

# **The Effectiveness of Repeating Simulation after Reflection on Nursing Students Critical Thinking, Satisfaction, and Self-Confidence**

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***“To Err Is Human: Building a Safer Health System”***

Improving Patient-Safety  
in Nursing Education  
through Patient-Simulation

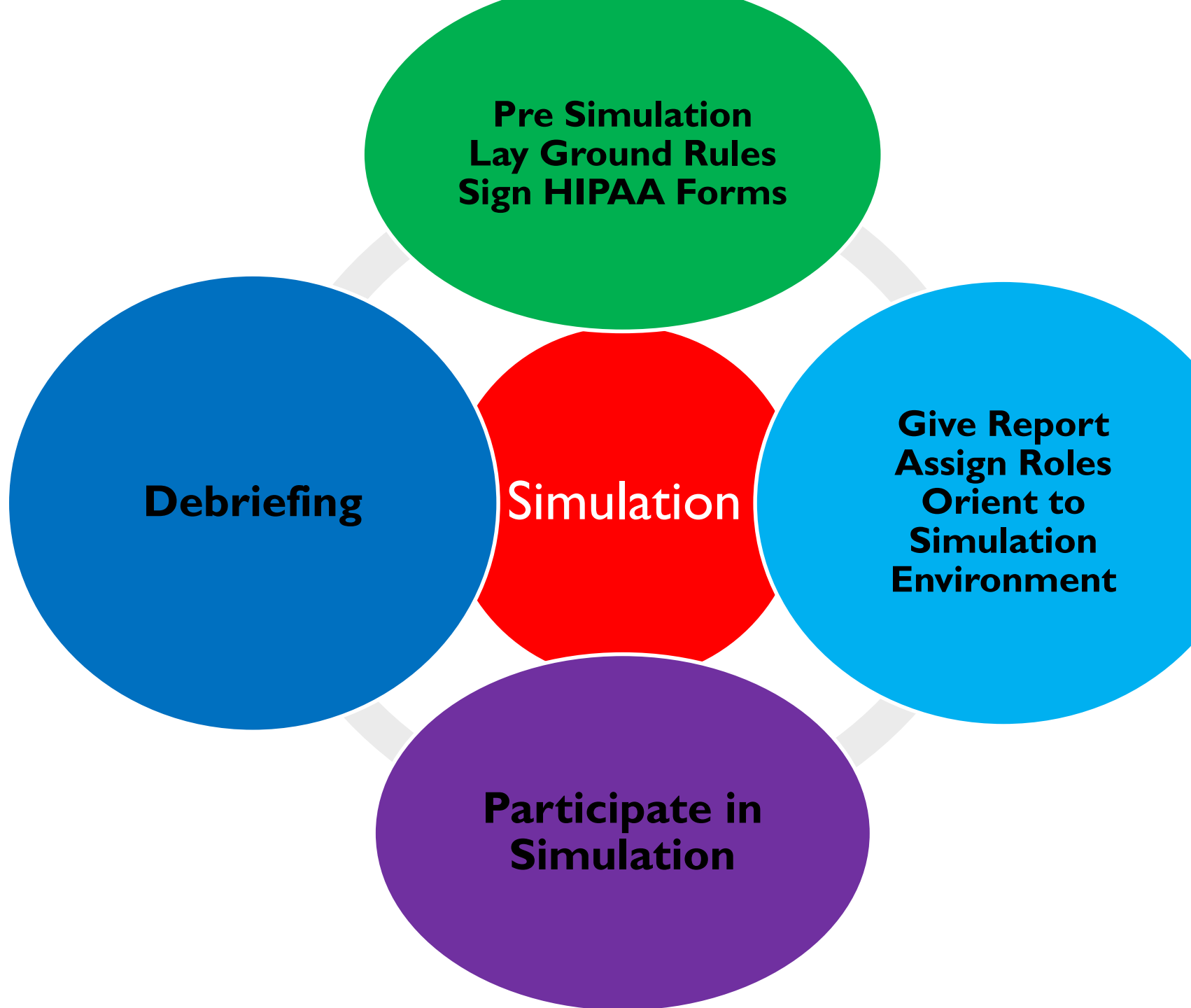


# Simulation

- Simulation provides ***efficacious active learning environment.***
- Simulation is an ***improved pedagogical method.***
- Simulation should provide a **safe learning environment.**

# Debriefing







# 3 Phases of Debriefing

Reaction

Analyze  
Understanding

Summarize

# Gap In Literature

- This study will address the gap in the literature with regard to the ***study of repeated simulation*** learning and contribute to the growing research of simulation in nursing education.



