

2021

## Effect of Video Recording and Self-Reflection on Skill Acquisition in Nursing Students

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*Walden University*

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# Walden University

College of Health Professions

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Lisa Aloy

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Walden University  
2021

Abstract

Effect of Video Recording and Self-Reflection on Skill Acquisition in Nursing Students

by

Lisa Aloy

MSN, Western Governors University, 2012

BSN, Western Governors University, 2014

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Nursing Education

Walden University

August 2021

## Abstract

Applications to nursing programs have grown at exponential rates causing a shortfall of clinical locations and lack of available clinical experiences. This negatively affects nursing students' access to bedside patient care, affecting nursing students' ability to safely learn and practice basic nursing skills. Nurse educators need to create robust learning experiences for students to learn basics nursing skills and gain confidence and competence in these skills. Video recording in nursing education is an underutilized teaching method that supports various aspects in student learning of skill acquisition. The purpose of this study was to explore Associate Degree Nursing (ADN) nursing student's perceptions of their confidence and competency following a simulated video recorded and self-reflection in nursing skills practice. Miller's assessment of clinical skills guided the qualitative, phenomenological interpretative design used to explore the lived experiences of nursing students undergoing video recording while engaging in a basic-nursing skill learning activity. Data collected from ten second semester nursing students were manually coded and analyzed; two themes emerged: lacking confidence and knowledge and feeling confident and knowledgeable. Quantitative studies are needed to explore differences in competence and confidence for students who participate in video recording and self-reflection compared to students who do not participate in this experience. The results of this study can be used by educators to design recorded simulated learning activities to help students develop confidence, safety, and security in their learning and provide more robust learning experiences for the nursing students leading to learning experiences that promote a positive social change.

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## Dedication

I dedicate this document first to my father, Dr. Guy Montalbano who served as my role model in life and of his love of science and learning. I dedicate document to my daughters, Noelle, and Brooke, who both unconditionally supported my journey to become a registered nurse and then continued to support and encourage me to become nurse researcher/educator. Lastly, I also thank all of my countless friends, colleagues, and students that have challenged me to grow and supported me along my journey. Thank you all from the bottom of my heart.

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## Chapter 1: Introduction to the Study

According to the American Association of Colleges of Nursing (AACN, 2014), enrollment in nursing programs has grown at exponential rates over the past years. Entry-level nursing programs have increased 5-10 % in enrollment to congested nursing programs (AACN, 2014). With higher enrollment rates in nursing programs, there has been a greater demand placed on hospitals for clinical site placement (National League for Nurses [NLN], 2016). The NLN Annual Summary of Nursing Schools Executive Summary and the Biannual Survey of Schools of Nursing reported continual shortages of clinical placement settings, thus creating competition for coveted clinical assignments and limited student learning opportunities (NLN, 2018). According to the NLN biannual survey, congested nursing programs and agencies are a predominant obstacle to sufficient clinical placement (NLN, 2018). Furthermore, in an executive summary, NLN (2018) found that since 2010 associate degree nursing (ADN) and practical nursing (PN) programs have seen an increase in clinical sites shortages. These clinical shortages create competition among nursing programs and students alike. Hospital educators and nurse faculty report student saturation in the clinical setting with many agencies stating they outpaced the availability of clinical agencies (Copeland, 2020).

The shortfall of clinical locations and lack of available clinical experiences also affects the development of confidence and competence in student learning. *Competency* can be defined as possessing knowledge, skills, and attitudes that enable the providing of quality care, appropriate behaviors, and sound clinical judgement (Zieber & Sedgewick,

2018). To overcome this deficit, Haraldseid et al. (2015) stated the necessity for creating student education in nursing simulation laboratories as part of required nursing curriculum. (Haraldseid et al., 2015).

In addition to creation of clinical nursing laboratories, the use of video recording has more recently been introduced to simulated learning environments to enrich student learning and self-evaluation (Bussard, 2016). *Simulation* in nursing education is defined as a pedagogical tool to validate and improve the participants' trajectory in skill acquisition (Bussard, 2016). Simulated learning interventions provide nursing students the practice to learn complex nursing skills and develop feelings of confidence and competence (Lundberg, 2008). The concept of *self-confidence* encompasses almost every aspect of an individual's identity; the ability to think, perceive, and function and in the educational realms and can serve as a motivational force in learning (Lundberg, 2008). In this chapter, I discuss the background, problem statement, purpose of the research, theoretical framework, nature of the study, and significance of the study.

### **Background**

In 2018, the NLN's Survey of Schools of Nursing identified that up to 38% of ADN turned away qualified nursing applicants. In their study, the NLN revealed the top three barriers to expanding ADN nursing programs were lack of clinical placement 50%, lack of faculty 25%, and lack of classroom space at 10% (NLN, 2018). Likewise, McNelis et al. (2011) stated the lack of quality clinical sites as one of the top five barriers that students face when entering nursing as a profession.

