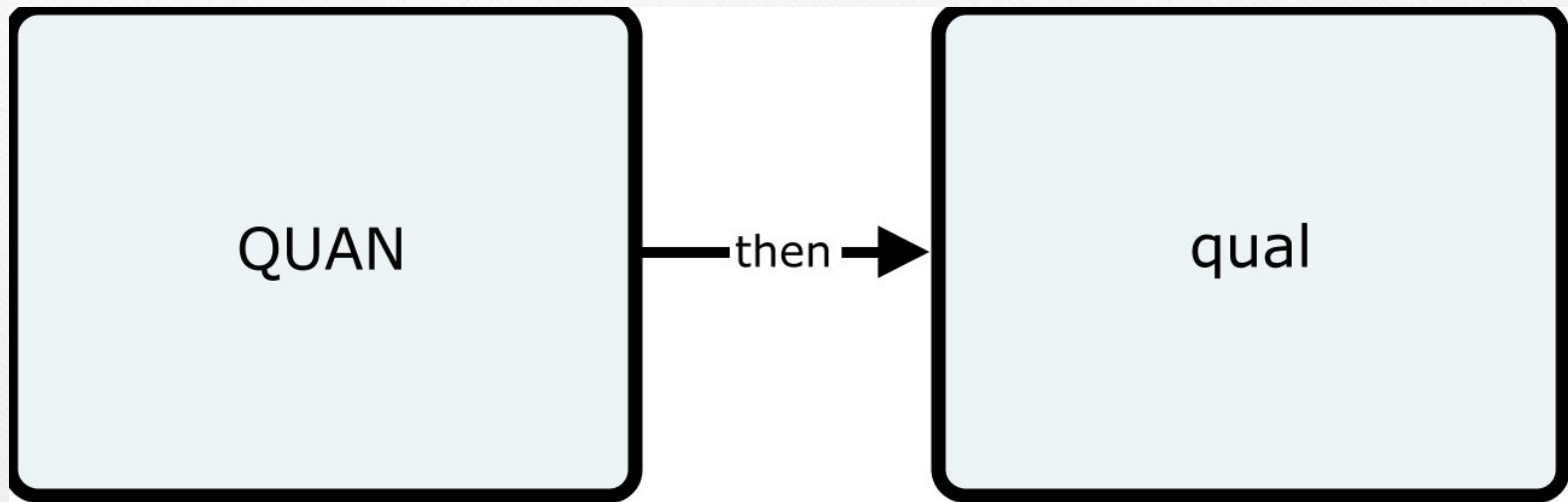
Concurrent Triangulation  
Concurrent Nested  
Concurrent Transformative

10

Each discussed in terms of implementation, priority, stage of integration, and theoretical perspective.

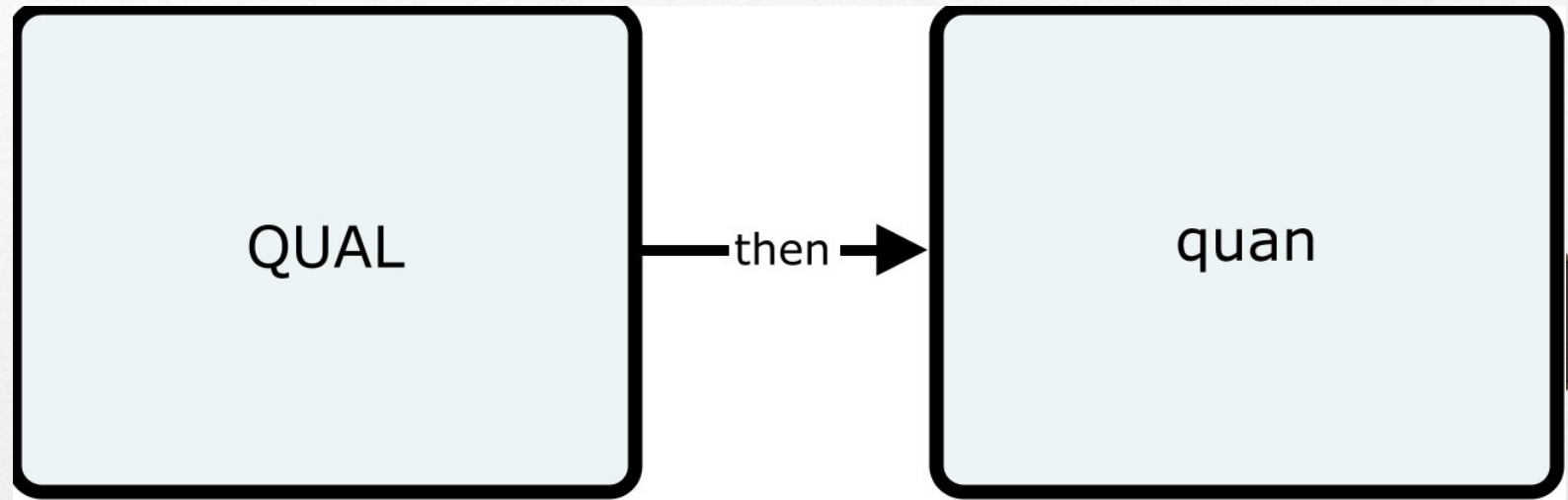


# Sequential Explanatory Design



- QUAN data are collected and analyzed
- qual data are collected and analyzed
- Interpretation of entire analysis
- Purpose is to use the second study to help explain the first