# Statement of the Problem

- The problem was to *understand how debriefing after a low-fidelity simulation effects the problem solving processes*; that directly related to nursing students' critical thinking skills, self-confidence, and satisfaction in learning.





# Statement of the Purpose

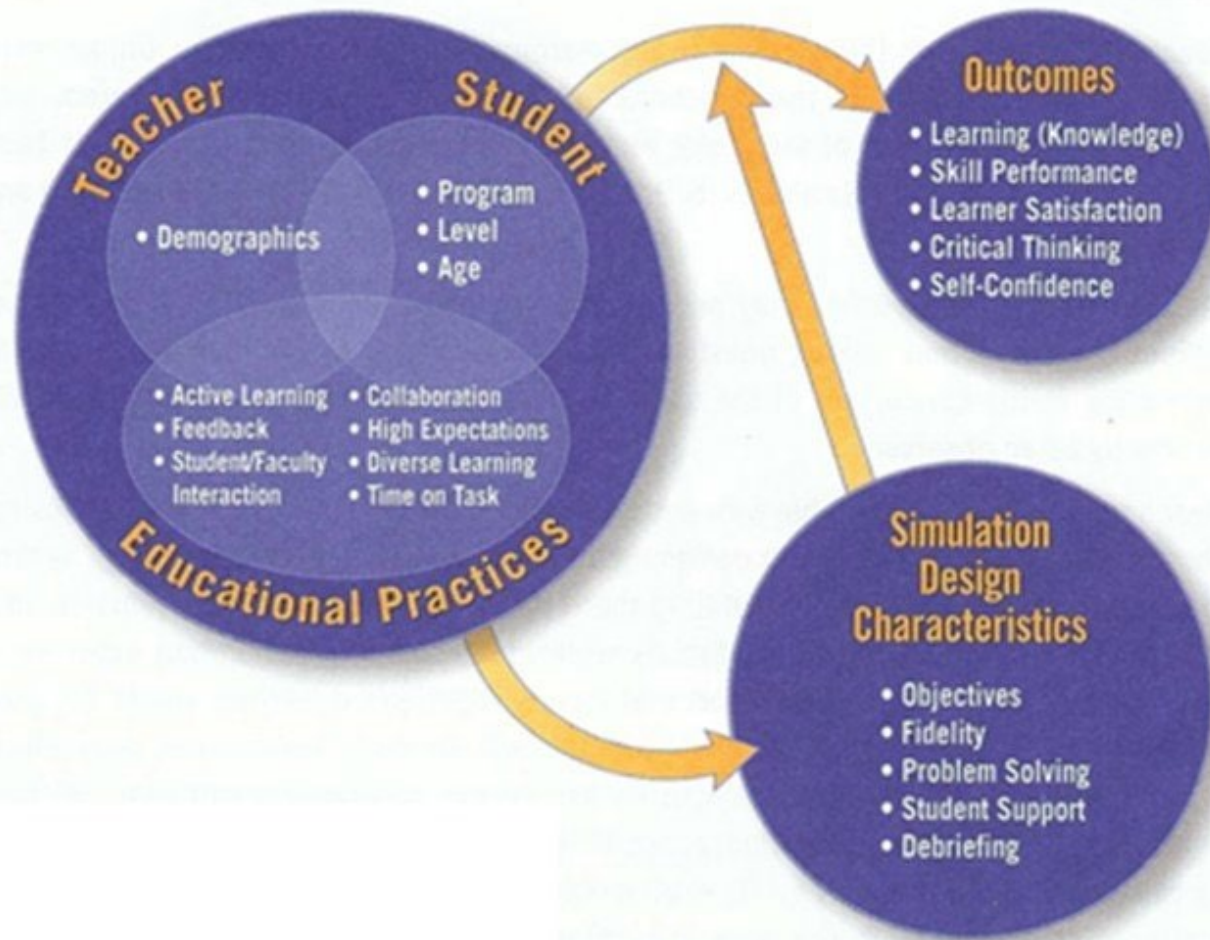
- The purpose of this study was to *investigate the relationship between critical thinking skills, self-confidence, and satisfaction in nursing students* on repeated low-fidelity simulation after debriefing.