Clinical learning experiences are vital to the student nurse in development of critical thinking and learned clinical experiences. They provide opportunities for students to learn experimentally and to have experience to apply the theoretical knowledge clinically (Jamshidi et al., 2016). Students' lack of clinical experience and skills can be a basis for feelings of vulnerability, anxiety, and reduced student satisfaction in the experience. In extreme cases, students have reported suffering from inferiority complexes as a result of their experience (Jamshidi et al., 2016). The clinical experience is not only mandatory for licensure but is also as an essential component of nursing curriculum (Kaldal et al., 2018)

When clinical learning experiences are unavailable, alternative learning modalities are required to provide opportunities for nursing students to master basic nursing skills (Quinn & McAuliffe, 2019). The development of simulated learning environments are designed to emulate real-life situations to demonstrate a deeper level of learning and understanding (Doody & Condon, 2013). Simulated learning has been used in aviation, the military, and even medicine for the past 20 years, and in more recent years in nursing (Aebersold & Tschannen, 2013).

Simulations and skills practice are used in nursing to expose nursing students to different experiences to facilitate learning in a nonthreatening environment without the risk of patient harm (Evans et al., 2015). With the development of simulation labs to enrich student learning and providing practice in nursing skill acquisition, Strand et al. (2017) explored video recorded and self-reflection in the learning of clinical skill

acquisition in a simulated laboratory. Strand found that nursing students had positive reactions and feelings towards the use of video recording as a learning modality for skill acquisition. The participating students reported after the experience that integrating video recording in skill acquisition was a useful tool in learning and assessing cognitive awareness. The implementation of video recording allows both the educator and the student to view and rereview the performance of the skill (Strand et al., 2017).

Video recording in nursing education is an underutilized teaching method that supports various aspects in student learning of skill acquisition, as it promotes a methodology to visualize and reflect on ones' performance (Zhang et al., 2020). Video recording directly creates opportunities for nursing students to learn, practice, and demonstrate newly learned skills (DeBorough & Prion, 2017). Other student centered benefits to the use of video recording in nursing education include an increase in self-assessment, meaningful learning activities, and student engagement (Strand et al., 2017).

Thus far, most of the body of evidence has focused primarily on high fidelity or high-stake stimulations. High fidelity simulation is a learning modality used in simulation labs where students can participate in real life scenarios in a controlled environment either using a simulator, such as sim man or a live actor (Lewis et al., 2012). Low fidelity simulation is described as simulated experiences that utilize role play, noncomputerized mannequins or task trainers (Aebersold & Tschannen, 2013). Low fidelity simulation is beneficial when looking to evaluate less complex involved scenarios (Rystedt & Lindström, 2001).



The shortfall of clinical locations and lack of available clinical experiences also affect the development of confidence and competence in student learning. *Competency* one's ability to apply knowledge and skills learned and translate it into clinical practice (Zieber & Sedgewick, 2018). To overcome this deficit, Haraldseid et al. (2015) stated the necessity for creating student training in nursing simulation laboratories as part of required nursing curriculum. In addition to creation of clinical nursing laboratories, the use of video recording has more recently been introduced to simulated learning environments to enrich student learning and self-evaluation (Bussard, 2016). Bussard defined *simulation* in nursing education as a pedagogical tool to validate and improve the participants' trajectory in skill acquisition (Bussard, 2016). Simulated learning interventions provide nursing students the practice to learn complex nursing skills and develop feelings of confidence and competence (Lundberg, 2008). This study is important to nursing education because it contributed to the current body of literature in establishing alternative learning strategies to aid nursing students gain clinical skill acquisition when clinical opportunities are limited.

### **Problem Statement**

For the third year in a row, *Psychology Today* recommended nursing in the top 100 Best Jobs (Riggerio, 2019). The AACN reports that nursing school in the United States turned away more than 64,000 qualified applicants due to factors such as insufficient number of nursing faculty, clinical sites, classroom space, preceptors, and budgetary constraints (Rosseter, 2017). In investigating possible causes of the overflow

of applications of perspective nursing students, the NLN biannual report stated that 50% of nursing schools report lack of clinical placement as the main barrier to expanding their nursing programs. An additional 25% reported lack of faculty, 10% report lack of classroom space, and 15% accounts for other causes as barriers to expand nursing programs (NLN, 2018).

Clinical skill acquisition and clinical preparation are the cornerstone of nursing practice (De et al., 2016). The clinical environment allows the student to safely apply the theoretical and didactic knowledge learned in the classroom, providing real life opportunities to apply to actual clinical practice. The rationale is for the student to gain knowledge, confidence, and competence in the skill. Quinn and McAuliffe (2019) reported that changes in hospital admissions and shortages in clinical sites have created challenges for nursing students to obtain the necessary clinical experiences to meet their student learning objectives. According to the NLN 2018 Biennial Survey of Schools, lack of clinical placement contributed to main obstacles in admitting students to ADN programs (NLN, 2018). This contributes to the decline in student clinical skill acquisition, with a shift from a clinical focus to a more academic, lack of trained instructors, and clinical locales (Meechan et al., 2011).