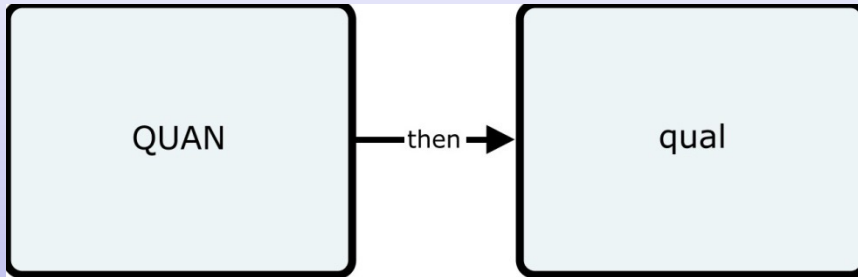
# Sequential Exploratory



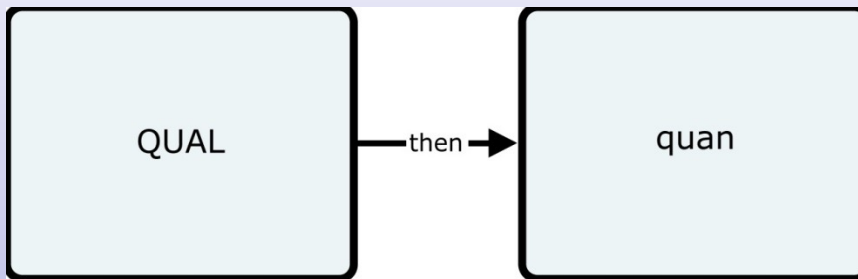
- QUAL data are collected and analyzed
- quan data are collected and analyzed
- Interpretation of entire analysis
- Purpose is often to use the first study to develop the second OR to use the second study to explore the first in more detail



# Sequential Transformative



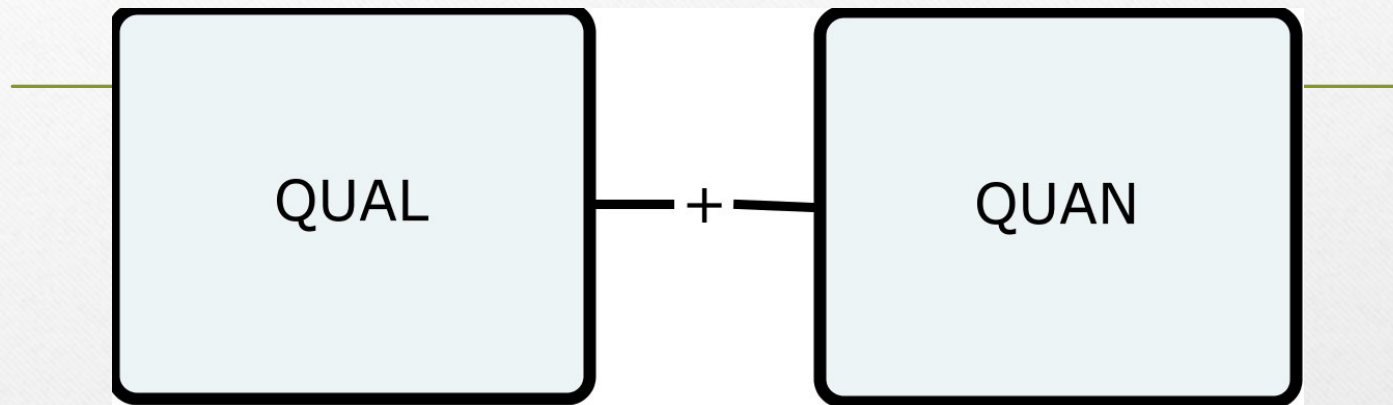
Theoretical Perspective



Theoretical Perspective

Purpose: Gives voice to diverse perspectives, to better advocate for participants, etc.

