



# Effects of Mock Code Blue Simulations on New Graduate Nurses Confidence Levels



Anna Stansbury, FHSN, & Aliyah Frederick, FHNS  
Fort Hays State University

## Abstract

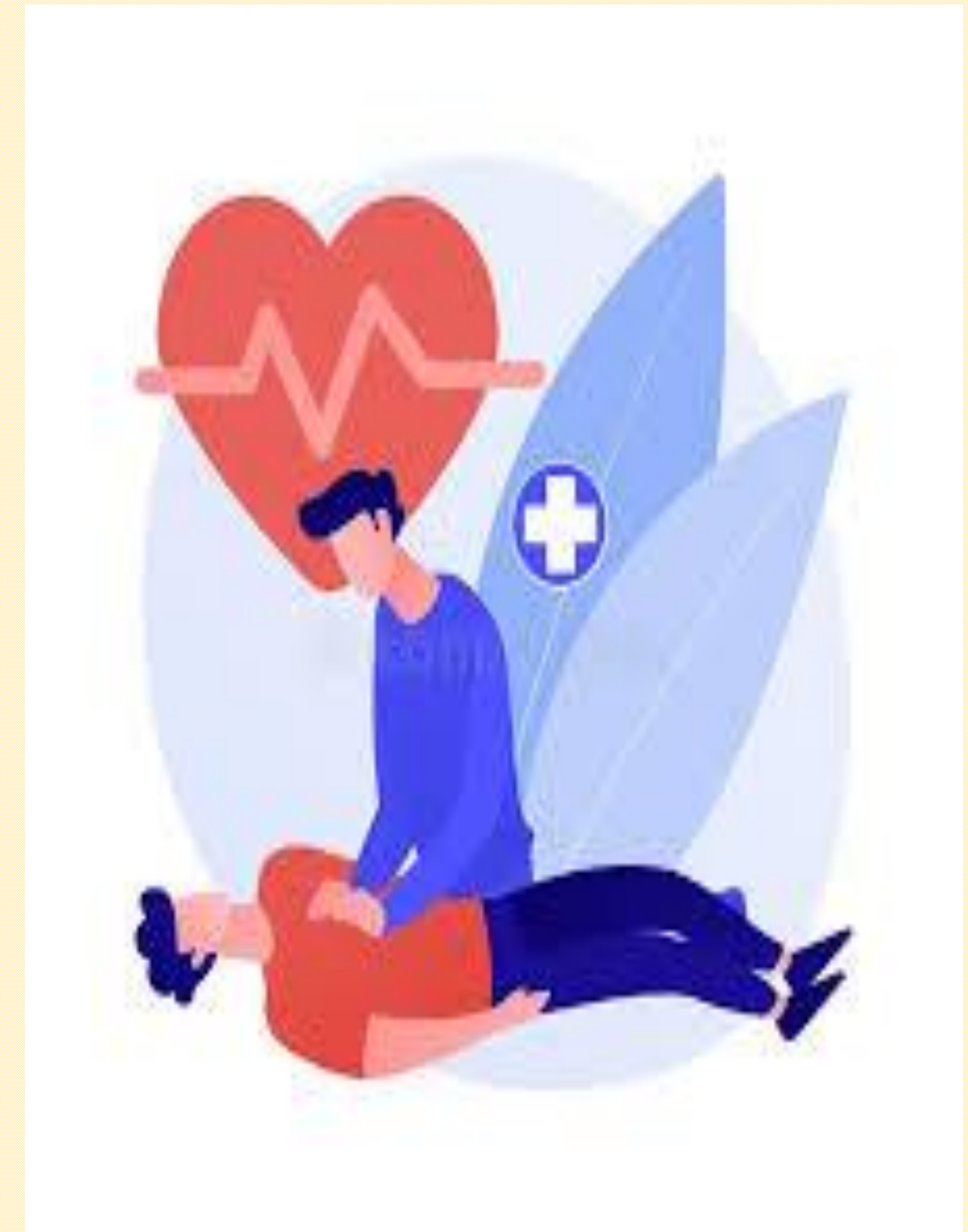
**Objective:** Determine if new-graduate nurses' participation in mock code simulations improves their confidence during code blue situations.