The high demand and competition in clinical assignments and patient selection clinically diminish nursing students' opportunities to learn clinically and practice basic nursing skills at the bedside. Low fidelity simulation and the use of video recording is a learning modality that allows nursing students to learn experimentally and review and

reflect on their performance and their learning. The development of simulated learning environments is designed to emulate real-life situations to demonstrate a deeper level of learning and understanding. The current body of literature is saturated with studies examining high fidelity simulation and video recording. To date, there is little evidence to explore low fidelity simulation and the benefits to student learning basic skills acquisition. Upon examining the literature using the search terms that include nursing student, low fidelity simulation, and video recording, only two results were yielded. The first article, Goodstone et al. (2013) examined the differences in critical thinking of students participating in high fidelity simulation versus low fidelity simulation, using a case study. The findings suggest that both groups of students demonstrated an increased level of critical thinking. Due to the qualitative nature of the study, statistical data were unavailable. In the second article, Wilbeck et al. (2014), evaluated nurse practitioner's competency in a simulated precipitous delivery. A multimodal approach for this study included assigned readings, skills videos, lecture, practice with models, simulation (high and low fidelity) simulation, and debriefing to evaluate the student's confidence and competence in the care of this patient situation safely. Prior to the simulated event, up to 67% of the participants felt either not confident at all or not very confident in their role, versus after the simulation, students reported up to 96% felt either somewhat confident or very confident. Modifications for future research includes smaller group size, and varied settings and types of healthcare providers. The use of video recording as a tool in which the student view and review the performance and the reflection of how the low fidelity

simulation contributed to the student's feelings of confidence and competence in their performance are not addressed in the articles reviewed, nor in the literature.

This study helped fill the gap in understanding how the use of low fidelity simulation, video recording, and self-reflection affects confidence, and competence in learning of basic nursing skill acquisition. The nursing students reflected on the quality of their performance and the extent to which the activities affected their confidence and competence of the learned skill.

### **Purpose of study**

The purpose of this study was to explore ADN nursing students' perceptions of their confidence and competency following a simulated video recorded and self-reflection in nursing skills practice. A qualitative, phenomenological, interpretative design was used with videotaped skill practice with self-reflection on the quality of their performance and how the activity affected their confidence and competence of the skill.

### **Research Question**

What are the lived experiences of nursing students undergoing video recording while engaging in a basic nursing skill learning activity?

### **Theoretical Framework**

The use of evidence-based practice in nursing research advances evidence based care and improves outcomes for patients, families, providers and the health care system in general (Grove et al., 2021). To support student skill acquisition and confidence and

competence, Dr. George Miller's assessment of clinical skills/competence/performance was chosen as the theoretical frameworks to guide the research (Miller, 1990).

Miller's Assessment of clinical skills theory was appropriate for my area of interest, which focuses the learning of clinical skills and demonstrating competence of said skills. Miller defines *competence* as having adequate knowledge, judgement, or strength of a skills or task (Miller, 1990). Miller's theory is depicted as a pyramid in which the base depicts knowledge what the student "knows." The next level from the bottom is the "knows how" stage. In this stage, competence emerges. The next level is the "shows how" stage or the performance stage. The top of the pyramid is the "does" phase. At this level, the student would be proficient in the skill.

In applying Miller's theory to my study, skill acquisition begins at "knows" stage. Here the nursing students will have didactic knowledge and understanding of the skill. At this level, the student has learned and "knows" what is required to carry out the learned skill. Miller contended that simply knowing how a task is completed does not demonstrate competence (Miller, 1990). To guide learning, the student must transition from the "knowing" stage and progress to the "knows how" stage. At this level, the student has gained a deeper knowledge and understanding of the skill. During the "know how" stage the student begins developing competence by analyzing, practicing, and interpreting the concepts being learned. The student will progress to the next level, the "shows how" level. The shows how level is achieved when the student has demonstrated competency in the "knows", "knows how", and "shows how" stages. The last phase of

Miller's learning theory is the "does" phase when the students is able to complete the task in at competent and confident level. The base of Miller's framework, knowledge or knowing serves as the foundation of this theory. Once the student "knows how" the skill preformed, Miller believes the next step in the learning dent to trajectory is for the student to demonstrate competency in the skill. Miller's "shows how" allows the student to perform the task to demonstrate not only do they understand the skill and the corresponding rationales, but can accurately, competently preform the task (Miller, 1990). The "knows," "knows how," and "shows how" levels of Miller's theory relate to my research as student learning, skill acquisition, confidence, and competence are its foundation.

### **Nature of the study**

The nature of this study was a qualitative, phenomenological design. I used a phenomenological approach in exploring ADN nursing student's perception of video recording and self-reflection in basic skill acquisition. In phenomenological research, the aim is to understand the lived experience (Patton, 2015). The goal of the researcher was describe the experiences of participants who have all had the same experiences (Creswell, 2018). The understanding of nursing student's experiences, values, and unique viewpoints provides a rich opportunity to measure the effect of the video recorded self-reflective process (McEwen et al., 2019). For this research study, this was accomplished by allowing students watch video-recorded simulation of learned skills to evaluate competence in skill mastery and evaluate their feelings of confidence in the ability to

perform the skill in practice via interviews. Qualitative studies are those where data is expressed in words, focuses on subjectivity, explores meaning and description and analyzes text (Rudestam & Newton, 2015).

### **Definitions**

*Simulation:* A pedagogical tool to validate and improve the participants' trajectory in skill acquisition (Bussard, 2016).

*Confidence:* One's ability to apply knowledge and skills learned and translate it into clinical practice (Zieber & Sedgewick, 2018).

*Competence:* Possessing knowledge, skills, and attitudes that enables the providing of quality care, appropriate behaviors, and sound clinical judgement (Zieber & Sedgewick, 2018).

*Fidelity:* Believability in a simulated experience (Aebersold & Tschannen, 2013).

*High fidelity simulation:* Simulated experiences that utilize computerized, life-like mannequins that are controlled by an operator (Erlinger et al., 2019).