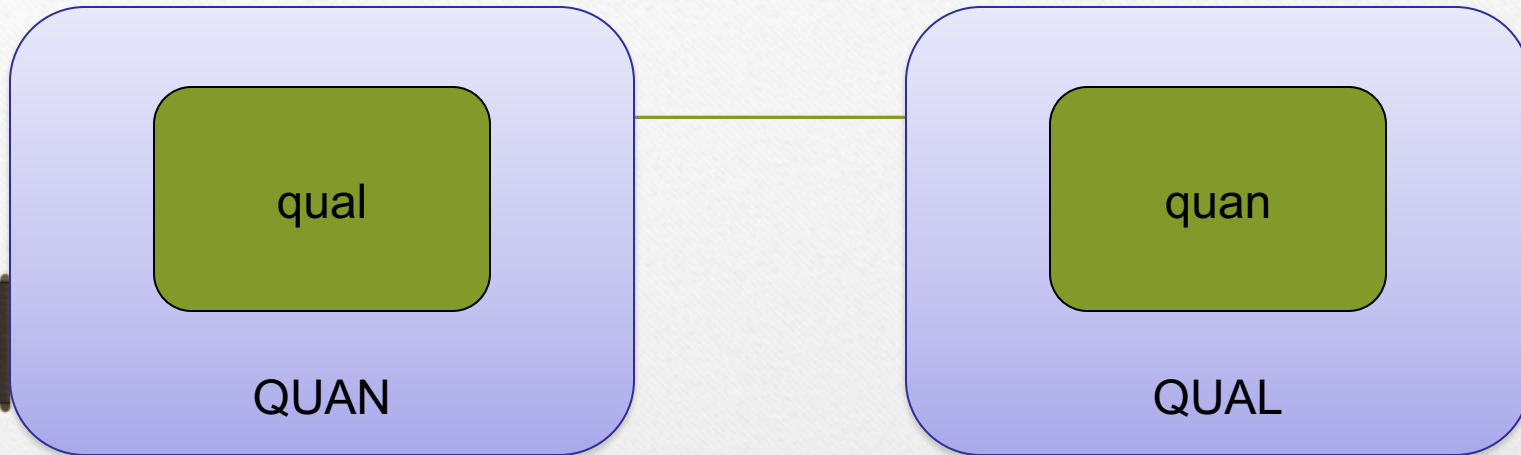
# Concurrent Triangulation



- QUAN and QUAL data are collected and analyzed at the same time
- Interpretation of entire analysis
- Purpose: Using two different methods to confirm, cross-validate, or corroborate findings within a single study

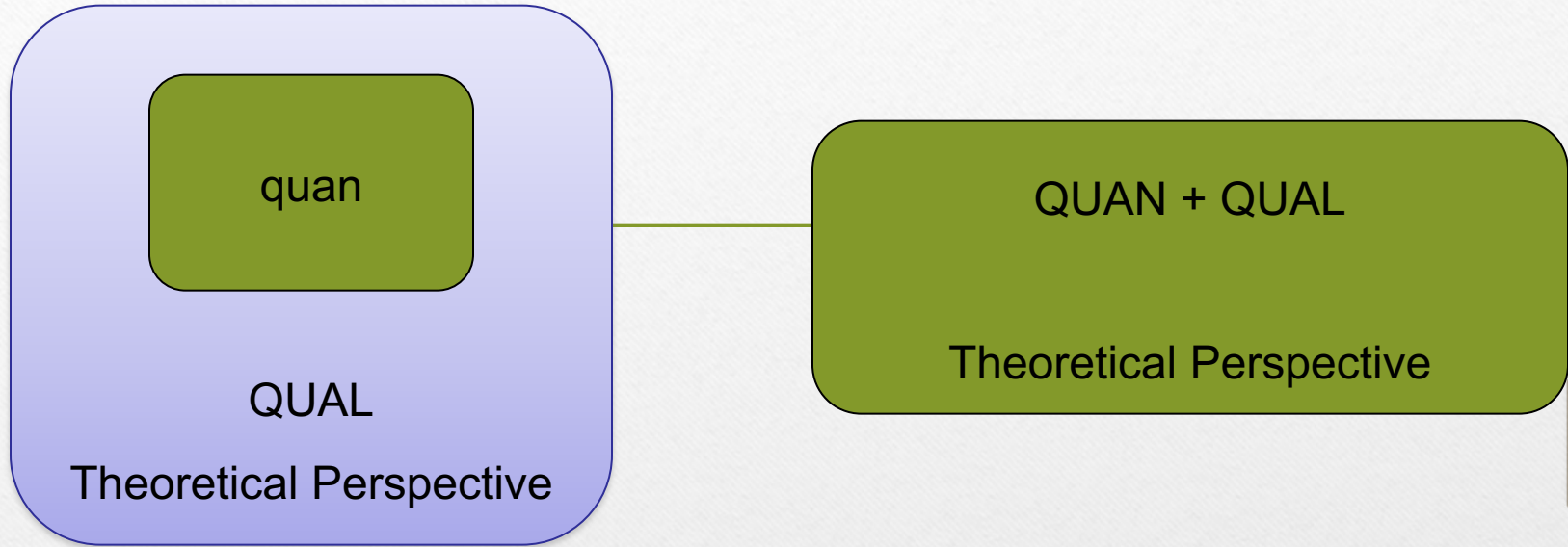


# Concurrent Nested



- QUAN and QUAL data are collected and analyzed at the same time
- Either QUAN or QUAL can be emphasized
- Analysis at the integration phase
- Purpose: Used to gain broader perspectives from using different methods as opposed to using the predominant method alone

# Concurrent Transformative



- QUAN and QUAL data are collected and analyzed at the same time
- Either QUAN or QUAL can be emphasized
- Analysis at the integration phase
- Purpose: to give participants a voice in the change process of an organization that is studied primarily quantitatively: QUAN(qual) OR to triangulate quan and qual data for convergence of information



# Some Examples of MM Designs

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# A Mixed Methods Approach to Understanding College Students on Academic Probation

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A Sequential Exploratory  
Mixed Design

