To determine the overall impact of an orientation skills boot camp on the confidence of nursing students to perform skills, the research team designed a study based on a quasi-experimental pre- and post-design. The faculty research team attained organizational Institutional Review Board (IRB) approval at the small, private, health sciences college and the large tertiary care parent organization associated with the college. Ninety-two senior year nursing students in the Bachelor of Science in Nursing senior 1 clinical course were eligible to participate. Students submitted pre- and post-surveys electronically via Blackboard Learning Management System. The orientation skills boot camp included rotations through the following stations: Physical assessment, post-surgical abdominal wound with sterile dressing change, chest tube and tracheostomy care, insertion of intravenous catheter and nasogastric tube, and administration of intravenous medications. The measurement tool selected for use was the National League for Nursing (NLN, 2005) Student Satisfaction and Self-Confidence in Learning, 13-item instrument. NLN grants permission to use this tool for non-commercial use (NLN, 2005). By using a 5-point Likert scale, the tool measures student satisfaction and self-confidence in learning (NLN, 2005). A description of the tool includes reliability testing using Cronbach’s alpha: satisfaction = 0.94; self-confidence = 0.87 (NLN, 2005). The tool was adapted for this study to include questions measuring student confidence on the individual skills performed at the stations. This ongoing study incorporates results over a period of 3 non-consecutive clinical semesters. Results from the first two semesters compare mean scores from the student surveys and show an increase in confidence on the post-surveys. Fifty additional students will complete the boot camp study during fall 2017. Results from the three semesters will be compared by paired t-testing and completed for the conference poster.

Simulation in nursing provides a safe environment to develop judgment and hone skills essential for practice (Robinson & Dearmon, 2013; Liaw, 2011). The use of simulation allows students the opportunity to apply concepts and skills learned within the nursing curriculum (Robinson & Dearmon, 2013). Additionally, the simulated environment provides a nonthreatening milieu for application of clinical judgment without the risk of actual patient harm (Robinson & Dearmon, 2013). It is suggested that simulated learning environments are a modern-approach to learning and are preferred over the traditional classroom by students who are accustomed to technology (Bland, Topping, and Wood, 2011; Harder, 2010; Robinson & Dearmon, 2013). The NLN fully supports a myriad of simulation strategies for use within nursing programs and endorses that these experiences may substitute for up to 50% of clinical hours (Rutherford-Hemming, Lioce, Kardong-Edgren, Jeffries, & Sittner, 2016). According to the Virginia Board of Nursing (2013), nursing education programs may incorporate up to 20% of total clinical hours as simulation experiences.

Medical education frequently utilizes clinical boot camps for resident training but the use of this strategy with nursing education is sparse (Yaylaci & Kitapcioglu, 2015). Hogewood, Smith, Etheridge, and Britt (2015) wrote about the development and implementation of an OB/PEDS Boot Camp for nursing students including a description of the different educational stations employed, however this article did not incorporate a study of its effectiveness. Few studies link simulation interventions to specific clinical skills, however Valizadeh, Amini, Fathi-Azar, Ghiasvandian, and Akbarzadeh (2013) report an increase in student confidence to perform peripheral venous catheterization on pediatric patients. This team utilized a group-based simulation where the students practiced catheter insertion on infant manikins, role playing, and critical thinking application of a written scenario.

Liaw and colleagues (2012) show an increase in student confidence to perform skills after participating in a simulation-based learning experience (Liaw, Scherpbier, Rethans & Lainin-Yobas, 2012). Kimhi et al.
(2016) found that simulation education increased confidence in nursing students regardless of whether the intervention occurred prior to or after a student’s clinical experience. Dearmon et al. (2013) revealed that by incorporating a 2-day simulation-based orientation for beginning nursing students, confidence as well as knowledge increased. Additionally, the team found that students reported a decrease in anxiety, contributed to the non-threatening practice environment and learning about instructor expectations. Thomas and Mackey (2012) relayed that when student confidence was elevated they were more apt to perform skills and reach their clinical objectives. Simulation is most effective in the more advanced student due to their higher knowledge level of theory, potentially impacting their clinical decision-making (Thomas and Mackey, 2012).