*Low fidelity simulation:* Simulated experiences that utilize role play, non-computerized mannequins or task trainers (Findik et al., 2019).

*Self-Reflection:* a self-directed process of learning by witnessing one's own learning experience and assessing its parts (Rose, 2016)

### **Assumptions**

For this study, I made several assumptions.

- Nursing students desire enriching clinical experiences where they have the opportunities to learn and practice nursing skills.
- Nursing students rely on the clinical experience to safely practice and to develop competence in basic nursing skills.
- Clinical experiences are equally important as theoretical content in nursing education as the clinical environment plays a key role in developing students critical thinking abilities, skill acquisition, and feelings competence and confidence at the bedside.
- Nurse faculty are the foundation of the student learning, clinically modeling safe, professional nursing care.
- Nursing student will participate in the low fidelity intervention and reflect honestly on the experience and provide truthful feedback.

### **Scope and Delimitations**

For this study, ADN students enrolled in a Medical/Surgical course were chosen to explore the effects of video recording and self-reflection on confidence and competence of basic nursing skill acquisition. The nursing students selected were located in the southwestern region of the United States. The students selected in this study represented students enrolled in one nursing program.

Transferability or achieving the ability to apply the data/findings to other situations is an issue in qualitative research (Rudestam & Newton, 2015). The goal of this



of this study was identify best practices for student learning and the hope is that it can be applied to other student learning areas when skill acquisition is the goal.

### **Limitations**

This study was limited to a convenience, purposeful sample of ADN nursing students enrolled in a medical/surgical course. One limitation that may arise from this study is the issue of transferability. Transferability is the ability to transfer or apply the research model to other studies and contexts (Rudestam & Newton, 2015). This study was conducted at one nursing school with one cohort of students causing a transferability issue as when replicated at a different locale, replication may be difficult.

Dependability was another limitation identified. Dependability is aligned with concept of reliability and is described as consistent and repeatable over time (Ravitch & Carl, 2016). This study was conducted with one nursing school and one cohort of students. The sample of participants was limited to Southwestern portion of the United States. BSN and RN to BSN students was excluded from the study, as well as high fidelity simulation learning experiences.

Subjectivity was another limitation identified. The researcher served as the interviewer and evaluator of data. To prevent bias, I created a self-reflective journal to remove my own personal viewpoints and experiences, to better explore the perspective from the student' viewpoint. (Cresswell, 2018).

### **Significance**

This study added to the current body of literature by uncovering nursing student's perception of low fidelity simulation in learning and how the video recording affected their competence and confidence. Clinical agencies and nursing programs continue to be saturated with students and competition for clinical placement and opportunities at the clinical sites create competition for students in patient selection and skill practice and acquisition (Quinn & McAuliffe, 2019). Overcrowding and limited opportunities on live patients have created a vacuum that is being filled by simulated events that are becoming the norm in nursing programs (Brown, 2014). Nursing programs continue to be impacted and have difficulties in securing clinical practice settings and student learning opportunities. To offset this, the California Board of Registered Nurses allows up to 10% of clinical hours to be completed in nursing simulation/clinical labs ("California Board of Registered Nurses," 2016). Advancements in educational modalities best suited for nursing students in a laboratory setting are needed to guide the creation of simulated learning experiences that aid in building confidence of the practitioner (nursing student) and competence of the assigned skill (Debourgh & Prion, 2017).

Implementing concepts that incorporate video recorded simulated learning experiences as part of nursing curriculum, contributes to positive social change for the students participating. Student learning is enhanced by the ability to view and review the recording allowing the student to identify strengths and independently correct weaknesses. The results of this study have the potential for positive social change for

students and educators. Educators will utilize the results to design recorded simulated learning activities to help nursing students develop the ability to collaborate, reflect, and discuss critical learning situations. Further, recorded simulated learning interventions help nursing students develop the ability to collaborate, reflect, and discuss critical learning situations; this has the potential to increase students feelings of confidence, safety, and security in their learning (Strand et al., 2017).

### **Summary**

Clinical learning opportunities are essential for nursing student growth in the development of skill acquisition, critical thinking, and basic clinical judgment (Deborough & Prion, 2017). With record number of nursing applicants, there is an increased demand for clinical placement and more competition for clinical learning opportunities (NLN, 2018). The use of video recording and self-reflection is a learning modality that is under used in nursing with benefits that include allowing the student to watch and rewatch their performance, identify gaps in knowledge, and help develop feelings of confidence and competence (Bussard, 2016).

For this study, a qualitative, interpretative, phenomenological design was used to explore nursing student's perception of video recording and self-reflection in the learning of basic nursing skill acquisition focusing on their feelings of confidence and competence. In developing this study, Miller's Assessment of clinical skills theory guided the research as a theoretical model. After participating in the learning intervention, the students participated in a face-to-face interview exploring their

perception of the activity and how it affected their feelings of confidence and competence in their learning. Chapter 2 provided a comprehensive review of the literature with concepts such as low fidelity simulation, and confidence and competence in learning.

## Chapter 2: Literature Review

The NLN Biennial Survey of Nursing Programs reported in 2018 a 38% of qualified nursing applicants were turned away from associate degree programs (NLN, 2018). The demand for entry in nursing programs far exceeds the available seats. The most common barriers that contribute to this phenomenon are insufficient clinical site, lack of qualified nurse educators, and funding (NLN, 2018). This increase in nursing student enrollment is saturating clinical agencies with nursing students, which in turn is creating competition for clinical experiences.

