2017

The Impact of Standardized Patients on Physical Assessment Skills, Clinical Judgment, and Self-Efficacy in Undergraduate Nursing Students

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THE IMPACT OF STANDARDIZED PATIENTS ON PHYSICAL ASSESSMENT
SKILLS, CLINICAL JUDGMENT, AND SELF-EFFICACY IN UNDERGRADUATE
NURSING STUDENTS

BY

ALLISON MUELLER

A thesis submitted in partial fulfillment of the requirements for the degree

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THE IMPACT OF STANDARDIZED PATIENTS ON PHYSICAL ASSESSMENT
SKILLS, CLINICAL JUDGEMENT, AND SELF-EFFICACY IN UNDERGRADUATE
NURSING STUDENTS
ALLISON MUELLER

This thesis is approved as a credible and independent investigation by a candidate for the
Master of Science degree and is acceptable for meeting the thesis requirements for this
degree. Acceptance of this thesis does not imply that the conclusions reached by the
candidate are necessarily the conclusions of the major department.

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LIST OF ABBREVIATIONS

American Association of Colleges of Nursing (AACN)
Experiential Learning Theory (ELT)
Institute of Medicine (IOM)
International Review Board (IRB)
Lasater Clinical Judgment Rubric (LCJR)
National League for Nursing (NLN)
South Dakota State University (SDSU)
Standardized Patient (SP)
Statistical Package for the Social Sciences (SPSS)
University of South Dakota (USD)
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ABSTRACT

THE IMPACT OF STANDARDIZED PATIENTS ON PHYSICAL ASSESSMENT SKILLS, CLINICAL JUDGMENT, AND SELF-EFFICACY IN UNDERGRADUATE NURSING STUDENTS

ALLISON MUELLER

2017

The healthcare industry is seeing constant changes in patient acuity, expanding care environments, new healthcare policies, and continual advancements in research and technology. To overcome these challenges, nurses must receive education that adequately prepares them with confidence, clinical judgment, and the proper skills to provide safe and quality care to patients. More specifically, nurses must have strong physical assessment skills, sound clinical judgment, and high levels of self-efficacy (Chong, Lim, Liu, Lau, & Wu, 2016; Institute of Medicine (IOM), 2010). Peer physical assessments are generally the standard for practicing and validating physical assessment skills (Slater, Bryant, & Ng, 2016). Standardized patients (SPs), however, may be a better method for learning and validating physical assessment skills, enhancing clinical judgment, and improving self-efficacy (Sideras et al., 2013; Slater et al., 2016). The following paper describes a quasi-experimental research study that was completed to examine whether peers or SPs enhanced undergraduate nursing students’ physical assessment skills and their own perceptions of their clinical judgment and self-efficacy when learning to complete a physical assessment. Results of this study validated the use of both peers and SPs in acquiring physical assessment skills, developing clinical judgment, and improving self-efficacy in undergraduate nursing education.
Chapter One: Introduction

Nursing education is faced with many challenges today. The healthcare industry is experiencing constant changes in patient acuity, expanding care environments, new healthcare policies, and continual advancements in research and technology. To overcome these challenges, nurses must receive education that adequately prepares them with confidence, clinical judgment, and the proper skills to provide safe and quality care to patients. Challenges also arise for nurse educators, as the methods by which nursing education has been delivered in the past are potentially no longer adequate. New strategies for learning must be implemented that bridge the gap between the classroom and the challenges seen in today’s healthcare settings (Chong, Lim, Liu, Lau, & Wu, 2016; Institute of Medicine (IOM), 2010).

In 1963, Howard Barrows developed the idea of the standardized patient (SP) as one approach for enhancing the education of medical professionals. He proposed that a layperson could be used as a learning accessory, especially in the education of medical students. He defined a SP as:

A person who has been carefully coached to simulate an actual patient so accurately that the simulation cannot be detected by a skilled clinician. In performing the simulation, the SP presents the gestalt of the patient being simulated; not just the history, but the body language, the physical findings, and the emotional and personality characteristics as well. (Association of Standardized Patient Educators, 2016, para. 1).

Today, SPs are defined as lay people who are carefully trained to assist in teaching and assessment of medical and nursing students within simulated clinical
environments. These individuals are carefully trained to portray a specific patient type in an extremely realistic way (Theroux & Pearce, 2006). SPs provide students the opportunity to practice skills on real patients in a safe, but life-like, environment. Standardized patients also provide immediate and valuable feedback to students and encourage students to actively reflect on their own communication and physical examination skills. Furthermore, SPs provide educators with the means to assess therapeutic communication skills, psychosocial and emotional responses, as well as body language and student identification of abnormal physical assessment findings (Sideras et al., 2013).

**Statement of the Problem**

The ability to perform a physical assessment is a basic nursing skill. This basic skill however, is a crucial component of the nursing process (Munroe, Curtis, Considine, & Buckley, 2013). Completing a thorough and accurate physical assessment is key in providing safe, effective, and comprehensive care to patients in today’s challenging world of healthcare (Birks, James, Chung, Cant, & Davis, 2014).

Clinical judgment and self-efficacy are also skills all nurses must possess. Clinical judgment is the ability to assess a patient’s situation and needs, draw a conclusion, and intervene appropriately (Kim, Kim, Kang, Oh, & Lee, 2016). Clinical judgment allows nurses to make proper and safe decisions regarding their patients’ care. Self-efficacy, or an individual’s perception of his or her own abilities, assists students in closing the gap between theory and practice and encourages students to have confidence in their own skills and in the care they provide (Lasater, 2006; Robb, 2012).
Clinical judgment and self-efficacy play a role in the completion of a physical assessment, but also impact what nurses choose to do with their assessment findings. Physical assessment provides the nurse with a catalog of information, but the nurse must take that a step further and utilize sound clinical judgment to complete further assessments, develop a plan of care for the patient, and monitor or identify changes in a patient’s condition (Fennessey & Wittmann-Price, 2011). For these reasons, nurse educators must utilize teaching methods that not only assist students in acquiring physical assessments skills, but that also cultivate clinical judgment and promote self-efficacy.

Generally, undergraduate nursing programs have students perform physical assessments on fellow classmates (peer physical assessments) to practice and validate assessment skills. Although many students express comfort with this technique as long as sensitive areas are excluded, this method does not always give students the opportunity to assess abnormal findings, develop sound clinical judgment, or improve self-efficacy, leaving some to wonder whether a better teaching method exists (Slater, Bryant, & Ng, 2016).

Slater and colleagues (2016) suggested that assessing SPs rather than peers, was a better method for learning and validating physical assessment skills and enhancing clinical judgment in undergraduate nursing students. Researchers also suggested that using SPs in physical assessment skill validation actually decreases student anxieties, discourages memorization, and overall enhances learning (Sideras et al., 2013; Slater et al., 2016). Although Slater and colleagues (2016) presented thought-provoking questions and had positive results during their research study, replication is needed to provide further validation of this intervention.
Purpose of the Study

The purpose of this study was to examine whether peers or SPs enhanced undergraduate nursing students’ physical assessment skills and their own perceptions of their clinical judgment and self-efficacy when learning to complete a physical assessment. Results of this study validated the use of peers and SPs in acquiring physical assessment skills, developing clinical judgment, and improving self-efficacy in undergraduate nursing education.

Research Questions and Hypothesis

The research questions in this study were:

1) Are undergraduate nursing students’ physical assessment skills enhanced when peers or SPs are used in learning how to complete a physical assessment?

2) Are undergraduate nursing students’ perceptions of their own clinical judgment enhanced when peers or SPs are used in learning how to complete a physical assessment?

3) Are undergraduate nursing students’ perceptions of their own self-efficacy enhanced when peers or SPs are used in learning how to complete a physical assessment?

The hypothesis for this study was: SPs will enhance undergraduate nursing students’ physical assessment skills and their own perceptions of their clinical judgment and self-efficacy when learning to complete a physical assessment.
Significance

The nursing process provides direction for all practicing nurses as they develop patient care plans and provide care to their patients. Although nurses work in many different fields, settings, and with varying populations, the nursing process connects all nurses across the globe and provides direction and standardization to the nursing care all patients receive. The steps of the nursing process include assessment, diagnosis, planning, implementation, and evaluation (American Nurses Association (ANA), 2016). The assessment portion of the nursing process includes the completion of a physical assessment. Therefore, the ability to perform a physical assessment is not only a crucial component of the nursing process, but also a basic skill all nurses must possess (ANA, 2016; Munroe et al., 2013).

