Using Leadership Simulation Scenarios With Graduate Nursing Learners to Support Frontline Nurse Leader Competency Development

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Although the use of simulation has grown in education, there is little written about how it can be used with frontline nurse leaders (FLNLs) to teach nontechnical skills such as critical thinking, teamwork, communication, and conflict resolution. This article discusses the implementation of FLNL simulation in a graduate nurse leadership program based on the American Organization for Nursing Leadership (AONL) Nurse Manager Competencies. Learner confidence increased in the AONL competencies post-simulation. Although the setting of this project was the academic setting, the approach described could be easily adapted to the clinical setting for orientation and education of FLNLs.

The American Organization for Nursing Leadership (AONL)[1] developed competencies for nurse leaders to use as standards in a variety of care settings that include acute care, post-acute care, and system-level positions. Faculty of the Master of Science in Nursing Leadership (MSN in NL) program at Cizik School of Nursing use the AONL Nurse Manager Competencies[1] as a framework for the curriculum, which is focused on developing frontline nurse leaders. In the MSN in NL program, enrolled students include nurses who are in both formal and informal leadership roles. Feedback from program alumni as well as senior nursing leaders in the area indicated frontline nurse leaders must be proficient in nontechnical skills such as critical thinking, teamwork, communication, and conflict resolution. Although course faculty have implemented various teaching approaches to build core competencies, the faculty determined that additional, active learning approaches could be used to better develop these skills. As a result, frontline nurse leader (FLNL) simulation was developed and proposed to support the learner's development of key nontechnical skills. The purpose of this article is to describe the process used and propose how a similar process could be implemented in a practice setting to develop frontline leaders.

BACKGROUND

Nurse educators have successfully incorporated simulation into nursing education to provide learners a safe environment to practice high-risk and/or high acuity skills in both undergraduate and graduate education.[2] Most of these simulations are focused on clinical management and utilize manikins or standardized patients in the clinical setting.[2] Although simulation is well-documented for its success in teaching clinical

> **KEY POINTS**
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> - There is limited nursing literature on the use of simulation with frontline nurse leaders (FLNLs) to teach nontechnical skills such as critical thinking, teamwork, communication, and conflict resolution.
> - Leadership simulations based on American Organization for Nursing Leadership Nurse Manager Competencies increased learners' confidence levels.
> - Leadership simulations could be easily adapted to the clinical setting for orientation and education of FLNLs.

skills, little is known about the use of simulation for teaching nontechnical skills, such as leadership skills.

Researchers have studied simulation to teach "basic" leadership skills such as communication, teamwork, delegation, and priority setting; however, the context is limited to the clinical setting or "at the bedside."[3] This means the leadership skills are specific to scenarios where patients are directly involved, and the goal is to establish a basic level of communication for the bedside nurse. Notably, a lack of published studies exist that aim to investigate the use of simulation as a teaching approach to develop advanced leadership skills for the frontline nursing leader, such as transformational leadership skills, provision of discipline, and negotiation of disputes.[4]

To best prepare MSN in NL graduates to effectively function in a complex, rapidly changing health care system, nursing faculty must create an innovative and active learning environment where learners develop advanced leadership skills.[5] The gap in published evidence related to the use of simulation to teach advanced leadership skills provides an ideal opportunity for nursing faculty to create an active learning activity via the use of SBL while contributing meaningful evidence to the body of science.

Framework

Constructivism learning theory provided a theoretical framework for this project. In constructivism, teaching and learning are based on the premise that learners learn best by fitting new information together with prior knowledge. The theory suggests that learners construct knowledge and meaning from their experiences, and learning is an active process.[6] Additionally, adult learning theory asserts that adults will learn information that is useful and relevant to them and are actively involved in the learning process.[7] Simulation is a well-documented example of active learning that incorporates adult learning theory.

The principles from the book *Crucial Conversations*[8] served as a secondary framework for this project. The book outlines specific steps that can be employed to effectively hold conversations in situations that are have high stakes, varying opinions, and/or strong emotions. Frontline nurse leaders are faced with these types of conversations on a daily basis and must demonstrate mastery of these skills to effectively lead and achieve organizational outcomes.

Specific Aim of the Project

The aim of this quality improvement (QI) project was to evaluate the effectiveness of using FLNL simulation scenarios to increase learner's confidence in their competency of AONL Nurse Manager Competencies[1] related to relationship management and influencing behaviors. These particular competencies were selected as they aligned with the objectives of the course.