**Design:** Quasi-experimental, Comparative

**Setting:** Hays Medical Center

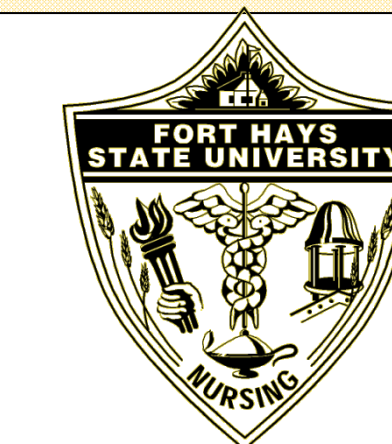
**Participation:** New Graduate Nurses from Fort Hays State University

**Results/Conclusion:** Pending results and data collection





# Effects of Mock Code Blue Simulations on New Graduate Nurses Confidence Levels



Anna Stansbury, FHSN, & Aliyah Frederick, FHNS  
Fort Hays State University

## Abstract

**Objective:** Determine if new-graduate nurses' participation in mock code simulations improves their confidence during code blue situations.

**Design:** Quasi-experimental, Comparative

**Setting:** Hays Medical Center

**Participants:** New Graduate Nurses from Fort Hays State University

**Results/Conclusion:** Pending results and data collection

## Introduction

Code blues are stressful situations that require personnel involved to be confident in their skills and adaptable to their surroundings (Bennett et al., 2021). Many new graduate nurses have not had the opportunity to be actively involved in critical care situations causing a decrease in confidence and reduced decision making. Providing new graduate nurses with the ability to participate in mock code blue simulations will allow them to practice utilizing their skills in a controlled environment. According to Morton (2017) high-fidelity simulations create an environment for nurses to develop critical thinking and clinical judgment which can then be applied in nursing practice. This study will evaluate how the participation in mock code simulations helps to increase the confidence of new graduate nurses during code blue situations compared to those who do not participate in code blue simulations.

**Purpose:** The purpose of this study is to determine if the participation of new-grad nurses in mock code simulations correlates to increased levels of confidence when participating in code blue simulations.

### Key Terms:

**High-fidelity Simulation:** an experience distinguished by an experimental environment that is collaborative, interactive, and learner centered that reproduces and experience to replicate an intended effect on the participants (Adamson, 2015).