The purpose of this qualitative research was to explore the perceptions of confidence and competence following a low fidelity video recorded skill practice. In this chapter, I discuss the literature review strategy, theoretical framework, and review key variables that include clinical skill acquisition, simulated learning, video recording, self-reflection, confidence, and competence.

### **Literature Review Strategy**

The library data bases used to identify peer reviewed literature include nursing and education indexes. Nursing indexes include Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline, ProQuest, and PUB Med. Educational indexes include SAGE, Science Direct, Ovid, Thoreau, and Google Scholar. In addition, information was obtained professional organization websites. The articles included in the search were published between 2013-2018 and searched key words nursing student. This search yielded over 74,000 results. Due to the high number of articles yielded, the search

terms were narrowed to include student nurse, skill acquisition, nursing and Key Search Terms and combinations included: confidence, competence, clinical experience, qualitative, and clinical nursing skills. These steps narrowed the search to 750 results. The final results included 185 studies that related to the variables. Additional steps taken to exclude the articles include the exclusion of concept articles, duplicates, and blogs were eliminated.

### **Theoretical Framework**

The use of evidence based practice in nursing research advancing evidence based care and improved outcomes for patients, families, providers and the health care system in general (Grove et al., 2021). To support student skill acquisition and confidence and competence, Dr. George Miller's Assessment of clinical Skills/competence/performance was chosen as the theoretical frameworks to guide the research.

Miller was known for his influential role in psychology by contributing to the development of cognitive psychology, psycholinguistics, and developed and contributed to theoretical models used in information, communication, grammar, semantics, as well as other disciplines (Pinker, 2013). Miller's theoretical model has been used in various disciplines that includes medical, psychological, teaching/educational, and business realms. Muse and McManus (2013) applied Miller's assessment of clinical skills/competence/performance theory in the assessment of competence in cognitive behavior therapy (CBT) therapists. This study reviewed 64 articles in an attempt to expand the implementation of CBT in practice and assess competency in CBT. The

literature review identified 10 key methods appropriate for assessing competency, which are identified in Miller's theoretical model. Miller's hierarchical model was applied in evaluating cognitive behavioral therapist's level of knowledge application in areas of basic knowledge, assessment of practical understanding, assessment of practical application of knowledge, and clinical practice assessments (Muse & McManus, 2013).

Miller's theoretical model was applied in evaluating nursing student and lecturers' perspectives in simulation clinical examinations. In this study, Alinier utilizes Miller's four level triangle to aid nursing student in achieving milestone in clinical skill acquisition. The know, knows how, shows how, and does structure of this theoretical model was applied to nursing students and faculty to develop instructional modalities to best evaluate student learning at different stages in the trajectory of the educational process. (Alinier, 2003).

Buykx et al. (2011) applied Miller's theoretical model by assessing nursing students in detecting patient deterioration in a simulated patient scenario by requiring nursing students to demonstrate their skill competency using Miller's pyramid: knows, knows how, shows how, and does.

Miller's Assessment of clinical skills theory is appropriate for my area of interest, which focuses the learning of clinical skills and demonstrating competence related to the skills. The theoretical model was used in developing the four open-ended interview questions and were used during the data collection process to interpret the findings of the study. Miller defines competence as having adequate knowledge, judgement, or strength

of a skills or task (Miller, 1990). Miller's theory is depicted as a pyramid (in which the base depicts knowledge that the student "knows." The next level from the bottom is the "knows how" stage. In this stage, competence emerges. The next level is the "shows how" stage or the performance stage. The top of the pyramid is the "does" phase. At this level, the student would be proficient in the skill.

In applying Miller's theory to my study, skill acquisition begins at "knows" stage. Here the nursing students will have didactic knowledge and understanding of the skill. At this level, the student has learned and "knows" what is required to carry out the learned skill. Miller contends that simply knowing how a task is completed does not demonstrate competence (Miller, 1990). To guide learning, the student must transition from the "knowing" stage and progress to the "knows how" stage. At this level, the student has gained a deeper knowledge and understanding of the skill. During the "know how" stage the student gains a deeper understanding by analyzing, practicing, and interpreting the concepts being learned. The student will progress to the next level, the "Shows How" level. The Shows How level is achieved when the student has demonstrated competency in the "knows", "knows how", and "shows how" stages. The last phase of Miller's learning theory is the "does" phase when the students is able to complete the task in at competent and confident level. The base of Miller's framework, knowledge or knowing serves as the foundation of this theory. Once the student "knows how" to perform the skill preformed, Miller believes the next step in the learning trajectory is for the student to demonstrate competency in the skill. Miller's "shows how" allows the student to



perform the task to demonstrate not only do they understand the skill and its rationales, but can accurately, competently perform the task (Miller, 1990). The “knows”, “knows how”, and “shows how” levels of Miller’s theory relate to my research as student learning, skill acquisition, confidence, and competence are its foundation.

## **Literature Review**

### **Limited Clinical Access to Nursing Programs**

Registered Nurses account for the largest population of the health care profession, accounting for 29 million nurses worldwide, with upwards of 4 million in the U.S. alone. The World Health Organization (WHO) estimate that an additional one million nurses will be needed by 2020 (AACN, 2014). Despite an increase in growth of nursing programs, the demand for acceptance in programs far exceeds actual enrollment with up to 38% of qualified applicants being turned away for lack of available (NLN, 2018). In investigating causes contributing to this phenomenon, the main obstacles to expanding nursing programs to allow more acceptance of qualified students is lack of clinical locations/placement (50%), with other barriers that include lack of nurse faculty (25%) and lack of classroom space (10%,) and other (15%) (NLN, 2018).