METHODS

Interventions

With faculty oversight, FLNL simulation scenarios were developed by senior-level MSN in NL learners with the intent to create relevant, "real-world" scenarios a frontline nurse leader would likely encounter in the clinical setting. Actors for the scenarios were the same senior-level MSN in NL learners. Seven scenarios were designed that could be altered from "beginner" to "advanced" level. An example of 1 of the scenarios used is provided in *Figure 1*. Each learner participated in a FLNL simulation scenario geared to the learner's level of leadership experience. The learners had a variety of leadership experiences ranging from staff nurse committee chairperson to charge nurse to assistant nurse manager and shift nurse manager.

Before the FLNL simulation activity, the learners read *Crucial Conversations*[8] and participated in an online discussion about the book and how the principles from the book may have changed a previous unsuccessful conversation. All learners in the course participated in the in-class, FLNL simulation activity. Prior to the FLNL simulation activity, learners were asked to complete an anonymous pre-survey, and after the simulation activity, learners were asked to complete the same anonymous survey along with open-ended qualitative questions. Learners generated their own unique identifier code so that pre- and post-surveys could be linked.

Each FLNL simulation scenario lasted approximately 10 minutes. The simulation took place in a room that resembled a typical work setting. Faculty and students who were not engaged in the simulation watched a live video on a large monitor from a nearby conference room. After each FLNL simulation scenario, an in-depth peer-to-peer debriefing occurred. The goal of debriefing was to provide participants with the opportunity for meaningful reflection and analysis. Faculty guided the discussion and posed specific questions, including: 1) What went well in the scenario? 2) What could have been done better? 3) What did you learn by participating in or watching this scenario? and 4) Which principle(s) was/were used from *Crucial Conversations*[8]? During the debriefing, each learner had an opportunity to review a recording of their simulation session, discuss how the learner felt during the simulation activity, and receive feedback from peers, senior MSN in NL learners, and faculty.

Measures

The pre-simulation survey was composed of questions focused on the participant's perceived confidence before and after FLNL simulation as related to the AONL Nurse Manager Competencies[1] of relationship management and influencing behaviors. This competency can be subsectioned into 5 areas: managing

AONL Manager Competencies Learning Objectives:
The Art

A. Human Resource Leadership Skills
    1. Performance Management
        • Initiate corrective actions

B. Relationship Management and Influencing Behaviors
    1. Situation management
        • Identify issues that require immediate attention
    2. Influence others
        • Role model professional behavior

Scenario Synopsis

Tam has now reached an occurrence (written document) due to being late more than 12 times. Per policy, being late 6 times equals a verbal warning, 12 times late is a written warning, 16 times is a final warning, and 20 times late is termination (in 1 calendar year).

Tam is a single mom who is also in college and contemplating dropping school as she is struggling to keep it all together.

Set Up

Setting/Environment:	Women's Center
ER	Behavioral Health
Med-Surg	Executive Suites
Peds	Office
ICU	Meeting
OR / PACU	Other:

Room staging: Setting is in an office between manager and Tardy Tam	
Additional props: n/a	
Character names and roles: Tam (late nurse) and **Student–Manager**	
Pre-brief: **policy states:** being late 6 times equals a verbal, 12 times late is a written warning, 16 times is a final warning, and 20 times late is termination (in 1 calendar year). Being late is indicated at 10 minutes past the scheduled time of duty.	

Nurse Tam is a high performer on your unit and always positive. However, she is frequently late. Tam received a verbal warning for lateness 2 months ago but has since accrued 6 more and is due for a formal written warning. The written discipline means she will lose her bonus for the quarter and cannot transfer from the department for 6 months. You need to deliver the document and have her sign it.

Optional challenges for learners with some leadership experience: Tam is not a high performer as she does the bare minimum. She has a poor attitude and has told the team she does not need this job. The team talks about how Tam is always late, and there are rumors that she is friends with the secretary who will correct her late timecard. She has accrued enough for a final warning document. Four more times late and she will be terminated. Deliver the document.