Due to the increasing complexities seen within the world of healthcare today, healthcare professionals that have accurate physical assessment skills and abilities are more important than ever. Physical assessment is the responsibility of both nurses and physicians alike. An accurate and complete physical assessment is essential to understanding a patient’s condition and developing a plan of care. Physical assessments also assist healthcare providers in identifying changes in a patient’s condition and intervening quickly and appropriately. Nurses, specifically, must have well-developed physical assessment skills to develop a foundation for a patient’s plan of care and to move onto the next steps of the nursing process: developing nursing diagnoses and interventions. Accurate physical assessment fosters positive outcomes for patients (Fennessey & Wittmann-Price, 2011; Munroe et al., 2013).
Sound clinical judgment and self-efficacy are two additional skills nurses must possess to successfully manage today’s healthcare systems and complex patients. Clinical judgment assists nurses in making proper decisions regarding their patients’ care and is an active component of the diagnosis and planning stages of the nursing process (ANA, 2016; Lasater, 2006). Although the assessment stage of the nursing process, including the physical assessment, provides the nurse with a catalog of information, the nurse must take that a step further and utilize sound clinical judgment to complete further assessments, develop a plan of care for the patient, and monitor or identify changes in a patient’s condition (Fennessey & Wittmann-Price, 2011). Self-efficacy has been shown to close the gap between theory and practice and assists with application of skills learned in school once in the nurse’s practice arena (Robb, 2012).

For these reasons, developing strong physical assessment skills, sound clinical judgment, and resilient self-efficacy should be an important component of undergraduate nursing education. Unfortunately, research regarding the development of clinical judgment and self-efficacy in nursing students is lacking, especially in regards to physical assessment. Most of the research that has been done regarding these topics focuses on practicing nurses rather than nursing students (Lasater, 2006; Robb, 2012). Furthermore, educators and students frequently leave clinical judgment and self-efficacy unmeasured. Assessing these variables during undergraduate education could however, provide valuable insight into student learning deficits and ineffective teaching strategies (Carter, Creedy, & Sidebotham, 2015; Paul, 2014).

The use of SPs in undergraduate nursing education is one proposed method for improving physical assessment skills, clinical judgment, and self-efficacy in
undergraduate nursing education. The use of SPs has primarily been seen in the education of medical students and nurse practitioners. Some research, however, has been completed regarding their use in developing psychomotor skills and therapeutic communication skills in undergraduate nursing students’ mental health encounters (Alfes, 2015; Slater et al., 2016). The high cost, limited accessibility, and training involved in utilizing SPs have been seen as deterents of their use in education however (Theroux & Pearce, 2006; Weiner & Schwartz, 2014). Despite these limitations, results of the following study could be used to further validate the use of SPs in undergraduate nursing education; specifically validating their use in acquiring physical assessment skills, developing clinical judgment, and improving self-efficacy.

**Definitions**

For the purpose of the study, the following terms were used:

*Standardized patient (SP).* “Lay people who have been trained to realistically portray a patient with a particular presentation for medical or nursing education” (Theroux & Pearce, 2006, p. 430).

*Physical assessment.* The assembly of data regarding a patient’s physical condition through completion of a head-to-toe examination including inspection, auscultation, percussion, and palpation of a patient’s body systematically (Fennessey & Wittmann-Price, 2011).

*Peer physical assessment.* The completion of a physical assessment, as described above, on a fellow student or peer to acquire and validate physical assessment skills (Slater et al., 2016).
Clinical judgment. “Interpreting and reaching a conclusion about a patient's situation and deciding to intervene in the patient's problem...An interpretation or conclusion about a patient's needs, concerns, or health problems” (Kim et al., 2016, p. 45).

Self-efficacy. “An individual’s perception of his/her capabilities to produce designated levels of performance” (Robb, 2012, p. 167).
Chapter Two: Review of Literature and Conceptual Framework

A review of the literature was completed. EBSCO MegaFILE, ERIC, and CINAHL Plus databases were searched using these keywords: standardized patient, peer physical assessment, peer physical examination, critical thinking, clinical judgment, self-efficacy, teaching models, and simulation. Only scholarly, peer reviewed, research articles were utilized in this review.

Physical Assessment

Physical assessment is the assembly of data regarding a patient’s physical condition through completion of a head-to-toe examination including inspection, auscultation, percussion, and palpation of a patient’s body. Physical assessment is a systematic and ongoing process (Fennessey & Wittmann-Price, 2011). Physical assessment plays a key role in providing safe, effective, and comprehensive care to patients. Therefore, performing a thorough and accurate physical assessment is an essential skill all healthcare professionals must possess (Birks et al., 2014).

As the nursing role has continued to expand, accurate physical assessment and collection of a thorough patient history has become both the responsibility of nurses and physicians (Munroe et al., 2013). Many outsiders consider physical assessment just the duty of the physician, but such assessments are an imperative competency for all nurses, a critical component of the nursing process, and a skill actually required by professional nursing standards. An accurate and complete physical assessment provides healthcare professionals with the information needed to cultivate an accurate diagnosis and plan of care. For nurses specifically, physical assessment assists in determining appropriate nursing diagnosis and nursing interventions (Fennessey & Wittmann-Price, 2011).
Physical assessments also assist healthcare providers in ascertaining changes in patient conditions (Munroe et al., 2013).

In undergraduate nursing education, the development of physical assessment skills is described in three domains: psychomotor, perceptual, and cognitive. The psychomotor domain includes skill competence in inspection, palpation, percussion, and auscultation. The perceptual domain requires the nurse to be skilled in comparing and contrasting the different sounds heard when auscultating and percussing the patient. The cognitive domain requires the ability to distinguish between normal and abnormal assessment findings, as well as the ability to determine how abnormal findings will affect a patient’s care. This domain includes the concept of clinical judgment. Although these domains are defined differently, each domain must occur interactively. One cannot occur without the other. A patient’s ideas and perspectives must also be incorporated into the physical assessment process to allow for the development of a well-rounded plan of care (Fennessey & Wittmann-Price, 2011).

**Traditional teaching methods.** Peer physical assessment is the traditional teaching method used in guiding physical assessment skill acquisition within the medical community. This method is generally the method of choice in undergraduate nursing education as well (Slater et al., 2016). A peer physical assessment is defined as the completion of a head-to-toe physical assessment on a fellow student or peer in order to acquire and validate physical assessment skills (Slater et al., 2016).

Performing physical assessments of student peers holds both advantages and disadvantages for students and educators. One advantage of peer physical assessments is the ability for students to practice and perform physical assessments prior to encountering
a patient in a clinical setting. This method also serves as a practice alternative when patients are not available for skill acquisition. Being assessed by a fellow student also allows students to gain valuable insight into what patients experience when being examined (Koehler & McMenamin, 2014).

Furthermore, as peer assessments are generally completed in a safe learning environment, such as a simulation center or a practice lab, students often report lower levels of anxiety during these interactions. Lower levels of anxiety can lead students to provide fellow classmates with honest and valuable feedback during such assessments. Assessment of generally healthy peers also allows students to develop a strong foundation in identifying normal aspects of the physical assessment before they are required to detect abnormal findings. Assessing peers or fellow classmates also provides educational institutions with a cost-effective method for skill acquisition (Koehler & McMenamin, 2014).

Although the peer assessment methodology has been utilized for decades, several issues with this method warrant further exploration. Research shows that not all students are comfortable with performing assessments on or being assessed by a peer or fellow classmate even if sensitive body areas are excluded (Slater et al., 2016; Wearn, Bhoopatkar, Mathew, & Stewart, 2013). Female students, in general, are more reluctant to participate in peer physical assessments than their male cohorts (Slater et al., 2016). Other factors for reluctance or discomfort include age, body image, culture, ethnicity, gender, race, religion, a history of abuse, and a fear of exposure to communicable diseases (Koehler & McMenamin, 2014; Slater et al., 2016).
Other concerns regarding peer physical assessments are observed from an educator standpoint. Educators fear that peer physical assessments only allow students the opportunity to assess normal findings. Examining peers does not generally give students the opportunity to acquire skills in identifying abnormal findings. Educators also fear that this method promotes memorization of the physical assessment process rather than critical thinking and clinical judgment. Furthermore, students are more likely to guide or assist their fellow classmates in the next steps of the assessment process, reducing the likelihood that students truly know how to complete an accurate physical assessment. These factors also decrease the ability of the educator to perform an accurate assessment of student knowledge and skill (L. Slater, personal communication, October 13, 2016; Slater et al., 2016).

**Active learning strategies.** To overcome some of the challenges described above, student-centered or active learning models have now become the standard for delivery of nursing education in many institutions (Chong et al., 2016; Waltz, Jenkins, & Han, 2014). In student-centered or active learning models, the learner is the center or focus of the learning experience and life-like interactive scenarios are utilized to create a safe, but interactive learning environment. This type of education delivery system not only improves clinical judgment, but also psychomotor and communication abilities (Chong et al., 2016).

Examples of active learning strategies include group work, role-playing, interactive case studies, videotaping of skills, classroom response systems, and computer-based instruction (Waltz et al., 2014). Two of the most valuable active learning strategies however are simulation and SP utilization (Waltz et al., 2014). Research has shown
simulation and SP use significantly bridge the gap between theory and practice (Shin, Sok, Hyun, & Kim, 2015; Waltz et al., 2014).

Slater and colleagues (2016) completed a study to further examine the use of SPs in undergraduate nursing education; specifically in the acquisition of physical assessment skills. Students’ feelings of anxiety and clinical judgment were the main variables assessed during the study. Two sample groups, one utilizing peers during physical assessment validations and the other utilizing SPs during physical assessment validations, were utilized (Slater et al., 2016).