The NLN’s 2018 Biannual Survey of schools continued to report ongoing shortages in clinical placement for nursing student, thus causing competition for nursing programs and in turn nursing students to compete for coveted assignments and learning opportunities at the bedside (NLN, 2018). In the clinical setting, nurse educators interviewed state additional barriers to availability to the clinical setting with limitations

of the number of students per setting and/or unit, types of care allowed to provide, limited number of nurse preceptors, and inadequate clinical time (De et al., 2016).

### **Clinical Skill Acquisition**

The trajectory of student learning in nursing education is comprised of both theoretical and practical learning, which includes clinical knowledge, skill acquisition, and practical experience (Jamshidi et al., 2016). The clinical experience is not only mandatory for licensure but is also as an essential component of nursing curriculum (Kaldal et al., 2018). Due to shortages in clinical locales, patients, and learning opportunities, nursing students report lack of clinical experiences and inadequate skills practice, causing nursing students to have feelings of vulnerability, anxiety, and reduced student satisfaction in the experience. In extreme cases, students have reported suffering from inferiority complexes as a result of their experience (Jamshidi et al., 2016).

The clinical environment has been a longstanding element of required nursing education. In the current climate of nursing programs competing for clinical placement, programs are developing alternative student learning experiences to offset the shortfalls clinically (Verkuyul et al., 2016). Quinn and McAuliffe (2019) explored alternative, nontraditional clinical sites were located, such as the home care setting, outpatient clinics, and schools. This creative, forward thinking curriculum allowed these students meet their objectives while learning clinically.

In examining clinical skill acquisition in nursing students, current shortages in clinical locales are creating shortfalls in student skill acquisition. Strengths of Quinn and

McAuliffe's (2019) study include benefits of supplementing or replacing clinical time with simulation, use of nontraditional agencies and clinical rotations that focus on social participation, creation of communities of learning, and interprofessional collaboration. Limitations include the use of a single site, and a formal member check was not performed. Verkuyul et al. (2016) discussed the necessity of creating safe, stimulating alternatives for the clinical environment due to overcrowding and competition for clinical experiences. Quinn and McAuliffe (2019) discuss the benefits of utilizing simulation and other learning experiences to supplement clinical time. Verkuyul et al. (2016) introduced online learning with the concept of gaming and the benefits in student engagement. Positive feedback was noted with students wanting to keep playing and real-life scenarios. Limitations in their study uneven ratio of male versus female and feedback during the planning process.

### **Simulated Learning**

Simulation is described as a technique versus a technology with the objective of providing students safe, real life learning experiences that eliminate any harm to an actual patient in which the development of clinical judgment and critical thinking can begin (Findik et al., 2019). This process benefits the students by acquisition of skill through learning, practice, and demonstrating competency via performance (DeBorough & Prion, 2017). It has also been used in the military, aviation, and the nuclear power industry for years, however only seen in nursing over the past decade (Aebersold & Tschannen, 2013).

Simulation can be divided into two categories, high and low fidelity. High fidelity simulation experiences that utilize computerized, life-like mannequins that are controlled by an operator and low fidelity simulation is defined as a simulated experiences that utilizes role play, non-computerized mannequins or task trainers (Findik et al., 2019). When clinical learning experiences are unavailable, alternative learning modalities are required to provide opportunities for nursing students to master basic nursing skills (Quinn & McAuliffe, 2019). The development of simulated learning environments are designed to emulate real life situations to demonstrate a deeper level of learning and understanding (Strand et al., 2017). In this environment, nursing students are provided opportunities to practice necessary skills that will allow for errors and the development of clinical judgement without any risks to patient safety (Evans et al., 2015). Lee and Oh reported a positive impact between simulated learning and improved student problem solving, critical thinking, and clinical judgement (Lee & Oh, 2015).

DeBourgh and Prion (2017) found that students report increased confidence in performing the skills utilizing repetition with video recording, both independently and as a team. Strengths identified in their study include creating an environment where students report they were able to collaborate, increase team skills, peer support, and satisfaction in process and operations. A convenience sampling from one university and recall bias were limitations in the study.

## **Video Recording and Self Reflection**

The use of video recording and self-reflection was originally introduced to simulated learning environments to enrich student learning (Brimble, 2008). Video recording in nursing education is a learning modality that provides nursing students opportunities to review their participation and performances in simulated events, providing development of nursing judgement and clinical skill acquisition (Strand et al., 2017). Video-recorded learning improves the development of self-understanding and skill acquisition. Video recording provides opportunities for students to learn in a safe, secure environment that leads to the development of clinical judgment; it provides a platform for them to develop a critical consciousness by utilizing best practice and learn safe patient care (Strand et al., 2017).

Students who were exposed to multiple video-recorded high-fidelity complex simulation scenarios that mimicked actual nursing practice, reported that the repeated exposure increased their critical thinking, confidence, and competence (Kaddourah et al., 2016). They reported feelings of safety, security, and confidence and identified the video recording as an essential component in their learning of clinical skills (Strand et al., 2017). Self-reflection is a teaching strategy that show promise in improving students' learning outcomes, specifically in areas that include the retention of knowledge, engagement, and critical thinking self-reflection, also referred to as self-evaluation or self-awareness is a process of students' evaluation of their own work (Bussard, 2016).