Scenario Progression Outline

Timing (approx.)	Patient/Staff Actions	Expected Leader Interventions	May Use the Following Cues
0–2 min	Jokes about going to principal's office	Opening conversation to keep RN comfortable but build report	**Role member providing cue:** N/A Cue: N/A
2–4 min	Denial	Display facts	**Role member providing cue:** N/A Cue: N/A
4–6 min	Anger	Remain calm, understanding, don't take it personally, but have boundaries for behavior	**Role member providing cue:** N/A Cue: N/A
6–8 min	Bargaining/crying/acceptance	Coaching, mentoring, offer hope and reassurance/support	**Role member providing cue:** N/A Cue: N/A

ER, emergency room; ICU, intensive care; OR, operating room; PACU, post-anesthesia care unit.

Figure 1. Sample Scenario.

conflict, situation management, relationship management, influencing others, and promoting professional development. Each learner rated perceived confidence using a 5-point Likert scale ranging from 1 (very little confidence) to 5 (very high confidence).

The post-simulation survey used the same 5 point, Likert-style, confidence-level survey as well as open-ended qualitative questions. The qualitative questions included in the post-FLNL simulation survey requested information regarding elements of the core competencies the learner had found to be challenging in their academic work to date and what they believed would be most valuable to improve their confidence. The qualitative questions are listed in *Table 1*.

Analysis

Data were gathered via an anonymous online survey and downloaded into a secure, password-protected database. A unique identifier created by each participant was used to match the pre- and post-surveys. Analysis was conducted with deidentified data. Demographic data were summarized using mean values. To evaluate preliminary efficacies for outcome measures in these pilot data, the median differences in pre–post outcome measures were utilized. Due to the small sample size (N = 8), statistical analyses to compare groups were not performed.

Qualitative data gathered in the open-ended post-survey items were analyzed to identify the impact of simulation on the participant's confidence to handle leadership situations and develop leadership competencies. Qualitative questions also focused on the experience of the FLNL simulation activity so that faculty could make changes in future simulations based on participant feedback.

Ethical Considerations

Approval for this project was obtained from the university's institutional review board prior to data collection. The project manager, a faculty member who was not teaching the course, introduced the project to the learners, invited them to participate, and provided the links for the anonymous online survey.

RESULTS

Quantitative Results

Eight participants completed both pre/post-intervention surveys. Demographic data are summarized using mean values in *Table 2*. Of interest from the demographic data, 50% of the participants stated they were currently employed in a leadership role such as assistant nurse manager or shift nurse manager, but 87.5% of the participants noted they had not received any leadership training outside of an academic setting.

As illustrated in *Table 3*, participants reported increases in perceived confidence in most AONL competency measures after simulation. Due to the small sample size, statistical analyses to compare groups were not performed.

Qualitative Results

Participants reported the realism of the scenarios was essential to improving their confidence. Scenarios helped them critically think in "real time" during a difficult conversation, rather than engaging in discussion of hypothetical situations. Learners recognized the scenarios were based on challenging experiences similar to those in their own work settings. They also learned a good deal through observing how their colleagues handled the situations. The observations enabled them to identify alternative leadership behaviors and communication techniques.

Table 1. Post-Simulation Qualitative Questions
How did the simulation exercise affect your level of confidence related to your ability to handle the given situations?
Do you recommend the faculty continue to offer the simulation exercises to future cohorts? Explain your answer.
What did you like about the simulation exercise?
What didn't you like about the simulation exercise?
What changes would you like to see made to the simulation exercise?

Post-simulation debriefing sessions were identified as essential to the effectiveness of the learning experience. During the debriefing, both faculty and the senior MSN in NL learners shared helpful insights from their own leadership challenges. The process fostered supportive and constructive critique of self and peers, and further promoted meaningful discussions.

The simulation lab environment, which had recently undergone extensive renovation, was also identified as supportive of the learning experience. The video capabilities allowed participants to view their own behavior and reflect on the experience as well as receive feedback during the debrief.

Although the simulation was initially uncomfortable, participants unanimously recommended that faculty continue to include FLNL in future courses. Suggestions for improvement included developing a standardized time limit for each scenario and debrief, and a more formal debriefing process.

DISCUSSION

Summary

It is uncommon for graduate student learners to participate in simulations that address real-life dilemmas that may surface when fulfilling frontline nurse leader job expectations. Therefore, interventions were developed and implemented to allow the learners to use prior experience, simulation, and debriefing to increase confidence in core AONL Nurse Manager Competencies.[1] Qualitative findings were indicative of learner benefits. The primary outcome was an increase in learner confidence. This finding is similar to clinical simulation results, which suggest that simulation improves learner confidence.[9,10] Notably, to our knowledge, this is one of the few published QI projects that evaluated the effectiveness of simulation to increase learner confidence in a graduate nursing leadership program.