Data from the study was primarily collected from surveys completed by students in both sample groups. Results of the student surveys disclosed interesting results. Students interacting with SPs rather than peers (n = 47) felt high levels of nervousness and discomfort ($p = .02; p = .001$), but felt the experience assisted them in the development of clinical judgment ($p = .003$). In comparison, students within the peer physical assessment sample group (n = 70) felt lower levels of anxiety, but expressed concerns that this method promoted memorization over clinical judgment ($p = 0.04$) (Slater et al., 2016).

Following the study, the researchers felt strongly that SPs yielded better student outcomes and moved forward to fully implement SP use in their final head-to-toe assessment validations. Although study results were positive, the researchers concurred that further research regarding SP use in the acquisition of physical assessment skills is needed (L. Slater, personal communication, October 13, 2016).

**Clinical judgment and physical assessment.** Clinical judgment is “interpreting and reaching a conclusion about a patient's situation and deciding to intervene in the
patient's problem” (Kim et al., 2016, p. 45). Higher levels of clinical judgment are needed to ensure safe and quality patient care. Clinical judgment is also an essential skill in bridging the gap between theory and practice. Nurses utilize clinical judgment in order to make safe medical decisions regarding their patient and to provide quality care (Chong et al., 2016).

Clinical judgment is a skill that allows nurses to provide safe, high quality, and competent care to patients (Chong et al., 2016). Clinical judgment not only plays a role in the completion of a physical assessment, but also impacts what nurses choose to do with the results of their physical assessments. Physical assessment provides the nurse with a database of information regarding the patient’s status. The nurse must then use sound clinical judgment to develop a plan of care for the patient, and to monitor for changes in a patient’s condition (Fennessey & Wittmann-Price, 2011).

**Self-efficacy and physical assessment.** Self-efficacy is “an individual’s perception of his/her capabilities to produce designated levels of performance” (Robb, 2012, p. 167). Self-efficacy has a major effect on an individual’s cognitive and affective abilities and choices. An individual’s choices and actions are significantly impacted by the skills and capabilities the individual believes he or she possesses. Therefore, self-efficacy plays a key role in skill acquisition. Self-efficacy incorporation, as a fundamental concept in nursing education, is needed to narrow the gap between theory and practice. There is limited research, however, regarding self-efficacy and knowledge acquisition in the classroom specifically in regards to physical assessment. Therefore, it is imperative to further evaluate these concepts and their impacts on nursing education.
Improving a student’s self-efficacy can significantly impact his or her clinical skills and impact the care of future patients (Robb, 2012).

**Other Uses of SPs in Education**

Interacting with SPs assists learners in developing, assessing, and improving therapeutic communication skills, psychosocial and emotional responses, and psychomotor skills. SPs are also valuable tools to use when working to properly identify abnormal physical assessment details. Furthermore, SP experiences offer students the opportunity to learn in an environment that mirrors real-life even more so than manikin-based simulations. Standardized patients provide students with immediate feedback and evaluation of their performance, allowing students to actively reflect upon their own communication and physical examination skills (Sideras et al., 2013). Most importantly, SPs have been linked to improved clinical judgment skills in students, although more research is needed (Slater et al., 2016).

Standardized patients have frequently been used in undergraduate, mental health, nursing education. Mental health rotations can often be a scary and anxiety ridden time during the undergraduate nursing experience. Undergraduate nursing students express fear, anxiety, and many uncertainties regarding mental health nursing. Although most clinical rotations cause some level of anxiety for students, mental health rotations seem to significantly elevate those levels. Much of this fear is generated due to a lack of experience with communicating or interacting with individuals who are suffering from mental illness. This lack of experience, mixed with high levels of anxiety, can be a dangerous combination leading to students suffering feelings of failure and even adverse patient events (Alfes, 2015; Kameg, Szpak, Cline, & McDermott, 2014).
Kameg and colleagues (2014) conducted a study analyzing whether SPs are effective in decreasing baccalaureate nursing student anxiety prior to a mental health rotation. During the study, 69 undergraduate nursing students attended a SP simulation prior to their mental health clinical rotations. The goal of the experience was to decrease students’ anxiety levels by allowing them to practice their therapeutic communication skills in a safe and judgment free learning environment. Surveys taken before and after the simulation suggested the SP simulation met its goal as the majority of students expressed decreased levels of anxiety following the simulation experience ($p = .022$) (Kameg et al., 2014).

Alfes (2015) conducted a study comparing SPs to role-playing and their impacts on students’ knowledge, attitudes, and feelings of self-efficacy in regards to mental health nursing. Both undergraduate ($n = 46$) and graduate ($n = 31$) nursing students were included in the study. Each sample group participated in a SP experience and a role-playing experience. Following each experience, students completed surveys. Analysis of these surveys revealed self-efficacy of the undergraduate nursing students following the SP experience was the only variable to have statistically significant results. Baccalaureate nursing students expressed a higher level of self-efficacy following the SP experience ($p \leq .001$) (Alfes, 2015).

**Conceptual Framework**

Kolb’s (1984) Experiential Learning Theory (ELT) provided the theoretical framework for this study. Learning, defined by this theory, is “the process whereby knowledge is created through the transformation of experience. Knowledge results from the combination of grasping and transforming experience” (Poore, Cullen, & Schaar,
2014, p. 244). Knowledge is generated when physical experiences are transformed into cognitive experiences. Knowledge and clinical judgment skills are increased when the learner has the opportunity to participate in an active learning experience and then perform a thorough reflection of that experience (Kameg et al., 2014; Lisko & O’Dell, 2010).

Kolb’s ELT describes learning as a continuous cycle where the learner travels through four phases of learning: (a) the learner partakes in a concrete learning experience, (b) the learner completes a period of reflection regarding the concrete learning experience, (c) the learner completes a period of abstract conceptualization where he or she considers factors or interventions that may have changed or improved the outcome of the experience, and (d) the learner partakes in active experimentation where learned content is used during future experiences. All four of these phases must occur for optimum learning to occur (Lisko & O’Dell, 2010; Poore et al., 2014).

In this research study, the SP and peer physical assessments represented the first phase of the learning cycle: the concrete experience. The reflective observation phase, or second phase of the learning cycle, occurred during the debriefing or feedback portion of the experience. The abstract conceptualization phase also occurred during the debriefing or feedback session of the experience, as the learner was able to consider the relevance of the experience, stimulated new ideas for the future, and considered what could have been done differently to achieve different outcomes. The active experimentation phase of the learning cycle occurred when students utilized what was learned during the SP and peer experiences within the clinical setting (Poore et al., 2014).
In addition to the learning cycle described above, the ELT highlights the importance of acknowledging that many different styles of learning exist. Kolb (1984) identifies four different styles of learners. These include: the diverging learner, the assimilating learner, the converging learner, and the accommodating learner. Diverging learners prefer to participate in concrete learning experiences and reflective observations to acquire knowledge. This type of learner also prefers to work in groups. The assimilating learner prefers the reflective observation and abstract conceptualization portions of the learning cycle. The converging learner acquires knowledge best through active experimentation and abstract conceptualization. This type of learner is also a problem solver and prefers technical work. The accommodating learner prefers concrete experiences and active experimentations. This type of learner highly prefers hands on learning opportunities. Although a learner must experience all phases of the learning cycle to achieve optimal learning, an individual may prefer certain portions of the cycle to others and may not utilize each phase equally (Poore et al., 2014).
Model

*Figure 1* below shows a visual depiction of Kolb’s ELT.

Chapter Three: Method and Procedures

This chapter discusses the research study’s design, setting, sample criteria, and procedure. Study instruments and data analysis are also reviewed.

Study Design

A quasi-experimental post-test study design with two comparison treatments was used for this research study. The goal of the study was to test a causal hypothesis and also to determine if one of two treatments was more effective. When using quasi-experimental research design, an intervention or treatment is tested for its ability to meet a proposed objective in a setting where true random assignment cannot be achieved (White & Sabarwal, 2014). A design including two comparison treatments is often used “when one treatment is the currently identified treatment of choice and the researcher has identified a treatment that might lead to even better outcomes” (Grove, Burns, & Gray, 2013, p. 237).

The study took place during an on-campus lab in a sophomore level, undergraduate nursing, health assessment course. The purpose of this lab was to allow students time to practice their physical assessment skills prior to validating the skill in front of course instructors. Traditionally, this course utilized peer physical assessments as the standard for such skill acquisition and validations (J. Ness, personal communication, January, 5, 2017).

Students consenting to partake in the study were divided into two treatment groups. One group utilized peers when practicing physical assessments during the lab session. The other group utilized SPs when practicing physical assessments during the lab session. At the end of the lab session, each student was asked to complete the
Demographic Information Questionnaire (see Appendix A), the Lasater Clinical Judgment Rubric Survey (2005) (see Appendix B), and the National League For Nursing’s (NLN’s) (2005) Student Satisfaction and Self-Confidence in Learning Survey (see Appendix C).