# Theories Supporting this Research

## Primary Theories

- **Reflective Simulation Framework**
- **The Nursing Education Simulation Framework**

# NESF

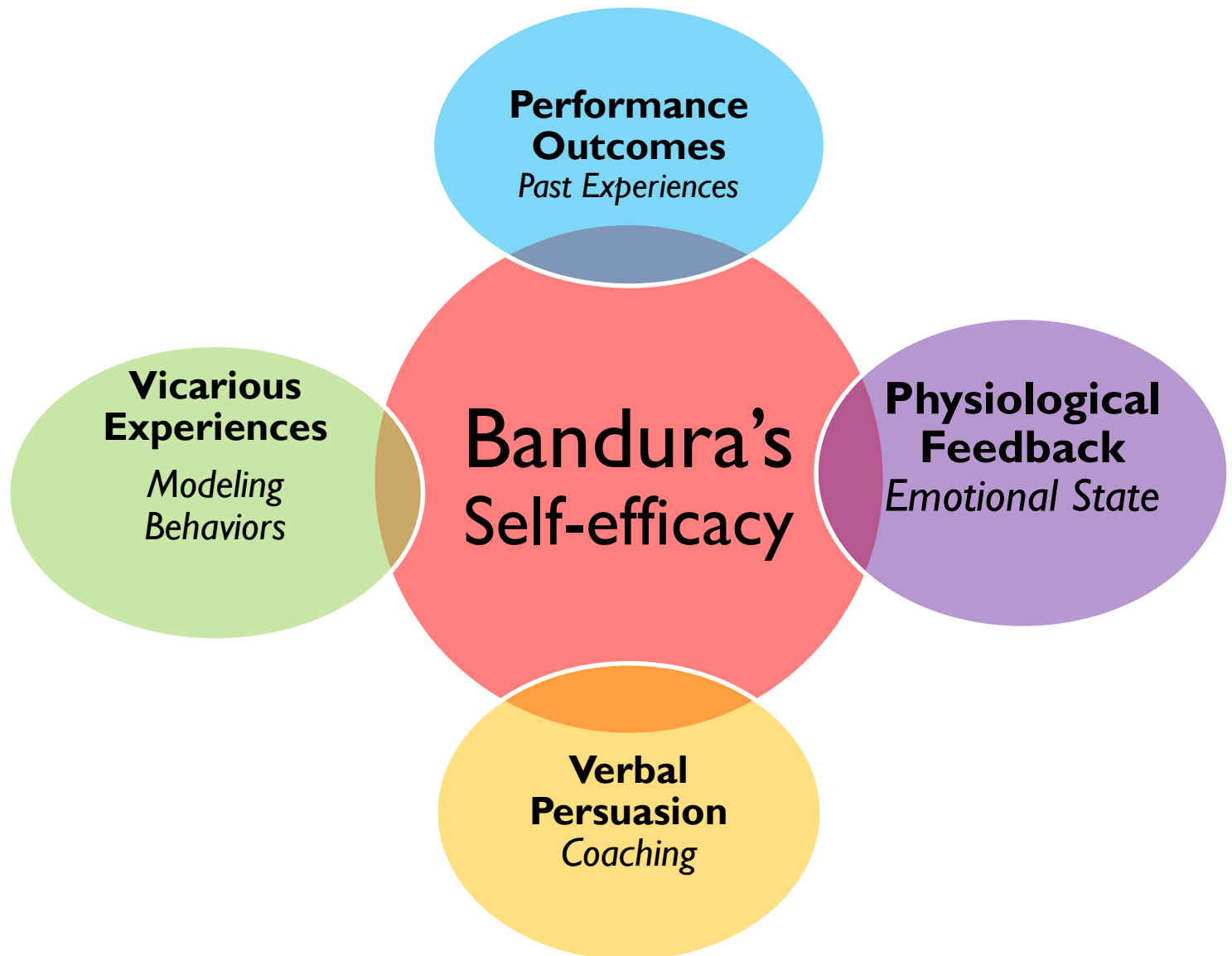


# Secondary Theories

## Benner's Theoretical Concept



# Secondary Theories



# Review of Literature



## ***Details of Literature Reviewed by Year of Publication***

Type of literature	Older than 5 years	Current	Total
Peer-reviewed articles	32	42	74
Non-peer reviewed articles		0	0
Books	12	0	12
Web pages		4	4