Table 2. Participant Demographics		
	Sex	Males: 25% Females: 50% Preferred not to say: 25%
	Age ranges	26 to 30 years: 25% 31 to 35 years: 37.5% 36 to 40 years: 12.5% 51 to 55 years: 25%
	Currently employed in a leadership role	Yes: 50% No: 50%
	Previously employed in a leadership role	Yes: 25% No: 50% No response: 25%
Received formal leadership training outside of the classroom setting		Yes: 12.5% No: 87.5%
	Previous experience with simulation activities	Yes: 87.5% No: 12.5%

Table 3. AONL Competency and Related Question(s) Pre-Post Measures (N = 8)

	Relationship Management and Influencing Behaviors	Pre Median	Post Median
Managing conflict	Question 1: How confident were you in managing conflict?	3	4
Situation management	Question 2: How confident were you in identifying issues that require immediate leadership attention?	3	4
Relationship management	Question 3: How confident were you in promoting team dynamics?	3	4
	Question 4: How confident were you in mentoring and coaching staff and colleagues?	3	4
	Question 5: How confident were you in applying communication strategies?	3	4
Influencing others	Question 6: How confident were you in encouraging participation in professional action?	3	4
	Question 7: How confident were you in role modelling professional behavior?	4	4
	Question 8: How confident were you in acting as a change agent?	3	4
Promoting professional development	Question 9: How confident were you in applying principles of self-awareness?	3	4
	Question 10: How confident were you in encouraging evidence-based practice?	3	4
	Question 11: How confident were you in applying leadership theory to practice?	3	4

We achieved our objective of evaluating the effectiveness of simulation to increase learner confidence. The debriefing sessions, faculty feedback, and peer feedback contributed to the improvement. This change is viewed as a positive step in narrowing the gap in evidence that supports the use of simulation to teach advanced leadership skills. We learned that graduate students are eager to engage in opportunities that enhance cognitive skills, improve verbal communication, and strengthen collaborative skills.

Patrician and collegues[11] studied the developmental needs of charge nurses and discovered that nurses are often promoted to leadership positions without receiving adequate training. As a result, the researchers recommended that both graduate and undergraduate programs be revamped to include simulation and observation experiences that prepare nurses for high-performing leadership positions. This QI project aligns with the recommendations outlined by Patrician and colleagues.[11] Furthermore, the project

findings add to the limited body of evidence suggesting that simulation is a key component in increasing nurse leader competency.[12]

There are several limitations of this QI project. First, the sample size consisted of 8 participants, and the simulation was conducted in a single setting, making it difficult to generalize the findings. Second, the personal expectations of the MSN in NL learners, combined with faculty oversight, were utilized to develop the simulation scenarios instead of using tested and validated simulation scenarios. Finally, the success of the simulation and debriefing depended on the learner's attitude, level of engagement, and the ability to build upon prior knowledge.

Lessons Learned

Several lessons were learned from this project. The first was the importance of having the scenarios reflect realistic situations that would be faced by FLNLs. The

learners noted that this was one of the most valuable benefits of the simulation. A second lesson was the need for debriefing and providing structure to that debriefing. Although consistent questions were asked of all learners, more structure will be added for future simulation scenarios. A final lesson learned was the significance of providing the learners with tools to be successful. By having the learners read *Crucial Conversations*[8] prior to the simulation activity, application of the principles in the book could be practiced during the simulation. Further refinement of this approach will be applied during future simulation activities.

CONCLUSIONS

The use of simulation, debriefing, peer feedback, and faculty feedback led to improved learner confidence in the measured AONL Nurse Manager Competencies.[1] Our findings have implications for both faculty and nurse executives tasked with educating or hiring qualified nurse leaders. Faculty and hospital nurse leaders should consider using a dyad approach to increase learner confidence. Leadership simulations such as those used in the project are an opportunity for partnerships between practice settings and academia. Further work should explore options for utilizing the education department staff within health care facilities to build upon knowledge gained during graduate and undergraduate nurse leadership simulation experiences. Perhaps, this approach will facilitate the seamless transition of nurses into leadership roles. More studies are needed to explore the use of simulation in graduate and undergraduate programs and its effect on nurse leader behavior.

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