**Study Setting**

The study took place during a sophomore level, undergraduate nursing, health assessment course at a Midwestern university. South Dakota State University (SDSU) offers a traditional, accelerated, and RN to BSN option for those looking to obtain a baccalaureate nursing degree (SDSU College of Nursing, 2016). The course introduced health assessment skills and pre-selected nursing interventions to undergraduate nursing students in the first semester of the university’s traditional baccalaureate nursing program. Sixty-four students were enrolled in the course. During the progression of the health assessment course, students were required to attend multiple on-campus labs. These lab sessions ran for approximately four hours. The study occurred during the course’s on-campus lab designated for the practice of physical assessment skills. Prior to the start of the semester, course instructors divided this particular on-campus lab into two 2-hour sessions and assigned students to each session respectively (Carlson, Foerster, Ness, Knipp, & Garren-Grubbs, 2016; J. Ness, personal communication, January 5, 2016).

**Sample**

Sixty-four sophomore level undergraduate nursing students were invited to participate in the study. No exclusion criterion existed. Consenting study participants were randomly assigned to one of two treatment groups: a peer treatment group and a SP
treatment group. Those not consenting to participate in the study were placed into the peer treatment group, as this was the course’s current practice.

**Study Procedure**

Prior to the start of the study, International Review Board (IRB) approval was obtained (see Appendix D) from SDSU and SPs were hired. SPs were recruited through the University of South Dakota (USD) School of Medicine’s Parry Center for Clinical Skills and Simulation in Sioux Falls, South Dakota and were reimbursed for time and travel. A research grant was obtained to provide funding and payment for the study’s SPs.

Students were approached before the day of the on-campus lab and at this time details of the study were explained. Informed consent was obtained from those students who were willing to participate in the study. This consent allowed the researcher access to the students’ final physical assessment validation grades as well (see Appendix E & F). After consent was obtained, study participants were randomly assigned to one of two treatment groups: a peer treatment group and a SP treatment group. Those students choosing not to participate in the study were automatically placed into the peer treatment group. Consideration was taken to ensure that every student had a partner of the same gender.

On the day of the study, the SPs arrived early to complete training. The experience level of the study participants and proper areas to include in their feedback were discussed. Students attended their assigned lab session. A list of group assignments was displayed on a projector for students to see when they arrived to their assigned lab sessions. Students then divided into their assigned treatment groups. Once divided into
their assigned treatment groups, the participants were allowed to pick a partner of their choosing. The participants then had two hours to practice their physical assessment skills.

Those in the peer treatment group practiced their skills on their partner (peer) during the lab session. Participants used the course’s Hospital Assessment Skills Validation checklist for guidance during the session (see Appendix G). Those in the SP treatment group practiced their skills on a SP during the lab session. In this group, the participant’s partner served only as an observer. The SPs were given a pre-determined scenario to follow during the assessment as well (see Appendix H). This group’s participants also used the course’s Hospital Assessment Skills Validation checklist for guidance during their sessions (see Appendix G). This validation checklist was also used during the students’ final physical assessment validation. Following each practice session, all participants were asked to complete the Demographic Information Questionnaire (see Appendix A), the Lasater Clinical Judgment Rubric Survey (2006) (See Appendix B), and the NLN’s (2005) Student Satisfaction and Self-Confidence in Learning Survey (See Appendix C).

**Instruments**

**Demographic Information Questionnaire.** Demographic information was collected from all students using the Demographic Information Questionnaire on the day of the study (see Appendix A). Collected demographic information included gender, age, ethnicity, and whether each student was a traditional (first degree of study) or a non-traditional student (held a previous degree). All demographic information was kept confidential.
The Lasater Clinical Judgment Rubric Survey. The *Lasater Clinical Judgment Rubric* (LCJR) was used to measure the participants’ perceptions of their own clinical judgment. This rubric was developed as a tool to assist educators in assessing the development of clinical judgment in undergraduate nursing students. The LCJR is based on the four phases of Tanner’s Clinical Judgment Model. These four phases are reflective of the nursing process and include: noticing, interpreting, responding, and reflecting. The LCJR shows a developmental progression, but also assists in evaluating a single experience in regards to clinical judgment (Lasater, 2006). The rubric “presents a bigger picture view of clinical judgment development, allowing students to grasp what clinical judgment involves, evaluate their growth, and identify goals toward its achievement” (Lasater, 2006, p. 499).

Within the rubric, each of these phases is broken down into dimensions (11 total) that further define what it means to successfully attain each phase. Examples of these dimensions as they pertain to the ‘noticing’ phase of Tanner’s Clinical Judgment Model include: focused observation, recognizing deviations from expected patterns, and information seeking. Each dimension contains four statements: a beginner level statement, a developing level statement, an accomplished level statement, and an exemplary level statement. Each level correlates with a score: beginning (1), developing (2), accomplished (3), and exemplary (4) (Gubrud-Howe, 2008; Lasater, 2006). An example of a beginner level statement within the rubric is: “I am confused by the clinical situation and the amount and kind of data. My observation is not organized and important data is missed, and/or assessment errors are made.” An example of an exemplary level statement is: “I focus observation appropriately. I regularly observe and
monitor a wide variety of objective and subjective data to uncover any useful information” (Lasater, 2006) (see Appendix B).

Reliability and validity for the LCJR have only been researched within the undergraduate, pre-licensure nursing student population (Victor-Chmil & Larew, 2013). In one study, the rubric’s reliability was evaluated in 36 undergraduate nursing students. An overall Cronbach’s alpha score of .870 was established for the rubric and Cronbach’s alpha scores ranging from .886 to .931 were established for the rubric’s subscales (noticing = .886, interpreting = .931, responding = .887, reflecting = .914) (Gubrud-Howe, 2008).

In another study, the rubric’s reliability was evaluated in 53 students. A Cronbach’s alpha score of .810 was established in the subscales related to self-confidence and a Cronbach’s alpha score of .884 was established in the subscales related to clinical competence (Blum, Borglund, & Parcells, 2010). Content validity of the LCJR is well established as well. The LCJR is one of only two tools available to educators to successfully measure and evaluate Bloom’s three learning outcomes and to measure six of the eight standards within the American Association of College’s of Nursing’s (AACN) Baccalaureate Essentials (Blum et al., 2010).

**The NLN’s Student Satisfaction and Self-Confidence in Learning Survey.**

The NLN’s (2005) Student Satisfaction and Self-Confidence in Learning survey was used to measure the study participants’ perceptions of their own self-efficacy (see Appendix C). This survey contained 13 questions such as: 1) The teaching methods used in this simulation were helpful and effective, and 2) I am confident that this simulation covered critical content necessary for the mastery of medical surgical curriculum. Using a five
point Likert scale (1 = strongly disagree with the statement, 5 = strongly agree with the statement), participants rated their satisfaction with instruction and level of self-confidence following the given activity (Franklin, Burns, & Lee, 2014). The reliability of this survey tool was tested in a sample of 2200 novice baccalaureate nursing students. An overall Cronbach's alpha score of .92 was established with the satisfaction portion of the survey scoring .94 and the self-confidence portion of the survey scoring .83; thus, representing a high level of internal consistency (Franklin et al., 2014).

**Analysis**

Data was analyzed using IBM’s Statistical Package for the Social Sciences (SPSS) Statistics Version 24 (IBM Corporation, Armonk, NY). Descriptive statistics including frequencies, percentages, means, and independent samples t-tests were used to analyze the study’s sample demographics, final validation scores, and survey scores. Cronbach’s alpha scores were used to assess the internal reliability of the study’s survey instruments.

**Research question #1.** Are undergraduate nursing students’ physical assessment skills enhanced when peers or SPs are used in learning how to complete a physical assessment?

**Statistical analysis.** The study participants’ final physical assessment skills validation scores were collected and compared between treatment groups. An independent samples t-test for the differences of means between each group’s final validation scores was completed to determine if a statistical significance between each group existed. A p-value of 0.05 was used to determine if a statistical significant difference existed.
Research question #2. Are undergraduate nursing students’ perceptions of their own clinical judgment enhanced when peers or SPs are used in learning how to complete a physical assessment?

Statistical analysis: Responses from the Lasater Clinical Judgment Rubric Surveys (2006) were scored and analyzed. The mean survey scores for each treatment group were calculated. An independent samples t-test for the differences of means between the SP treatment group’s survey scores and the peer treatment group’s survey scores was completed to determine if a statistical significance between each group’s scores existed. A p-value of 0.05 was used to determine if a statistical significant difference existed.

Research question #3. Are undergraduate nursing students’ perceptions of their own self-efficacy enhanced when peers or SPs are used in learning how to complete a physical assessment?

Statistical analysis. Responses from the NLN’s (2005) Student Satisfaction and Self-Confidence in Learning Surveys were scored and analyzed. The mean survey scores for each treatment group were calculated. An independent samples t-test for the differences of means between the SP treatment group’s survey scores and the peer treatment group’s survey scores were completed to determine if a statistical significance between each group’s scores existed. A p-value of 0.05 was used to determine if a statistical significant difference existed.
Chapter Four: Results

This chapter provides an in-depth description of the study sample and discusses the analyzed results of the data collected during the study. The purpose of this study was to examine whether peers or SPs enhance undergraduate nursing students’ physical assessment skills and their own perceptions of their clinical judgment and self-efficacy when learning to complete a physical assessment. The hypothesis for this study was: SPs will enhance undergraduate nursing students’ physical assessment skills and their own perceptions of their clinical judgment and self-efficacy when learning to complete a physical assessment.