Randy Larkins



# Research Questions

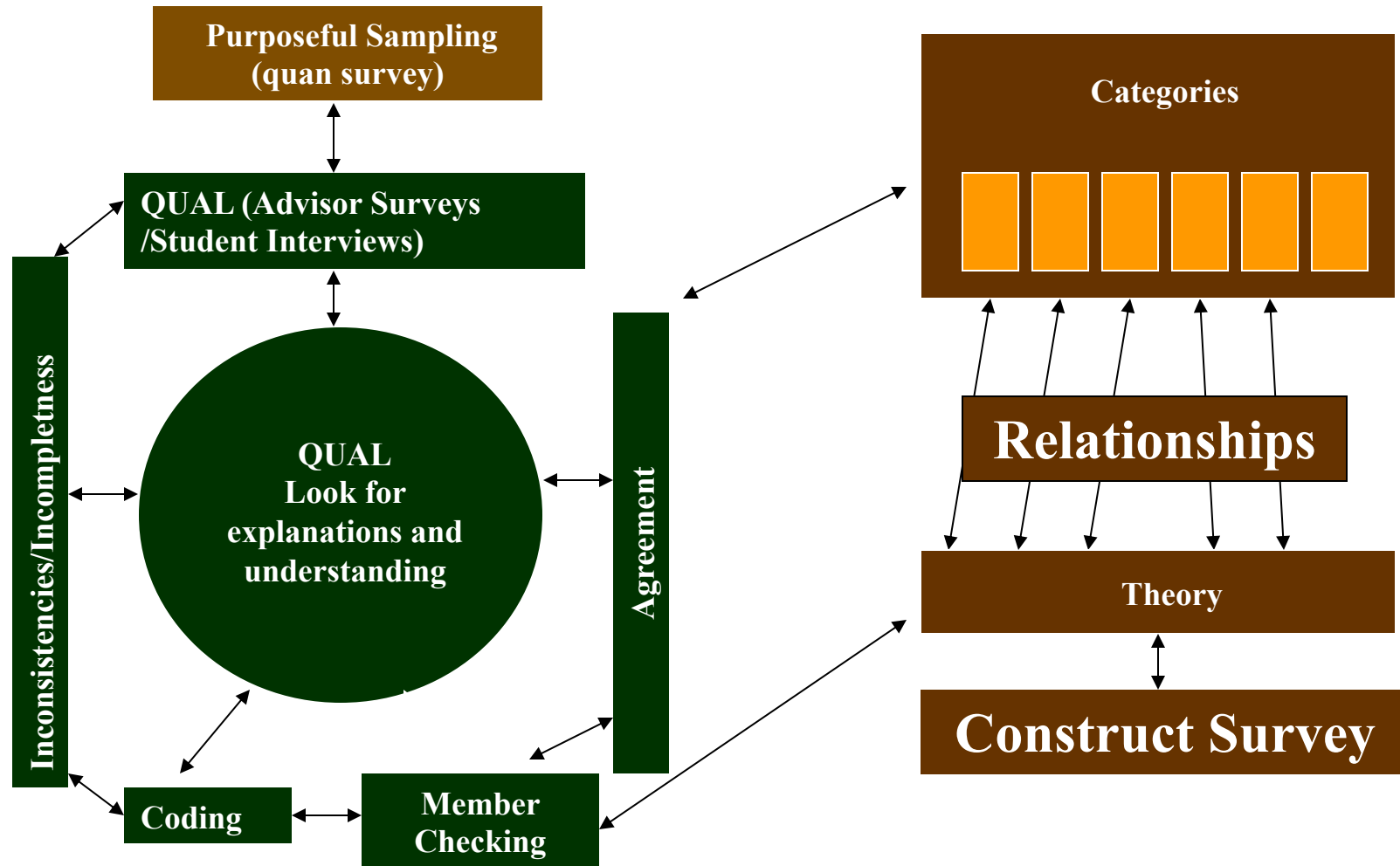
What factors or events result in

- 1) Developing,
- 2) Maintaining, and
- 3) Overcoming

Poor academic performance?