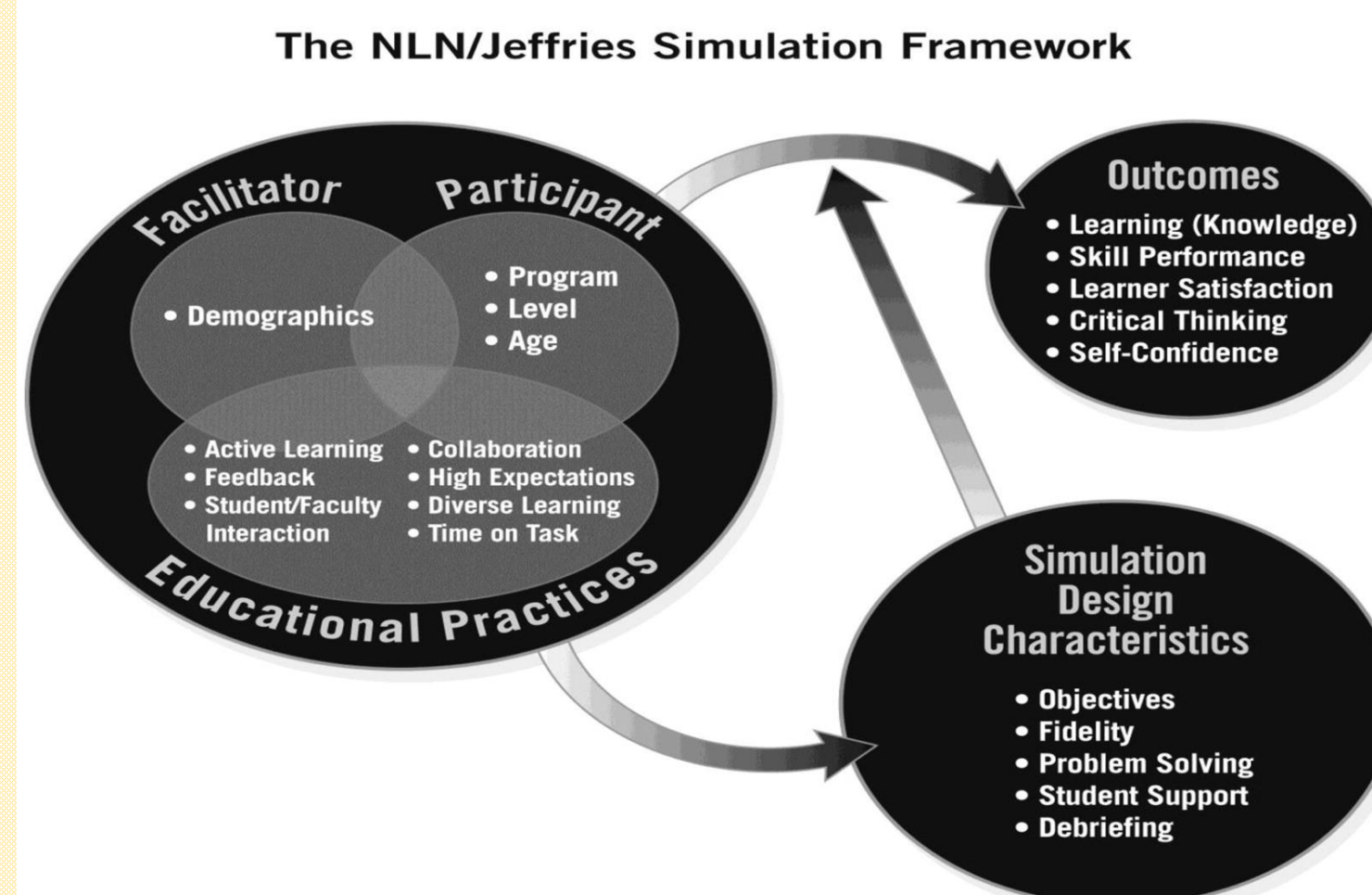
**Code Blue:** a state of acute patient deterioration that requires life saving interventions to correct the cause of cardiac arrest, respiratory distress or failure (Morton, 2017).



<https://scrubsmag.com/code-blue-everything-you-need-to-know/>

## Framework

The NLN/Jeffries simulation framework best describes the proposed question. It focuses on the relationship between the facilitator and participant during simulations as well as the characteristics and participant outcomes.



<https://www.elsevier.com/content/image/S153878914000673x.pdf>

## Methodology

**Research Design/Interventions:** Quasi-Experimental, mixed methods study using observation.

**IV:** Participation of new-graduate nurses in mock code blue simulations.

**DV:** Level of confidence in new-graduate nurses.

**Proposed RQ:** To analyze the how participating in a mock code blue simulation improves confidence levels of new graduate nurses.

### Literature Sources:

Many new graduate nurses lack the opportunity to be actively involved in critical care situations, "leading to hesitation and low self-confidence in decision-making" (Bennett et al., 2021). Even though researchers found competence, confidence, and readiness for independent practice all improved, this study is focusing on confidence because new graduate nurses have not had as many opportunities to practice their skills as more experienced nurses (Morton, 2017). New graduate nurses were chosen for this study to provide them with an opportunity to utilize their skills in a low-risk simulation environment. Using a simulation provides the participants with a safe environment to practice skills used during a code blue situation (Morton, 2017).