## **Confidence and Competence**

Clinical confidence is a concept that is subjective in nature and cannot be readily taught in the classroom; it is the ability to implement knowledge and skill and implement it into a behavior (Zieber & Sedgewick, 2018). It is a feeling of mastery that must be acquired in the clinical realms by actively participating in clinical activities and experiencing success (Lundberg, 2008). Zieber and Sedgewick (2018) evaluated nursing student's perceptions of confidence, competence, and knowledge retention in a simulated learning activity. The results of this study evaluated a qualitative competence supporting an increased perceived confidence between the pre and posttest, and the qualitative results were consistent with the qualitative findings, supporting a boost in competence, confidence, and knowledge retention.

In nursing, the concept of competence describes the development of specific attitudes, mastery of skills, and a sufficient knowledge base needed for licensure and practice. The achievement of clinical competence is a challenging milestone to achieve without the benefit of clinical experiences for nursing students (Zieber & Sedgewick, 2018). In evaluating competence, Zieber and Sedgewick (2018) evaluated students' competence over a three-month period after participating in lecture and high-fidelity simulated advanced cardiac life support (ACLS) experience. The researchers identified that the students' competence increased immediately after the experience. Their level of competence continued to rise over a three-month period. The students attributed their increase competence to their mastery of basic nursing skills obtained during the simulated

activity (Zieber & Sedgewick, 2018). Bussard hypothesizes that students who can reflect on their actions on video, will independently make improvements in the skill by practicing. Bussard contends that this signifies the development of clinical competence and judgement in student learning.

### **Summary and Conclusion**

The NLN Biennial Survey of Nursing Programs reported in 2018 a 38% of qualified nursing applicants were turned away from associate degree programs (NLN, 2018). The demand for entry in nursing programs far exceeds the available seats. The higher demand for nursing as a profession has created scarcity of clinical placements for nursing students. Due to the current nursing shortage, the recent growth in nursing enrollment and the need for clinical placement of students to acquire skills has overburdened health care settings. This has in turn created shortages in clinical sites and agencies, creating competition for valuable learning opportunities for nursing students. (Quinn & McAuliffe, 2019).

Clinical skill acquisition and the development of confidence and competence are essential components to nursing education and a requirement for licensure (Kaldal et al., 2018). The implantation of video recording and self-reflection in the learning process allows the students to observe their performance, to reflect, and to evaluate their learning (Strand et al., 2017). In addition to benefiting the student in skill acquisition, video recording coupled with self-reflection additionally aids in the development of clinical judgement and critical thinking (Bussard, 2016). This research contributed to fill the gap

in understanding how the use of low fidelity simulation, video recording, and self-reflection affects confidence, competence in learning of basic nursing skill acquisition. The nursing students reflected on the quality of their performance and identified the extent to which the activities affected their confidence and competence of the learned skill. In chapter 3, I discuss the research design and rationale, role of the researcher, methodology, and trustworthiness.



### Chapter 3: Research Method

The purpose of this study was to explore ADN nursing student's perceptions of their confidence and competency following a simulated video recorded and self-reflection in the learning of basic nursing skills. Clinical agencies and nursing programs are overwhelmed with students and competition for clinical placement (Copeland, 2020). To accommodate this deficit, simulated learning and video recording is a recognized teaching modality (Bussard, 2016). A qualitative, phenomenological, interpretative design was used with videotaped skill practice with self-reflection on the quality of their performance and how the activity affected their confidence and competence of the skill. In this chapter, the research design, rationale, role of the researcher is discussed.

#### **Research Design and Rationale**

Quantitative research focuses on numbers and statistical information. Qualitative research has a direct link to constructivism and focuses on the understanding and experiences of those living the experiences (Rudestam & Newton, 2015). For this study I evaluated the lived experiences of nursing students.

#### **Research Question**

What are the lived experiences of nursing students undergoing video recording while engaging in a basic-nursing skill learning activity?

Simulation is a teaching modality in nursing education, surfacing within the past 20 years. Simulated learning coupled with video recording is a newer strategy method in nursing education that promotes communication and skill acquisition (Bussard, 2016).

Self-reflection is the ability to evaluate one's own learning and skill set and is an integral component of the learning process.(Rose, 2016) This type of active learning provided the nursing students with the opportunity for growth and the advancement of professional behaviors which include the ability to recognize personal abilities and limitations.

A qualitative, phenomenological design was used to explore ADN nursing students' perception of video recording and self-reflection in basic skill acquisition. Qualitative studies are those where data is expressed in words, focuses on subjectivity, explores meaning and description, and analyzes text (Rudestam & Newton, 2015). The goal of the researcher was to describe the experiences of participants who have all had the same experiences (Creswell, 2018). The understanding of individuals experiences, values, and unique viewpoints provides a rich opportunity to measure the effect of the video recorded self-reflective process (McEwen, et al. 2019). This research study was accomplished by allowing students to watch video-recorded simulation of learned skills to evaluate their feelings of confidence in the ability to perform the skill in practice via interviews.