Description of the Study Sample

Sixty-four sophomore level undergraduate nursing students were invited to partake in the study and 60 students originally consented to participate. No exclusion criteria existed. On the day of the study however, the number of study participants changed. Two students were absent due to illness and school activities. In addition, four students changed their minds and desired to participate in the study. Therefore, on the day of the study 62 students participated in the study.

The researcher randomly assigned study participants to their treatment groups by choosing names out of a hat. The peer treatment group consisted of 36 study participants (58.1%) overall. The SP treatment group consisted of 26 study participants (41.9%) overall. Originally, the number of study participants in each treatment group was even, but due to changes in student participation on the day of the study, the size of the treatment groups differed. These adjustments were made randomly in the same manner that participants were originally placed into each treatment group.
**Gender.** Out of 62 study participants overall, six participants (9.7%) were male and 56 participants (90.3%) were female. The peer treatment group consisted of two male participants (5.6%) and 34 female participants (94.4%). The SP treatment group consisted of four male participants (15.4%) and 22 female participants (84.6%).

**Age.** Out of 62 total study participants overall, 57 (91.9%) were less than 20 years of age, four (6.5%) were 21-25 years of age, and one (1.6%) was 26-30 years of age. No participants (0%) were greater than 31 years of age. The peer treatment group consisted of 35 participants (97.2%) who were less than 20 years of age and one participant (2.8%) who was 21-25 years of age. The SP treatment group consisted of 22 participants (84.6%) who were less than 20 years of age, three participants (11.5%) who were 21-25 years of age, and one participant (3.8%) who was 26-30 years of age.

**Ethnicity.** Out of 62 total study participants overall, 60 participants (96.8%) were Caucasian and two participants (3.2%) were African American. The peer treatment group consisted of 35 (97.2%) Caucasian participants and one (2.8%) African American participant. The SP treatment group consisted of 25 (96.2%) Caucasian participants and one (3.8%) African American participant.

**Type.** All 62 study participants (100%) were traditional undergraduate nursing students. The peer treatment group consisted of 36 (100%) traditional students and the SP group consisted of 26 (100%) traditional students.

**Results**

The data from both sample groups and from both surveys were analyzed using IBM’s SPSS Version 24 (IBM Corporation, Armonk, NY). The results of each comparison groups’ final physical assessment validations were also compared. An
independent samples *t*-test was completed to examine the results of both surveys for both the peer and SP treatment groups. The same was done to analyze each group’s final physical assessment validation scores. Results are described below as they pertain to each of the study’s research questions.

**Research question #1.** The first research question for this study was: Are undergraduate nursing students’ physical assessment skills enhanced when peers or SPs are used in learning how to complete a physical assessment?

**Statistical analysis.** Each study participant’s final physical assessment skills validation score was collected. The maximum score for the skills validation was 25. The minimum was 0. The mean score for each treatment group was calculated. The mean score for the peer treatment group was 23.44 (*SD*=1.03). The mean score for the SP treatment group was 23.22 (*SD*=1.31). See *Figure 2*. 
An independent samples $t$-test for the difference of means was completed to determine if a statistical significance between the treatment groups’ scores existed. A $p$-value of 0.05 was used to determine if statistical significance was present. Statistical comparison of the scores did not result in a statistically significant difference between the final validation scores of the peer treatment group and the SP treatment group ($t = 0.73$, $df = 60$, $p = 0.47$).

**Research question #2.** The second research question for this study was: Are undergraduate nursing students’ perceptions of their own clinical judgment enhanced when peers or SPs are used in learning how to complete a physical assessment?

**Statistical analysis:** Responses from the *Lasater Clinical Judgment Rubric Surveys* (2006) were summed and analyzed. It is important to note, one student in the
peer treatment group did not complete a survey. Therefore $n = 35$ for this data set. The maximum possible score for the survey was 44 while the minimum possible score was 11; the higher the score, the more the student perceived the activity improved their clinical judgment. See *Figure 3* below.

![Lasater Clinical Judgment Rubric Survey Scores by Group](image)

*Figure 3.* The survey scores for both treatment groups are represented in the figure. Scores for the peer treatment group ranged from 22-44. Scores for the SP treatment group ranged from 26-39.

The mean of the survey scores for each treatment group was calculated. The mean survey score for the peer treatment group was 35.14 ($SD = 5.00$). The mean survey score for the SP treatment group was 34.54 ($SD = 3.00$).

An independent samples $t$-test for the differences of means was completed to determine if a statistical significance between each treatment group’s survey scores existed. A $p$-value of 0.05 was used to determine if statistical significance was present.
Statistical comparison of the survey scores did not yield a statistically significant difference between the peer and SP treatment group’s perceptions of their own clinical judgment when learning how to complete a physical assessment ($t = 0.59, df = 56.77, p = 0.56$).

**Research question #3.** The third research question for the study was: Are undergraduate nursing students’ perceptions of their own self-efficacy enhanced when peers or SPs are used in learning how to complete a physical assessment?

**Statistical analysis.** Responses from the NLN’s (2005) *Student Satisfaction and Self-Confidence in Learning Surveys* were summed and analyzed. The maximum survey score was 65 while the minimum possible score was 13; the higher the score, the more the student perceived the activity improved their self-efficacy. See *Figure 4*. 
The mean of the survey scores for each treatment group was calculated. The mean survey score for the peer treatment group was 55.31 ($SD = 9.48$). The mean survey score for the SP treatment group was 56.08 ($SD = 5.94$).

An independent samples $t$-test for the differences of means was completed to determine if a statistical significance between each treatment group’s survey scores existed. A $p$-value of 0.05 was used to determine if statistical significance was present. Statistical comparison of the survey scores did not yield a statistically significant difference between the peer and SP treatment group’s perceptions of their own self-
efficacy when learning how to complete a physical assessment ($t = -0.37, df = 60, p = 0.72$).

**Reliability of Instruments**

The reliability of the *Lasater Clinical Judgment Rubric Survey* (2006) was assessed. A Cronbach’s alpha score of .932 was established for the rubric overall and Cronbach’s alpha scores ranging from .712 to .860 were established for the rubric’s subscales (noticing = .712 interpreting = .860, responding = .802, reflecting = .821). The reliability of the NLN’s (2005) *Student Satisfaction and Self-Confidence in Learning* survey was also assessed. A Cronbach's alpha score of .933 was established for the survey overall. A Cronbach’s alpha score of .875 was established for the satisfaction portion of the survey and a Cronbach’s alpha score of .907 was established for the self-confidence portion of the survey. These results represent a high level of internal consistency and reliability for both surveys used in this study.

**Summary**

This chapter presented the research study’s demographic information and the study’s statistically analyzed results. The purpose of this study was to examine whether peers or SPs enhanced undergraduate nursing students’ physical assessment skills and their own perceptions of their clinical judgment and self-efficacy when learning to complete a physical assessment. Statistical analysis of the data obtained during the study did not support the study’s hypothesis or support with statistical significance that SPs enhanced undergraduate nursing students’ physical assessment skills and their own perceptions of their clinical judgment and self-efficacy more than peers when learning to complete a physical assessment.
Chapter Five: Conclusions

Implications

Our nation’s healthcare systems are facing numerous challenges. It is becoming more and more challenging for nurses to provide their patients with safe and competent care. As a result, nurse educators are constantly being challenged to implement new and innovative teaching strategies that successfully prepare nurses with the tools needed to overcome these challenges. Research has shown these tools to include strong physical assessment skills, sound clinical judgment, and high levels of self-efficacy (Chong, Lim, Liu, Lau, & Wu, 2016; IOM, 2010). Researchers have suggested that utilizing SPs rather than peers is a better strategy for learning and validating physical assessment skills, enhancing clinical judgment, and improving self-efficacy in undergraduate nursing students. Furthermore, researchers suggested that using SPs in physical assessment skill validation actually decreases student anxieties, discourages memorization, and enhances learning (Sideras et al., 2013; Slater et al., 2016). The purpose of this study was to further examine this teaching strategy and to determine whether peers or SPs better enhance undergraduate nursing students’ physical assessment skills and their own perceptions of their clinical judgment and self-efficacy when learning to complete a physical assessment.

The first research question posed for this study was: Are undergraduate nursing students’ physical assessment skills enhanced when peers or SPs are used in learning how to complete a physical assessment? Although the statistical comparison of the study participants’ mean final physical assessment validation scores did not yield a statistically significant result, the mean scores proved to still be very similar (23.44 and 23.22).
These results validate both peers and SPs as effective learning strategies for assisting undergraduate nursing students in learning how to complete a physical assessment.

The other research questions posed by this study questioned whether peers or SPs enhanced undergraduate nursing students’ perceptions of their own clinical judgment and self-efficacy when learning how to complete a physical assessment. Similar to the study participants’ final physical assessment validation scores, the statistical comparison of the mean scores of the peer and SP treatment groups’ survey scores did not yield statistically significant results. The mean scores however, were again similar (35.14 and 34.54; 55.31 and 56.08). Although the statistical comparison of each treatment groups’ mean survey scores were not statistically significant, their closeness again validates both peers and SPs as effective teaching strategies in learning how to complete a physical assessment and in improving clinical judgment and self-efficacy.