# QUAL:

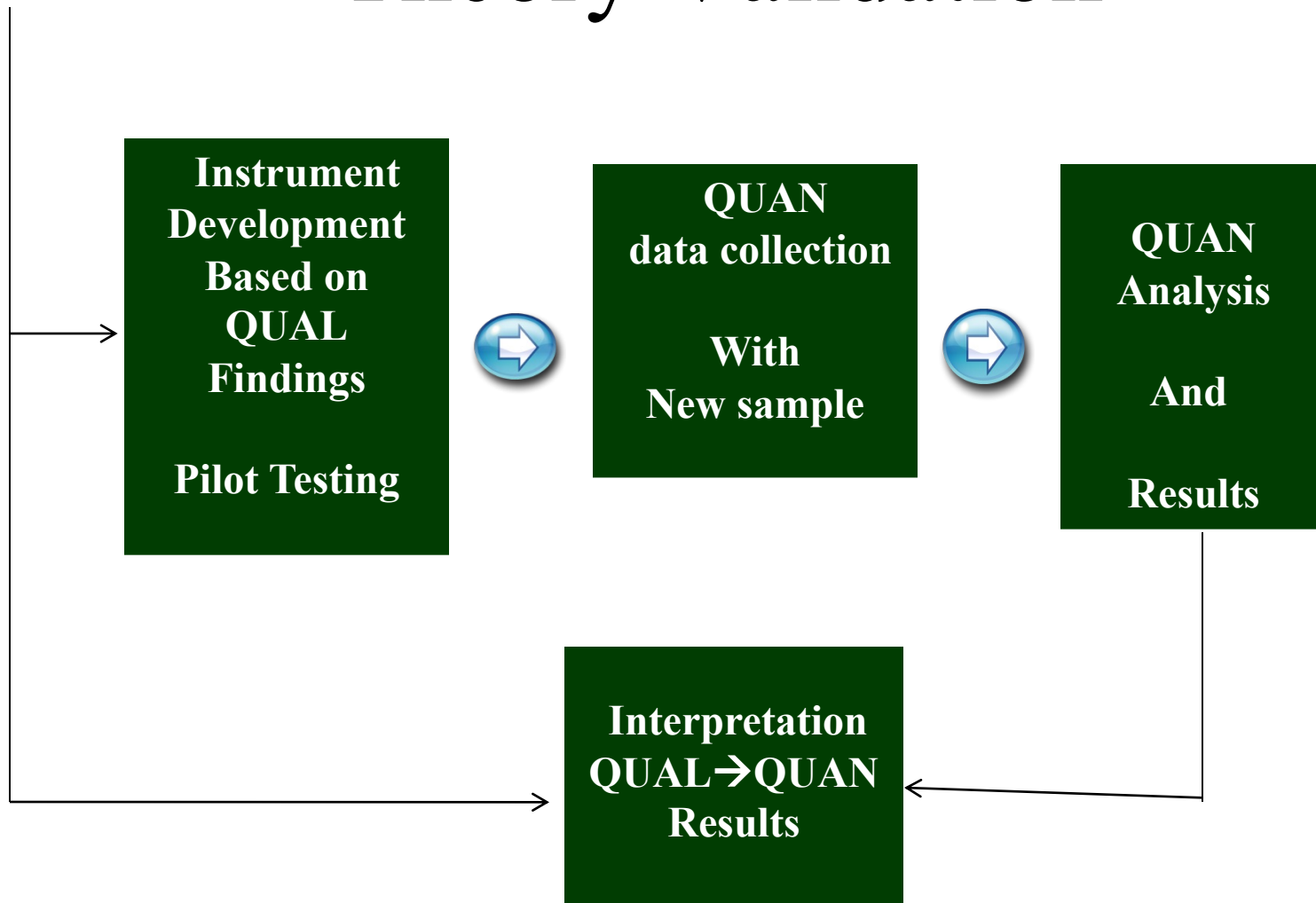
## Grounded Theory Procedure





**GROUND  
ED  
THEORY OF  
ACADEMIC  
PROBATION**

# QUAN: Theory Validation





**UNC**  
UNIVERSITY OF NORTHERN COLORADO



# The Awareness of the Rights and Responsibilities of Parents With Disabled Children in Elementary Schools in Saudi Arabia

SULAIMAN ALAJLAN



## *Overall*

How knowledgeable are parents of students who are referred to special education regarding parental rights and responsibilities in their child's education?

## Research *Quantitative questions*

- What do parents know about their rights and responsibilities when their children are referred to special education?
- How did parents find out about their rights and responsibilities?



## Research *Qualitative question*

- ▶ How do parents of students who are referred to special education feel about their rights and responsibilities during their child's referral?
- ▶ How do they feel regarding the information they have been given about their rights and responsibilities?

# *Design: Sequential Explanatory*

## *Quantitative phase one*

- Participants:
- 3 schools.
- 50 to 60 parents of the students in elementary school.

1	2	3	4	5
Strongly agree	agree	neutral	disagree	Strongly disagree

- Design electronic survey through Qualtrics.
- The total items will be 30 items.
- Approximately 10-15 minutes.





## *Phase two qualitative design*

- **Participants:**
- I will do the interview with 6 parents
- Semi-structured interview questions.
- One hour

# Overall Findings and Interpretation

**Explain Quantitative findings by  
using qualitative results**



# The Motivation of Adult Arab Learners of English as a Second Language in the United States

Ahlam Alhudithi  
Educational Leadership and Policy Studies  
University of Northern Colorado,  
Greeley, CO 80639

## Purpose

## Conceptual framework

Overall research question:

Why do adult Arab speakers learn English as a second language at ESL institutions in the United States?"

Qualitative: What are the experiences/motivations of adult Arab speakers in learning English as a second language at ESL institutions in the United States?

