

# Student Satisfaction and Self-Confidence in Learning Related to the Use of Simulation Design Elements and Simulation Best Practices



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## Background

- The provision of high-quality clinical experiences continues to challenge nurse educators.
- Multiple barriers include higher acuity patients with shorter confinements, faculty shortages and competition among programs for clinical site utilization.
- Simulation allows for replication of most patient situations as well as the opportunity for students to practice crucial cognitive, psychomotor and critical thinking skills in a safe environment.
- There is limited evidence addressing the effectiveness of simulated learning experiences on student perceptions of self-confidence and satisfaction.

## Purpose

The purpose of this study was to determine if and how student perceptions of satisfaction and self-confidence relate to simulation design elements and the use of simulation best practices in standardized patient clinical assessments in an undergraduate nursing program.



## Methods

- This was a non-experimental, descriptive study using three surveys developed by the National League for Nursing (NLN).
- Validity and reliability of these surveys was confirmed by the NLN.
- The surveys were administered to three groups of undergraduate nursing students following a simulation activity.
- A total of 47 survey packets were distributed and ten completed survey packets were returned.
- The Student Satisfaction and Self-Confidence in Learning Survey contained
  - ✓ 5 items measuring student satisfaction with current learning
  - ✓ 8 items measuring self-confidence in learning.
- The Educational Practices Questionnaire contained survey items addressing
  - ✓ active learning
  - ✓ collaboration
  - ✓ diverse ways of learning
  - ✓ clear expectations.
- The Simulation Design Scale Survey contained items addressing
  - ✓ objectives and information provided regarding the simulation experience
  - ✓ student's perception of being supported during the simulation experience
  - ✓ problem solving
  - ✓ feedback/ guided reflection
  - ✓ fidelity or realism of the simulation experience

## Results

Likert Scale data from the three surveys was analyzed for inter-relatedness utilizing Item Total Correlation. The data from the three surveys was arranged into scales to determine the inter-relatedness among the following combinations of survey items:

- Satisfaction Items compared to the Educational Practices Items
- Satisfaction Items compared to the Simulation Design Items
- Self-Confidence in Learning Items compared to the Educational Practices Items
- Self-Confidence in Learning Items compared to the Simulation Design Items

Each of these 4 scales had a high level of internal consistency, as determined by a Cronbach's Alpha of >0.90 (See table).

	Satisfaction with Current Learning Items	Self-Confidence in Learning Items
	Cronbach's Alpha	Cronbach's Alpha
Educational Best Practices Items	0.970	0.966
Simulation Design Items	0.963	0.962

## Conclusions

Within the sample of 10 students, the Educational Practices Questionnaire and the Simulation Design Scale both reliably measured satisfaction with current learning and self-confidence in learning. Additionally, the Educational Practices Questionnaire and the Simulation Design Scale both reliably measured satisfaction with current learning and self-confidence in learning.

## Implications for Practice

- This small pilot study shows promise that the surveys developed by the NLN are reliable in predicting student perceptions of satisfaction and self-confidence with the incorporation of educational best practices and best simulation design elements into simulated learning experiences.
- Additional research is warranted to replicate this pilot study with a larger sample size.
- The information and data collected from this small pilot study will be used by Saint Anthony College of Nursing (SACN) in the Higher Learning Commission Quality Initiative, "Enhancing Learning and Evaluation through Simulation" to improve the simulation learning experience.
- This will allow SACN to provide more effective simulated learning experiences in a safe environment that are tailored to student experience level and learning needs.

### Bibliography

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