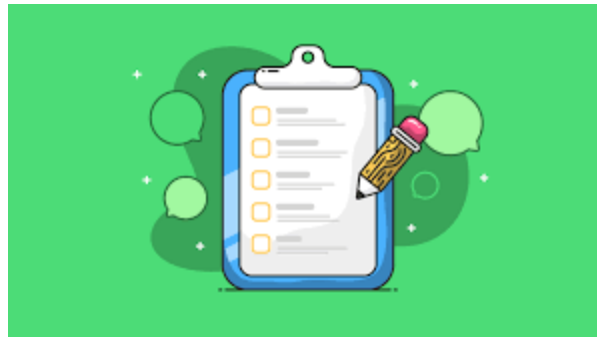


# RESEARCH Methodology





# Research Tools



# Methodology

## Instrumentation

- ***The Student Satisfaction Self-Confidence Learning (SSSCL)***. The National League of Nursing developed and validated the validity and reliability of this tool utilizing the Cronbach's alpha.
- The second tool that will be utilized is the ***Watson Glaser Critical Thinking Appraisal (WGCTA)***

# Research Questions



# Methodology

## Research Questions

- **RQ1** – What is the effect of repeating a low-fidelity simulation after reflection in the development of **critical thinking skills** in nursing students?
- **RQ2** – What is the effect of repeating a low-fidelity simulation after reflection in the development of **self-confidence** in nursing students?
- **RQ3** – What is the effect of repeating a low-fidelity simulation after reflection in the development of **satisfaction of learning** in nursing students?

# Methodology

## Sample

- The target population of this study consists of male and female freshmen *Associate Degree Nursing* students between 19 and 50 years of age.