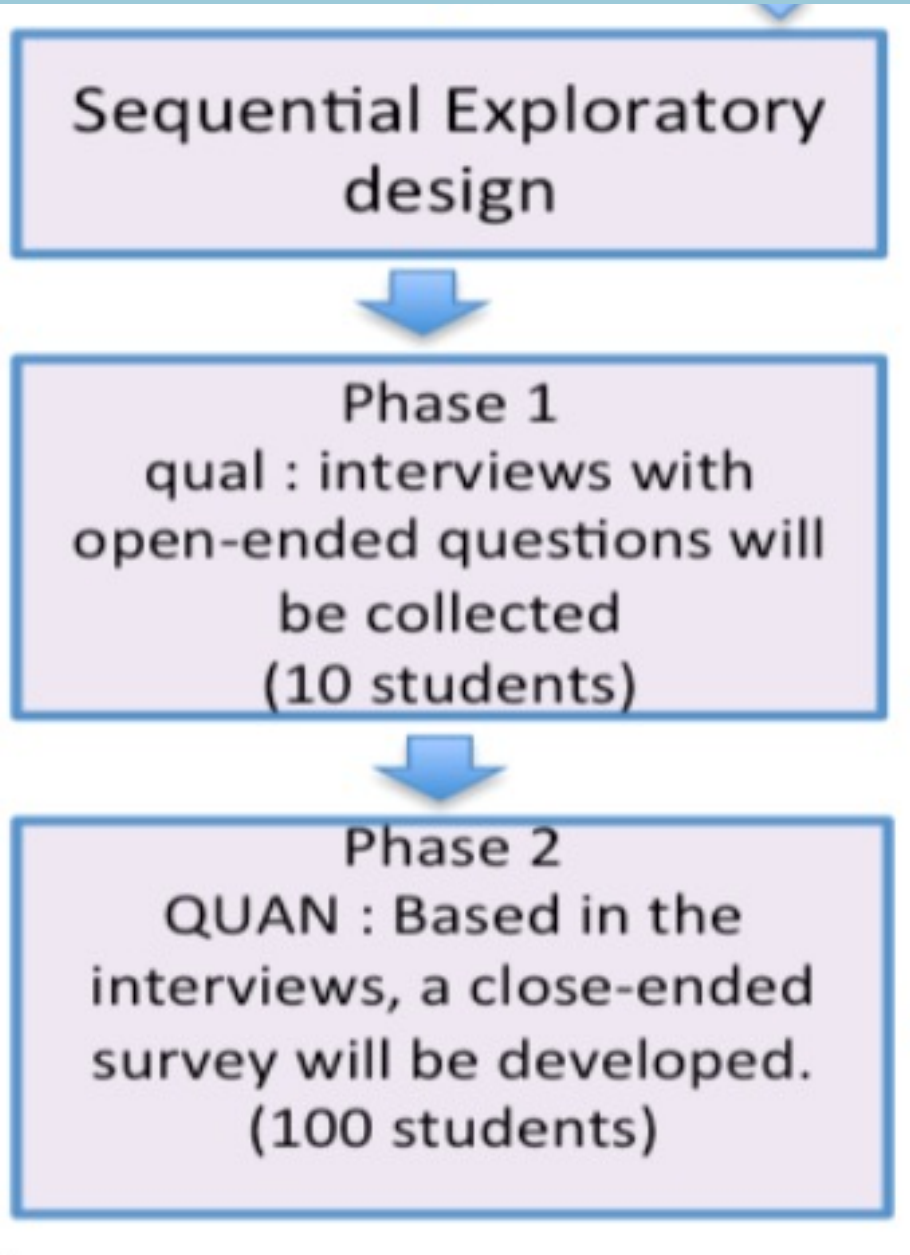
Quantitative: What are the motivating factors that influence Adult Arab to learn English as a second language at ESL institutions in the United States?

## Methodology

## Validity



## Sequential Exploratory design



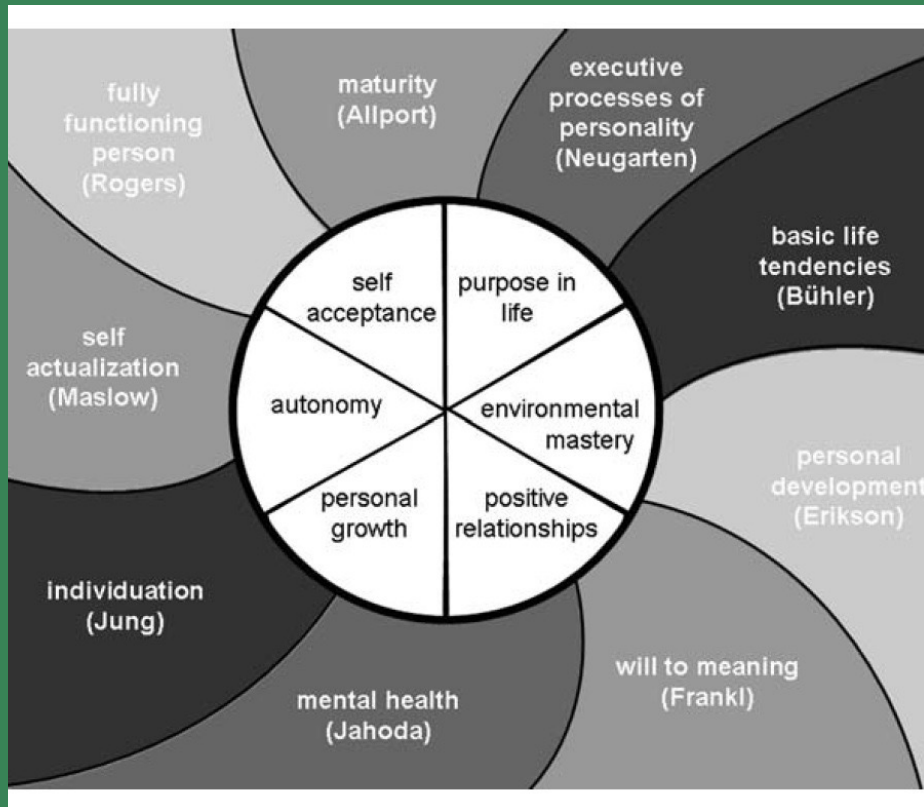
```
graph TD; A[Sequential Exploratory design] --> B["Phase 1  
qual : interviews with open-ended questions will be collected  
(10 students)"]; B --> C["Phase 2  
QUAN : Based in the interviews, a close-ended survey will be developed.  
(100 students)"];
```