Utilizing the NLN Student Satisfaction and Self-Confidence in Learning tool, Lewis and Ciak (2011) found positive results for self-confidence and satisfaction, as well as an increase in knowledge following a pediatric and obstetric simulation experience. Working under the auspices of the NLN, Jeffries developed the Nursing Education Simulation Framework (NESF) (Schlairet, 2011). The NESF cites self-confidence as one of the crucial student outcomes of simulation along with learning, skill performance, satisfaction, and critical thinking (Schlairet, 2011).

The influence of simulation on nursing student’s self-confidence to perform specific skills and the use of orientation boot camps in student nurse education warrants further study. Literature supports and validates the incorporation of simulation-based experiences into nursing education programs with support at a national and state level. This study is of benefit to healthcare organizations as they plan orientation programs for nurse graduates as well as simulation-based training for new skills and technologies. The concepts of this study will assist the implementation of evidence-based practice into the clinical setting and benefit nursing praxis.

---

**Title:**
The Use of a Skills Simulation Boot Camp to Increase Self-Confidence in Prelicensure BSN Students

**Keywords:**
confidence, simulation and skills

**References:**


Preparing senior nursing students for their last year of clinical rotations can be challenging. Frequently students have not had the opportunity to perform important, high level skills outside of the skills classroom. To enhance student performance a four-hour simulation skills boot camp was incorporated into clinical orientation.

Purpose:

Preparing senior nursing students for their last year of clinical rotations can be challenging. Students often have not been afforded the opportunity to perform important, high level skills outside of the skills classroom. High level skills required for a student at this level includes, physical assessment, intravenous insertion, intravenous medication administration, nasogastric tube insertion, wound care, maintenance of chest tubes and care of tracheostomies. To enhance student competency and confidence with performing these skills, faculty of the pre-licensure BSN program integrated a four-hour simulation skills boot camp into clinical orientation.
The purpose of this study was to determine the impact of a simulated skills boot camp on the confidence level of the senior baccalaureate nursing student related to skill performance.

Method:

- Quasi-experimental pre and post design
- Ninety-two senior year nursing students in the Bachelor of Science in nursing senior 1 clinical course were eligible to participate.
- Students submitted pre- and post-surveys electronically via Blackboard Learning Management System. The National League for Nursing (NLN) 13 Item Student Satisfaction and Self-Confidence in Learning Survey was used for this study.

Results:

Data will be analyzed using IBM’s Statistical Package for the Social Sciences for Windows (SPSS; Armonk, NY). For surveys with less than four omitted responses mean substitution will be used in an effort to enhance the statistical power of the study results. To measure pre and post self-confidence, total mean frequency scores will be calculated and reported in mean (SD), range. Bivariate correlational analysis and an independent t test will be performed to examine relationships among the variables.

Conclusion:

At this time the study is ongoing and an accurate conclusion cannot be provided. The study will be complete in September 2017 with reporting of three cohort results.

First Primary Presenting Author

Primary Presenting Author
Catherine A. Hiler, DNP
Jefferson College of Health Sciences
Nursing
Program Director, BSN program; Assistant Professor
101 Elm Avenue
Roanoke VA
USA

Professional Experience: January 2015-present Jefferson College of Health Sciences, Roanoke, Virginia Program Director Pre-licensure BSN program Assistant Professor Nursing August 2010 to 2015 Virginia Western Community College Roanoke, Virginia Assistant Professor Nursing Associate of Applied Science Degree Nursing Program

Author Summary: Catherine Hiler DNP is an Assistant Professor of nursing. She has been a poster presenter at the National Teaching Institute and Critical Care Exposition in 2011, 2012 and 2016. In 2016, she received the Research Poster Award at the National Teaching Institute for her work, Impact of Moral Distress on Perceptions of Work Environment and Patient Safety. In 2012, she completed a Research Fellowship; Increasing Nurse Confidence Levels to Facilitate Family Presence at the Bedside During CPR.

Second Author
Deidra S. Pennington, MSN
Jefferson College of Health Sciences
Nursing
Assistant Professor
Roanoke VA
USA

**Author Summary:** Ms. Deidra Pennington has 33 years of experience in Coronary Care and Neuro-Trauma intensive care. She has been full-time faculty for the past 6 years, achieving college awards for excellence in teaching (2011 & 2015). Ms. Pennington received the Excellence in Nursing Instruction Award Runner-Up from the VSNA in February 2017. Research interests include caring behaviors of faculty, the use of simulation in clinical orientation, and the mentoring of preceptors to work with nursing students.