**Sample:** New Graduate Nurses from Fort Hays State University

**Ethical Considerations:** Seeking full review from Hays Medical Center, Fort Hays State University Department of Nursing and Fort Hays State University IRB.

### Data Collection:

N: 64, dependent upon power analysis.

n= 32 new graduate nurses participating in code blue simulations

n= 32 non- code blue participating new graduate nurses

Data will be collected over the course of six months comparing the confidence level of new graduate nurses who agree to participate in the mock code blue simulations to new graduate nurses who did not participate in mock code blue simulations. The results will be obtained by observing the simulation and providing a questionnaire for the participants to reflect their involvement after each simulation. The findings will be analysed and compiled into a comprehensive data chart.

## Results/Findings

### Projected Data Analysis Method

An independent t-test will be used for this study to compare participation in mock code blue simulations confidence levels to those who do not participate in mock code blue simulations. Participating in mock code blue simulations will improve the confidence levels of new graduate nurses during mock code blue simulations. The predicted result from this study should show an increase in reported confidence in new graduate nurses after participating in mock code blue simulations.

### Literature Findings

Studies show that new-graduate nurses that participate in mock code simulations report increased self-confidence in their code-related skills. According to Morton, providing new graduate nurses with the ability to participate in mock code blue simulations will allow them to practice utilizing their skills in a controlled environment (Morton, 2017). A research study performed by Bennett et al. (2021) concluded that the mock code blue simulations improved the response time in nurses during code blue situations. In a different study performed by Clarke et al. (2018), showed that there was observed improvement in the CPR fraction. New graduate nurses' confidence was found to improve in a study performed by Forbach (2019).

## Discussion

### Implications For Nursing

This study will be used to further analyse how new graduate participants confidence improves with mock code blue simulations. By implementing these simulations for new graduate nurses, the confidence levels of new graduate nurses during code blue situations would be increased.

### Conclusion

Pending results and collection data. Studies show that there is research that supports the use of mock code blue simulations to improve the confidence of new graduate nurses during mock code blue simulations.

Future research should be continued to further assess the benefits of participating in mock code blue simulations to improve new graduate nurses' confidence levels. Implementing this study in more than one hospital could further validate findings and expand on external validity.

## References

- Adamson, K., Jeffries, P., R., Rodgers, B. (2015). NLN Jeffries Simulation Theory: Brief Narrative Description. *Nursing Education Perspectives*, 36(5), 292-293.
- Bennett, J., Dangerfield, C., Kuszajewski, M., & Morgan, B. (2021). Optimizing nursing response to crisis events through in-situ simulation. *MedSurg Nursing*, 30(2), 108-137.
- Clarke, S. O., Julie, I. M., Yao, A. P., Bang, H., Barton, J. D., Alsomali, S. M., Kiefer, M. V., Al Khulaif, A. H., Aljahany, M., Venugopal, S., & Bair, A. E. (2018). Longitudinal exploration of in situ mock code events and the performance of cardiac arrest skills. *BMJ Simulation and Technology Enhanced Learning*, 5(1), 29-33. <https://doi.org/10.1136/bmjstel-2017-000255>
- Forbach, El A. (2019). *Participating in in situ mock codes improves confidence of the new graduate NR*. ProQuest. <https://www.proquest.com/docview/2357554325?parentSessionId=VsNLWcJnZnCqtvs32%2BymrQwJ5H8ubWxsr6Ui0mzM%3D&pq-origsite=primo&accountid=27424>
- Morton, S. B. (2017). *Impact of high-fidelity simulation training on medical surgical nurses' self-confidence and mock code blue performance: A pilot study*. ProQuest. <https://www.proquest.com/pagepdf/1889144607>



FORT HAYS STATE UNIVERSITY  
DEPARTMENT OF NURSING

Forward thinking. World ready.