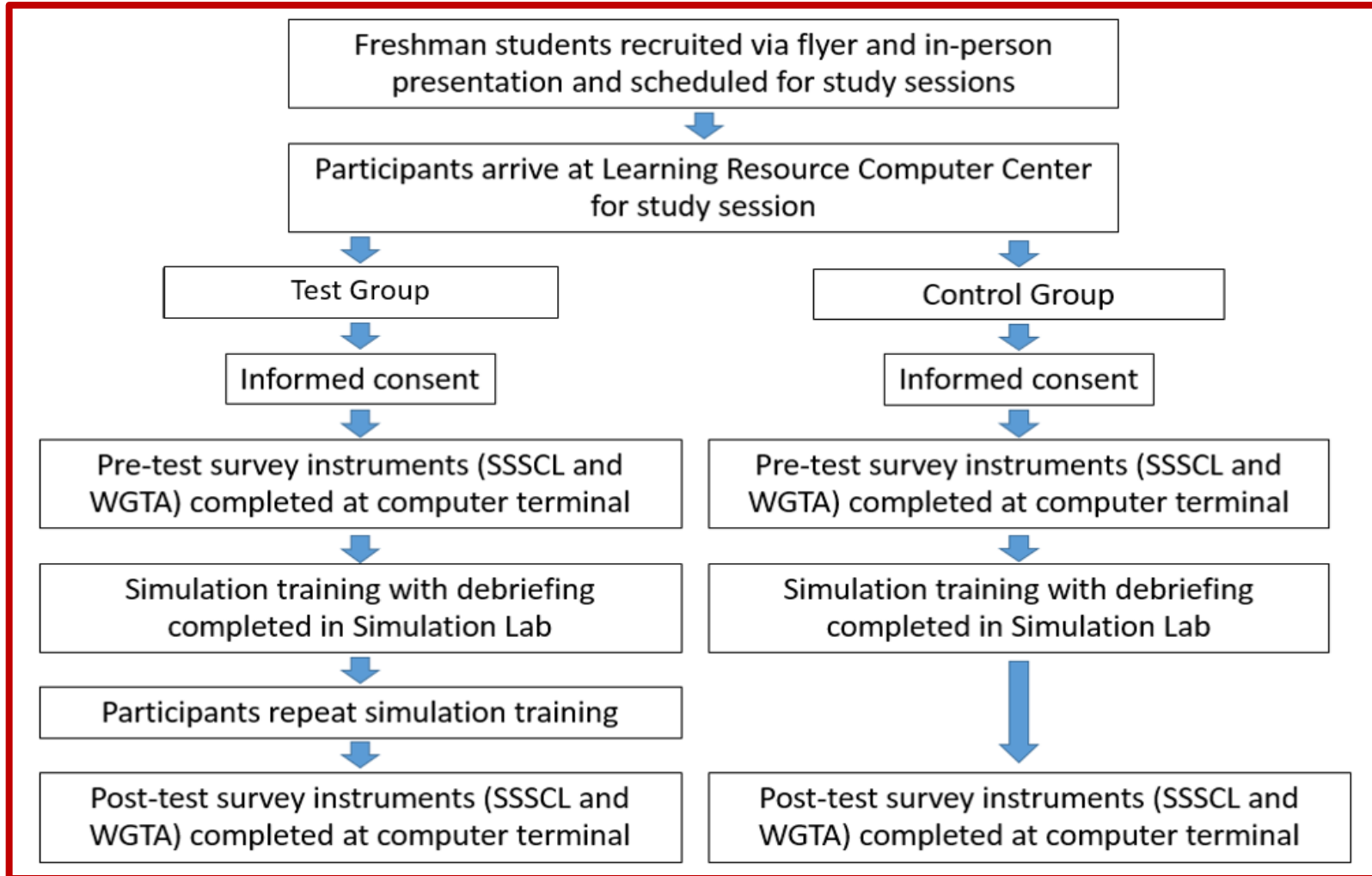


# Data Collection

- **24** Associate Degree Nursing students participated in the study
  - **12** assigned to control group
  - **12** assigned to test group (repeat simulation)



# Review of Study Procedures





# RESULTS



# Research Question 1

***H01*** – *There is no significant effect of repeat low-fidelity simulation after reflection in the development of critical thinking skills in nursing students.*

- An independent samples **t-test** was conducted to determine if there was a difference in **critical thinking** skills at posttest between the control and test groups.
- The results showed no significant difference between the control and test groups ( $t(20) = 1.22, p = .237$ ). **H01 was not rejected.**

## Research Question 2

**H02** – *There is no significant effect of repeat low-fidelity simulation after reflection in the development of self-confidence in nursing students.*

- An independent samples **t-test** was conducted to determine if there was a difference in **self-confidence** at posttest between the control and test groups.
- The results showed no significant difference between the control and test groups ( $t(22) = -0.19, p = .855$ ).  
**H02 was not rejected.**

# Research Question 3

**H03** – *There is no significant effect of repeat low-fidelity simulation after reflection in the development of satisfaction of learning in nursing students.*

- An independent samples **t-test** was conducted to determine if there was a difference in **satisfaction** at posttest between the control and test groups.
- The results showed no significant difference between the control and test groups ( $t(22) = -0.66, p = .517$ ). **H03 was not rejected.**

# Recommendations



# Recommendations

- *A mixed method or quantitative comparative design.* With one of these other approaches, the null hypothesis may have a better chance of being rejected if **all** participants participated in a simulation with debriefing only and a simulation with repetitive simulation then completed the post-test assessment.
- Another recommendation would be to **repeat** the study with a **baccalaureate and graduate** level population.
- One last recommendation for future research would be to utilize a different tool other than the Watson Glaser Critical thinking assessment. I would recommend the **utilization of an** established tool that **measures clinical decision-making**. The NLN does have a tool of this nature.

# Conclusions

- It is imperative to deliver simulation experiences in a **consistent manner** that yield **optimal student outcomes**.
- Contributing to the development of a **teaching model** that utilizes simulation will maximize student learning and outcomes. To achieve these goals, continued research of simulation is vital.

Thank you for your time





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