Comparing these results overall to other research and literature written regarding the use of peers and SPs as educational strategies offers both similarities and differences. Chong and colleagues (2016), as discussed in Chapter Two, asserted that active learning strategies, where the student and life-like experiences are placed at the center of learning, are the best educational delivery methods for improving clinical judgment, psychomotor skills, and communication abilities. Waltz et al. (2014) also found simulation and SP utilization to be valuable active learning strategies. In this study, the use of peers and SPs offered the study participants both student-focused and life-like experiences coinciding with the beliefs of both Chong and colleagues (2016) and Waltz et al (2014).

Overall, research regarding the use of SPs in nursing education specifically is very limited. The research that has been completed however, validated the use of SPs as
a better teaching strategy for improving self-efficacy, therapeutic communication, and clinical judgment as well as a strong method for decreasing student anxieties (Alfes, 2014; Kameg et al., 2014; Slater et al., 2016). The results of this study somewhat differ from these ideas. The results of this study did not necessarily discredit these notions, but rather validated both SPs and peers as equally beneficial active learning strategies for acquiring and improving such skills. In addition, this study did not specifically examine the use of peers and SPs in decreasing student anxieties or in improving therapeutic communication. Therefore, a comparison of these variables cannot be completed. For these reasons also, further research is needed.

**Limitations**

This research study contained several limitations. These limitations include:

1. This study utilized a convenience sample. The students who were invited to participate in the study were from one undergraduate nursing class, from one nursing program, and from one educational institution. The study participants and the researcher attended the same university as well. For these reasons, although study participants were randomly assigned to treatment groups and there was no contact between the researcher and the study participants prior to the study, the study sample was still a convenience sample.

2. Study results are not generalizable for several reasons. First, the study utilized a convenience sample. Second, the study took place during one lab session during one semester of an undergraduate nursing program. Third, the study’s treatment groups were small and uneven. Therefore, generalizations cannot
be made to other nursing programs, to other educational institutions, or to larger populations.

3. In regards to the study’s first research question (Are undergraduate nursing students’ physical assessment skills enhanced when peers or SPs are used in learning how to complete a physical assessment?), the researcher was not able to determine if the study participants’ final skills validation performances were solely dependent and reflective of what the participants learned and practiced during the study. Final validations took place several days after the study. Study participants had the opportunity to practice their physical assessment skills during other practice lab sessions and also outside of the classroom setting with fellow peers. It is unknown how much additional practice time students completed before their final skills validation. Therefore, the study participants’ final skills validation scores may not be solely reflective of what was learned during the study’s practice lab session.

4. Due to time, cost, and resource constraints, study participants were not able to participate in both treatment experiences. It would have been ideal for study participants to complete a pre-survey, participate in practice sessions with both a peer and a SP, and then complete a post-survey following their experiences. This would have allowed for a more accurate assessment of how each treatment enhanced the study participants’ perceptions of their own clinical judgment, self-efficacy, and growth overall.

5. The study used self-reported surveys to collect data and the study’s surveys did not contain an area for narrative responses. Although the researcher heard
wonderful verbal feedback from the study’s participants on the day of the study, there was no place for the study participants to write these comments on their surveys. This verbal feedback therefore, could not be included in the study’s results.

6. The cost of using SPs in education is high. The hiring and payment of the SPs used during the research study did provide a limitation for the researcher. SPs were paid for time, travel, and parking. Payment for each SP ranged from $100-$110. A research grant was obtained to provide the researcher with financial support in order to complete the study. Replication of this study would require future researchers to obtain some sort of financial assistance as well. Financial implications could also impact the ability of education institutions to utilize SPs on a regular basis.

**Recommendations for Further Research**

Further research is needed and must be replicated to further examine the benefits of peers or SPs as a method to enhance undergraduate nursing students’ physical assessment skills, perceptions of their own clinical judgment and self-efficacy, as well as their use in decreasing student anxieties and improving therapeutic communication skills. Research regarding the use of SPs in other areas of nursing education and general education would also be beneficial. For future research, it is recommended that the study be replicated in a larger and randomized sample population. In addition, assignment of study participants to treatment groups should be completed on the day of the research study to ensure treatment groups are of equal number. It is also recommended that the research be completed in several different undergraduate nursing programs (varying in
size and location) to further improve generalizability of the study results. The researcher also recommends that study participants participate in both treatment groups (a peer practice session and a SP practice session) and complete a pre and post survey to better compare the effectiveness of each treatment. Finally, for future research, it would be recommended that the study’s surveys include an area for narrative responses to further uncover study participants’ feelings, ideas, and thoughts. The layout of the surveys used for this study did not allow for such responses.

**Summary**

This study examined whether peers or SPs enhanced undergraduate nursing students’ physical assessment skills and their own perceptions of their clinical judgment and self-efficacy when learning to complete a physical assessment. This study did not yield results that validated SPs over peers as an educational strategy. Rather, results of this study validated both peers and SPs as beneficial learning strategies specifically in learning physical assessment skills, and undergraduate nursing students’ perceptions of their own clinical judgment and self-efficacy as they learn the skill of the physical assessment. Further research is needed however, as other researchers have found SPs to be a better method for increasing self-efficacy, improving clinical judgment, decreasing anxiety, and improving therapeutic communication skills (Slater et. al, 2016). To improve nursing education and to successfully prepare nurses for the challenges healthcare continues to face, it would be beneficial for researchers to further examine the use of SPs as a method to enhance undergraduate nursing students’ physical assessment skills, perceptions of their own clinical judgment and self-efficacy, as well as their use in other areas of nursing education.
References


Appendix A: Demographic Information Questionnaire

**Instructions:** Please circle the choice that best fits your personal demographic information.

1. What is your gender?
   a. Male
   b. Female

2. What is your age?
   a. 20 years of age or younger
   b. 21-25 years of age
   c. 26-30 years of age
   d. 31 years of age or older

1. Please specify your ethnicity.
   a. White or Caucasian
   b. Hispanic or Latino
   c. Black or African American
   d. Asian or Pacific Islander
   e. Other

2. Are you a traditional (first degree of study) or non-traditional student (hold another degree)?
   a. Traditional
   b. Non-traditional
### Appendix B: Lasater Clinical Judgment Rubric Survey

**Instructions:** This is a self-assessment. Please circle the response (exemplary, accomplished, developing, or beginning) for each dimension (topics in columns on the left) that best describes your own feelings regarding your clinical judgment in regards to your physical assessment abilities.

#### Lasater Clinical Judgment Rubric

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Exemplary (4)</th>
<th>Accomplished (3)</th>
<th>Developing (2)</th>
<th>Beginning (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effective Noticing</strong>&lt;br&gt;<strong>Involves:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Focused observation</td>
<td>Focusses observations appropriately; Regularly observes and monitors a wide variety of objective and subjective data to uncover any useful information</td>
<td>Regularly observes and monitors a variety of data, including both subjective and objective; most useful information is noticed; may miss the most subtle signs</td>
<td>Attempts to monitor a variety of subjective and objective data but are overwhelmed by the array of data; focuses on the most obvious data, missing some important information</td>
<td>Confused by the clinical situation and the amount and kind of data; observations are not organized and important data is missed, and/or assessment errors are made</td>
</tr>
<tr>
<td>Recognizing deviations from expected patterns</td>
<td>Recognizes subtle patterns and deviations from expected patterns in data and uses these to guide the assessment</td>
<td>Recognizes the most obvious patterns and deviations in data and uses these to continually assess</td>
<td>Identifies obvious patterns and deviations, missing some important information; Unsure how to continue the assessment</td>
<td>Focuses on one thing at a time and misses most patterns and deviations from expectations; misses opportunities to refine the assessment</td>
</tr>
<tr>
<td>Information seeking</td>
<td>Assertively seeks information to plan intervention: carefully collects useful subjective data from observing and interacting with the patient and family</td>
<td>Actively seeks subjective information about the patient’s situation from the patient and family to support planning interventions; occasionally does not pursue important leads</td>
<td>Makes limited efforts to seek additional information from the patient and family; Often seems not to know what information to seek and/or pursues unrelated information</td>
<td>Ineffective in seeking information; relies mostly on objective data; has difficulty interacting with the patient and family and fails to collect important subjective data</td>
</tr>
<tr>
<td><strong>Effective interpreting</strong>&lt;br&gt;<strong>Involves:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prioritizing data</td>
<td>Focuses on the most relevant and important data useful for explaining the patient’s condition</td>
<td>Generally focuses on the most important data and seeks further relevant information, but also tries to attend to less pertinent data</td>
<td>Makes an effort to prioritize data and focuses on the most important, but also attends to less relevant or useful data</td>
<td>Has difficulty focusing and appears not to know which data is most important to the diagnosis; attempts to attend to all available data</td>
</tr>
<tr>
<td>Making sense of data</td>
<td>Even when facing complex, conflicting, or confusing data, is able to (a) note and make sense of patterns in the patient’s data, (b) compare these with known patterns (from the nursing knowledge base, research, personal experience, and intuition), and (c) develop plans for interventions that can be justified in terms of their likelihood of success</td>
<td>In most situations, interprets the patient’s data patterns and compares with known patterns to develop an intervention plan and accompanying rationale; the exceptions are rare or in complicated cases where it is appropriate to seek the guidance of a specialist or a more experienced nurse</td>
<td>In simple, common, or familiar situations, is able to compare the patient’s data patterns with those known and to develop or explain intervention plans; has difficulty, however, with even moderately difficult data or situations that are within the expectations of students; inappropriately requires advice or assistance</td>
<td>Even in simple, common, or familiar situations, has difficulty interpreting or making sense of data; has trouble distinguishing among competing explanations and appropriate interventions, requires assistance both in diagnosing the problem and developing an intervention</td>
</tr>
</tbody>
</table>
### Effective responding involves:

<table>
<thead>
<tr>
<th>Calm, confident manner</th>
<th>Assumes responsibility; delegates team assignments; assesses patients and reassures them and their families</th>
<th>Generally displays leadership and confidence and is able to control or calm most situations; may show stress in particularly difficult or complex situations</th>
<th>Tentative in the leader role; reassures patients and families in routine and relatively simple situations, but becomes stressed and disorganized easily</th>
<th>Except in simple and routine situations, is stressed and disorganized, lacks control, makes patients and families anxious or less able to cooperate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear communication</td>
<td>Communicates effectively; explains interventions; calms and reassures patients and families; directs and involves team members, explains and gives directions; checks for understanding</td>
<td>Generally communicates well; explains carefully to patients; gives clear directions to team; could be more effective in establishing rapport</td>
<td>Show some communication ability (e.g., giving directions); communication with patients, families, and team members is only partly successful; displays caring, but not competence</td>
<td>Has difficulty communicating; explanations are confusing; directions are unclear or contradictory; patients and families are made confused or anxious and are not reassured</td>
</tr>
<tr>
<td>Well-planned intervention/flexibility</td>
<td>Interventions are tailored for the individual patient; Monitors patient progress closely and is able to adjust treatment as indicated by patient response</td>
<td>Develops interventions on the basis of relevant patient data; monitors progress regularly, but does not expect to have to change treatments</td>
<td>Develops interventions on the basis of the most obvious data; monitors progress, but is unable to make adjustments as indicated by the patient’s response</td>
<td>Focuses on developing a single intervention, addresses a likely solution, but may be vague, confusing, and/or incomplete; some monitoring may occur</td>
</tr>
<tr>
<td>Being skillful</td>
<td>Shows mastery of necessary nursing skills</td>
<td>Displays proficiency in the use of most nursing skills; could improve speed or accuracy</td>
<td>Is hesitant or ineffective in using nursing skills</td>
<td>Is unable to select and/or perform nursing skills</td>
</tr>
</tbody>
</table>

### Effective reflecting involves:

<table>
<thead>
<tr>
<th>Evaluation/self-analysis</th>
<th>Independently evaluates and analyzes personal clinical performance, notes decision points, elaborates alternatives, and accurately evaluates choices against alternatives</th>
<th>Evaluates and analyzes personal clinical performance with minimal prompting, primarily about major events or decisions; key decision points are identified, and alternatives are considered</th>
<th>Even when prompted, briefly verbalizes the most obvious evaluations; has difficulty imagining alternative choices; is self-protective in evaluating personal choices</th>
<th>Even prompted evaluations are brief, cursory, and not used to improve performance; justifies personal decisions and choices without evaluating them</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commitment to improvement</td>
<td>Demonstrates commitment to ongoing improvement; reflects on and critically evaluates nursing experiences; accurately identifies strengths and weaknesses and develops specific plans to eliminate weaknesses</td>
<td>Demonstrates a desire to improve nursing performance; reflects on and evaluates experiences; identifies strengths and weaknesses; could be more systematic in evaluating weaknesses</td>
<td>Demonstrates awareness of the need for ongoing improvement and makes some effort to learn from experience and improves performance, but tends to state the obvious and needs external evaluation</td>
<td>Appears uninterested in improving performance or is unable to do so; rarely reflects; is uncritical of himself or herself or overly critical (given level of development); is unable to see flaws or need for improvement</td>
</tr>
</tbody>
</table>

Appendix C: NLN’s Student Satisfaction and Self-Confidence in Learning Survey

Student Satisfaction and Self-Confidence in Learning

Instructions: This questionnaire is a series of statements about your personal attitudes. Each item represents a statement about your attitude toward your satisfaction with learning and self-confidence in obtaining the instruction you need. There are no right or wrong answers. You will probably agree with some of the statements and disagree with others. Please indicate your own personal feelings about each statement below by marking the numbers that best describe your attitude or beliefs. Please be truthful and describe your attitude as it really is, not what you would like for it to be.

Mark:
1 = STRONGLY DISAGREE with the statement
2 = DISAGREE with the statement
3 = UNDECIDED - you neither agree or disagree with the statement
4 = AGREE with the statement
5 = STRONGLY AGREE with the statement

<table>
<thead>
<tr>
<th>Satisfaction with Current Learning</th>
<th>S</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>S</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The teaching methods used in this simulation were helpful and effective.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. The simulation provided me with a variety of learning materials and activities to promote my learning the medical surgical curriculum.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3. I enjoyed how my instructor taught the simulation.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4. The teaching materials used in this simulation were motivating and helped me to learn.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5. The way my instructor(s) taught the simulation was suitable to the way I learn.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Self-confidence in Learning</th>
<th>S</th>
<th>D</th>
<th>U</th>
<th>A</th>
<th>S</th>
<th>A</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. I am confident that I am mastering the content of the simulation activity that my instructors presented to me.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7. I am confident that this simulation covered critical content necessary for the mastery of medical surgical curriculum.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8. I am confident that I am developing the skills and obtaining the required knowledge from this simulation to perform necessary tasks in a clinical setting</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>9. My instructors used helpful resources to teach the simulation.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10. It is my responsibility as the student to learn what I need to know from this simulation activity.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>11. I know how to get help when I do not understand the concepts covered in the simulation.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>12. I know how to use simulation activities to learn critical aspects of these skills.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>13. It is the instructor’s responsibility to tell me what I need to learn of the simulation activity content during class time.</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

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Appendix D: IRB Approval Letter

South Dakota State University

To: Allison Mueller, College of Nursing
Date: February 6, 2017

Project Title: The Impact of Standardized Patients on Physical Assessment Skills, Clinical Judgement, and Self-Efficacy in Undergraduate Nursing Students

Approval #: IRB-1702002-EXM

Thank you for bringing your project to the Human Subjects Committee. Your project is approved as exempt from the Common Rule because it fits the following category (from 45 CFR 46.101 (b)):

(2) Research involving the use of educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior, unless:
(i) information obtained is recorded in such a manner that human subjects can be identified, directly or through identifiers linked to the subjects; and (ii) any disclosure of the human subjects' responses outside the research could reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, or reputation.

If there are any unanticipated problems involving risks to subjects or others or changes in procedures during the study, please contact the SDSU Research Compliance Coordinator. At the end of the project please inform the committee that your project is complete.

If I can be of any assistance, don't hesitate to let me know.

Sincerely,

Dianne Nagy
Acting IRB Coordinator
Appendix E: Participant Letter

Dear Potential Participant,

I am writing to formally invite you to participate in the research study entitled: *The Impact of Standardized Patients on Physical Assessment Skills, Clinical Judgment, and Self-Efficacy in Undergraduate Nursing Students*. This study is being conducted as partial fulfillment of the requirements for a master’s degree with emphasis in nursing education from South Dakota State University. The purpose of this study is to evaluate students’ perceptions of standardized patient use in acquiring physical assessment skills, developing clinical judgment, and improving self-efficacy.

You were selected as a possible participant in this study as a result of your current enrollment in South Dakota State University’s Undergraduate College of Nursing; specifically, in the program’s first semester health assessment course.

Your participation in this study is completely voluntary. There are no known risks if you decide to participate in this research study. There are no costs to you for participating in the study. By agreeing to participate in this study, you will provide valuable feedback for nurse educators in further curriculum planning for undergraduate nursing students. You have the right to withdraw from this study at any time.

Data obtained during this study will remain anonymous. If results from this study are published, complete anonymity will be upheld. By signing the attached consent form, you are agreeing to participate in this study. Your participation is greatly appreciated.

Sincerely,
Allison Mueller

If you have any questions about the study, please contact:

Allison Mueller, BSN, RN, PCCN
Master’s Student
1436 S. Point Drive
Sioux Falls SD 57103
allison.mueller@jacks.sdstate.edu
605-261-7173

Heidi Mennenga, PhD, RN
Assistant Professor
College of Nursing
South Dakota State University
SWG 313, Box 2275
Brookings SD 57007
heidi.mennenga@sdstate.edu
605-688-6924
Appendix F: Consent Form

The Impact of Standardized Patients on Physical Assessment Skills, Clinical Judgment, and Self-Efficacy in Undergraduate Nursing Students

Statement of Consent: I have read the information enclosed in the participant letter and have received answers to my questions. I consent to participating in the study.