Phase 1  
qual : interviews with open-ended questions will be collected  
(10 students)

Phase 2  
QUAN : Based in the interviews, a close-ended survey will be developed.  
(100 students)

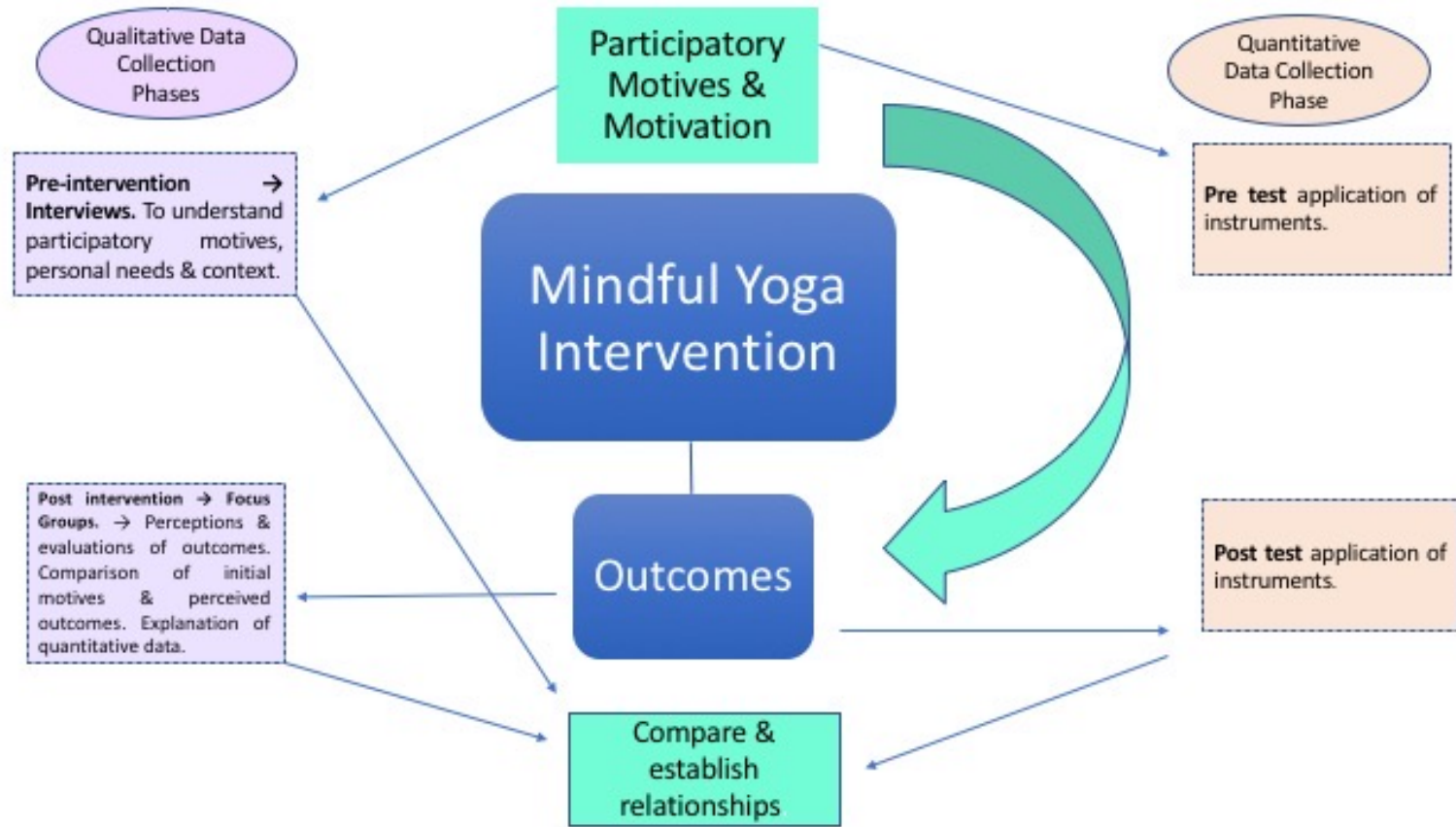
# Concurrent Design: The role of motivation in mindful physical activity on the psychological well-being of college students

MS María del Mar Chavarría Soto





# Concurrent Design: The role of motivation in mindful physical activity on the psychological well-being of college students



# Determining Clinical Nurse Educators' Preparedness



UNC

Sarah Wallace  
SRM 660  
4/7/18



# Research Questions

01

*Overall Question:*

To what extent are clinical nurse educators prepared for the role of the clinical nurse faculty position?