Your Name Printed: ________________________________
Your Signature: ________________________________
Date: ______________

Statement of Consent: I consent to the release of my final physical assessment skill validation score to this researcher.

Your Name Printed: ________________________________
Your Signature: ________________________________
Date: ______________
Appendix G: Hospital Assessment Skills Validation

N258: Nursing Principles & Application I: Assessment & Interventions

Hospital Assessment Skills Validation

If a score of 19 is not earned the skills validation will need to be repeated. The maximum score for a repeated skills validation is 19.

Skills validation needs to be completed within 30 minutes.
Bring a copy of this form to your skills validation.

Name:___________________________  Score:____________/25

Scenario: Patient is a direct admit from the clinic to the medical floor with a diagnosis of pneumonia.

<table>
<thead>
<tr>
<th></th>
<th>Pts</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Professionalism, not limited to professional dress (scrubs, name tag, hair pulled back if applicable).</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>2. Wash hands, introduce self, identify patient (2 forms). Provide privacy.</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>3. Identify patient’s chief complaint while assisting patient into gown. Elevate HOB.</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>4. Obtain a complete set of vitals:</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>a. Temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Pulse rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Respiratory rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Blood pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Pain rating</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Oxygen saturation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Discuss VS findings with patient (identify abnormal findings). State normal range of oxygen saturation; explain that oxygen therapy is needed.</td>
<td>.5</td>
<td></td>
</tr>
<tr>
<td>6. Assemble flowmeter and apply oxygen. (Use NC at this point). (Verbalize when its use is appropriate).</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>ASSESSMENT</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Mental status: alert, orientated.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>8. Skin:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>a. Inspection: color.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Palpation: temperature, condition, turgor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Respiratory:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>a. Inspection: rhythm, ease of respiration, chest expansion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Auscultation: lung sounds.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Note any cough, describe if applicable.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Cardiac:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>a. Auscultation: rhythm, heart sounds.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Palpation: capillary refill, edema.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Abdomen:</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>a. Inspection: contour.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Auscultation: bowel sounds.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Palpation: light.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Passing flatus? Last BM? Denies nausea, vomiting, diarrhea, constipation?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Pulses: radial, posterior tibialis, dorsalis pedis.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>13. <strong>MS/mobility:</strong> moves all extremities, toleration of activity (both are observed when bring patient into room &amp; assist with gown).</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>14. <strong>Neuro:</strong> gait (observe when bring patient into room), speech clear, follows commands.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Critical thinking</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Check physician orders for oxygen order.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>16. Reassess patient as needed</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
| 17. Demonstrate how to apply the following devices and when each would be appropriate:  
  a. Simple face mask  
  b. Non-rebreather mask | 2 |
| 18. **Safety:** Bed in low position, brakes on, top side rails up, call light within reach. | .5 |
| 19. Documentation in Neehr Perfect. | 2.5 |
Appendix H: Patient Scenarios

Patient Scenario A

For Student:

Your patient was admitted to the cardiopulmonary unit for shortness of breath and heart palpitations. The patient presented to the ER after experiencing shortness of breath and chest palpitations while using the bathroom early this morning. It’s noted the patient had a left total knee replacement 4 days ago.

For SP:

Report given to nurse: Your patient was admitted to the cardiopulmonary unit from the ER. The patient presented to the ER after experiencing shortness of breath and chest palpitations while using the bathroom early this morning. It’s noted the patient had a left total knee replacement 4 days ago.

Chief complaint: Shortness of breath, chest palpitations; “I got up to go to bathroom early this morning and when I was walking back to my room, I suddenly became more short of breath and felt like my heart was skipping a beat and pounding in my chest. It was very scary. I have never felt anything like that before”

Vitals: Pain rating of 4/10 in left knee, describe as an aching pain

Mental Status: Alert and oriented to person, place, and time

Respiratory: Complain of shortness of breath and a loose congested cough at times; white sputum

Cardiac: Deny chest pain, but complain of palpitations; “It still feels like my heart is skipping a beat every once in awhile”

Abdominal: Deny abdominal pain, but complain of feeling slightly bloated; passing gas; last bowel movement 3 days ago; “I am feeling constipated after surgery. Probably the pain meds”; no complaints of nausea or vomiting

MS/Mobility: Limp to left lower extremity related to knee surgery; unable to extend knee out completely straight; able to tolerate slight activity; state “I use a walker if I am going to be walking for a long period of time, especially outside of my house”

Neuro: Follow commands appropriately; clear speech; alert and oriented
Patient Scenario B

**For Student:**

Your patient was admitted to the surgical unit for right lower quadrant abdominal pain and fever for the past 24 hours. The patient was admitted following an exam by his primary physician at the clinic this afternoon.

**For SP:**

**Report given to nurse:** The patient was admitted to your unit after complaining of right lower quadrant abdominal pain and fever for the past 24 hours. The patient was admitted following an exam by his primary physician at the clinic this afternoon.

**Chief complaint:** Right lower quadrant abdominal pain and fever for the past 24 hours; “I started experiencing intense and sharp pain in my abdomen yesterday. It started at my belly button, but now hurts down lower and on the right side. I have also had fevers that have gotten as high as 101.0 degrees”

**Vitals:** Pain rating is 9/10 in the right lower quadrant area of the abdomen; describe as a sharp and very intense pain; “It takes my breath away”

**Mental Status:** Alert and oriented to person, place, and time

**Respiratory:** “Sometimes the pain takes my breath away”; deny cough or sputum production

**Cardiac:** No chest pain or palpitations

**Abdominal:** Complain of sharp and intense abdominal pain, especially in the right lower quadrant area of the abdomen; remain extremely guarded; wince with pain if abdomen palpated; last bowel movement yesterday; poor appetite with nausea; no vomiting yet

**MS/Mobility:** Unable to stand straight due to pain.

**Neuro:** Follow commands appropriately; clear speech; alert and oriented
Appendix I: Lasater Permission Notice

From: Kathie Lasater lasaterk@ohsu.edu
Subject: RE: Lasater Clinical Judgment Rubric
Date: January 26, 2017 at 5:47 PM
To: Mueller, Allison Kathleen - SDSU Student allison.mueller@jacks.sdstate.edu

Allison,

I’m so very sorry I missed replying to you—I did indeed get your email and reflected on my experience of visiting SDSU and receiving a presentation award from them a few years back. We’ve had some major snow and ice in the past couple of weeks that was very distracting—we don’t get very much normally, but this brought Portland and the metro area to a standstill! Here is the information I send those who ask permission:

Thank you for your interest in the Lasater Clinical Judgment Rubric (LCJR). You have my permission to use the tool for your project. I ask that you (1) cite it correctly, and (2) send me a paragraph or two to let me know a bit about your project when you’ve completed it, including how you used the LCJR. In this way, I can help guide others who may wish to use it. Please let me know if it would be helpful to have an electronic copy.

You should also be aware that the LCJR describes four aspects of the Tanner Model of Clinical Judgment—Noticing, Interpreting, Responding, and Reflecting—and as such, does not measure clinical judgment because clinical judgment involves much of what the individual student/nurse brings to the unique patient situation (see Tanner, 2006 article). We know there are many other factors that impact clinical judgment in the moment, many of which are impacted by the context of care and the needs of the particular patient.

The LCJR was designed as an instrument to describe the trajectory of students’ clinical judgment development over the length of their program. The purposes were to offer a common language between students, faculty, and preceptors in order to talk about students’ thinking and to serve as a help for offering formative guidance and feedback (See Lasater, 2007; Lasater, 2011). For measurement purposes, the rubric appears to be most useful with multiple opportunities for clinical judgment vs. one point/patient in time.

I’m very excited to hear more about your project. Let me know if I can be of help.

Best, Kathie

Kathie Lasater, EdD, RN, ANEF, FAAN
Professor, OHSU School of Nursing
3455 SW Veterans’ Hospital Rd., SN-4S
Portland, OR 97239; (503)494-8325

Kathie Lasater is also Assistant Editor of Nurse Education Today
http://www.nurseeducationtoday.com
Appendix J: NLN Permission Notice for Research Tools and Instruments

Permission for non-commercial use of surveys and research instruments (includes, theses, dissertations, and DNP projects) is granted free of charge. Available instruments may be downloaded and used by individual researchers for non-commercial use only with the retention of the NLN copyright statement. The researcher does not need to contact the NLN for specific permission. In granting permission for non-commercial use, it is understood that the following caveats will be respected by the researcher:

1. It is the sole responsibility of the researcher to determine whether the NLN research instrument is appropriate to her or his particular study.
2. Modifications to a survey/instrument may affect the reliability and/or validity of results. Any modifications made to a survey/instrument are the sole responsibility of the researcher.

When published or printed, any research findings produced using an NLN survey/instrument must be properly cited. If the content of the NLN survey/instrument was modified in any way, this must also be clearly indicated in the text, footnotes and endnotes of all materials where findings are published or printed.