02

*Qualitative Question:*

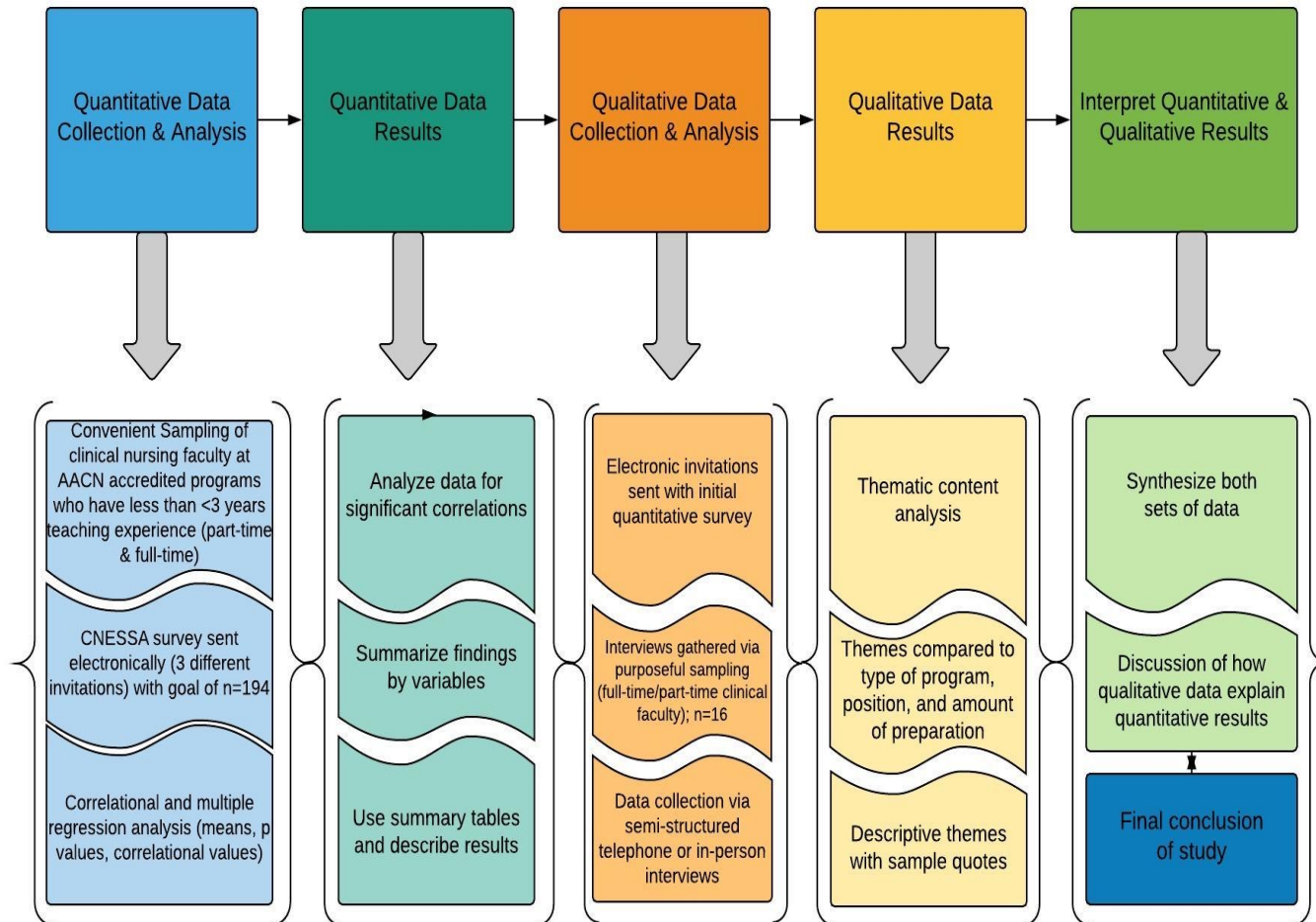
What are the perceived expectations for nurse educators who teach in the clinical role?

03

*Quantitative Question:*

What factors impact clinical nurse faculty preparedness?

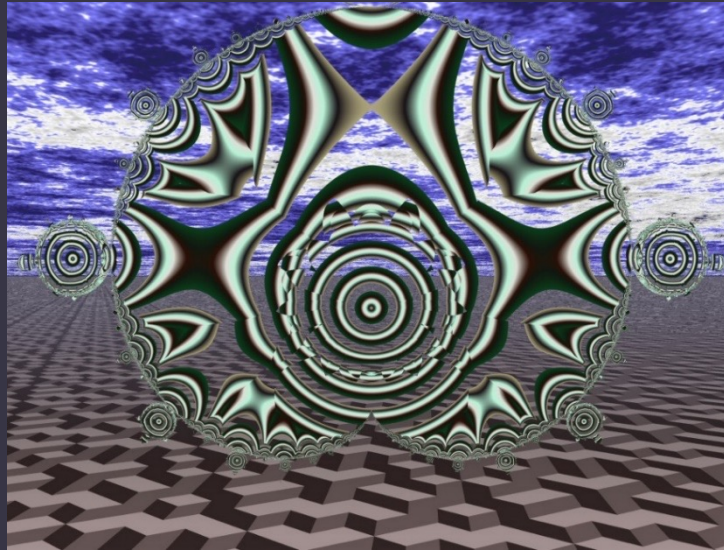
# Research Design





Randy Larkins, PhD, University of Northern Colorado

THANK YOU!



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