### **Role of the Researcher**

My role was of an observer/participant. I conducted audio recorded interviews with the participants to solicit their perspectives relating their experiences as a result of participating in the simulated learning activity. The interviews were held after the video recorded learning intervention. As the researcher, I had no personal or professional

affiliation with the students or school of nursing participating in this study, hence eliminating any supervisory or instructor power over the students participating. To eliminate researcher bias, I created a self-reflective journal to identify my own personal viewpoints and experiences. This allowed me to be open about my preconceived beliefs about the phenomenon, to better explore the student's perspectives. Therefore, my self-reflective journal included my own past experiences, prejudices, and biases that could alter the findings (Ravitch & Carl, 2016).

### **Methodology**

Qualitative research is focused on collecting non-numerical data, words, and images versus quantitative research focusing on numerical data (Grove et al., 2021). Exploring the lived experiences applies the phenomenological lens to this study. Phenomenology describes consciousness and experiences (Patton, 2015).

### **Study Participants**

The population for this study was comprised of nursing students enrolled in a medical surgical course in an ADN program in the southwest section of the U.S. A purposeful sample was used to recruit 12-14 participants out of the 28-30 enrolled students in the class. Purposeful sampling is one of the most commonly used methodologies in qualitative research; the participants are selected because they have experience with the research phenomenon which generates meaningful data (Ravitch & Carl, 2016). For example, they were enrolled in a medical/surgical course, participated in low-fidelity simulation/skills practice, and video recording.

**Inclusion/Exclusion Criteria**

This study included nursing students enrolled in a medical/surgical course in an ADN program in the southwest U.S. Inclusion criteria include students who participated in low fidelity simulation/skills practice and video recording. Exclusion criteria excludes BSN and RN to BSN students and high-fidelity simulation learning experiences, and students who are on academic probation.

**Sample Size/Sampling Design**

A sample size of 12-14 participants was for this study. In determining an adequate sampling size, the sample size should be sufficient to explore the aims of the study (Malterud et al., 2016). A participant pool of 12-14 participants provided sufficient data in the lived experiences of the participants for the aims of this study. In determining an appropriate sample size, qualitative researchers employ purposeful sampling techniques to obtain a diverse, robust information rich data. Data saturation occurs when no new information emerges during the coding process that adds to the research aims (Saldana, 2015). When saturation is achieved, other potential participants will be informed that data collection is complete and thanked for their interest in the study. In qualitative research, the focus is on quality, depth, and providing rich and robust data versus quantity as is the focus in quantitative research (Hennink et al., 2017).

**Contacting/Inviting Participants**

I met with the Assistant Chair of the College and discussed the purpose of the study and was given preliminary approval to recruit and interview students who met the

criteria and agree to participate in the study (Appendix A). I met with faculty who taught the Medical Surgical course to inform them of the purpose of the study, who can participate, and why their course was selected, and how data was collected from the participants. They agreed to post the recruitment flyer (Appendix B) in the online classroom and in the clinical online lab. After obtaining Walden University IRB approval, the following procedures was for data collection:

1. I provided flyers to the faculty to post in the online classroom and the nursing clinical laboratory online bulletin board. The flyer included my contact information.
2. The faculty met with the nursing students and provided the flyer information. The content of the information on the flyer included the purpose of the study, who can participate, the consent process, and how to protect the participants. The flyer contained my email address so that students will be able to email me directly, if interested in participation in the study.
3. I contacted students after receiving their email indicating interest in learning more about the study. I determined the participants eligibility to participate in the study and discussed the purpose of the study, what they will be required to do, the voluntarily nature of the study, and their right to refuse to participate, to those who meet the criteria.

4. Participants who agree to participate in the study were sent an electronic informed consent via email. The participant was then be instructed to complete the electronic consent and return via email acknowledging their consent to participate in the study. They were instructed to save a copy of the consent.
5. I set up a time to meet with the student via telephone after receiving the signed informed consent. The student selected the time to discuss where their conversation will not be overheard, and their privacy will be ensured.

### **Interviews**

I conducted audio recorded telephone interviews using open-ended interview questions (Appendix C) after the student participated in the video recorded skills exercise and watched the video of their performance. In a qualitative study where the goal is to understand the lived experiences of the participants, interviews are the foundations of the study. In the Qualitative interview process, the interviewer conducts face-to-face, telephone, or focus group interview (Cresswell, 2018). For this research study, four open-ended interview questions were written to gain insight on how the video-taped intervention affected the student's skill acquisition and their feelings of confidence and competence in the skill. The interview questions developed for this study were adapted from questions published in two research studies by Broussard (2016) and De Bourgh and Prion (2016). This allowed me to gain an in-depth understanding of my research overall research question: What are the lived experiences of nursing student's regarding

the effects of video recording and self-reflection on their competence and confidence in learning basic nursing skills during a simulated learning activity? The aim of this study was to evaluate the student's acquisition knowledge and therefore, adapting the interview questions from published studies that validated the use of video recording to facilitate students learning via self-reflection ensures that the interview questions are sufficient to address the research question.

### **Interview Questions**

The following interview questions were used to capture the experiences of the students:

1. Before you watched your video, how would you have critiqued your performance? Provide specific detail.
2. How did you feel after watching yourself perform the task?
3. Did this activity affect your perceptions of feeling competent in the performing skill?
4. When you reviewed your video recording what did you notice about yourself that you wanted to change? What did you want to do the same?

### **Data Analysis Plan**

The data collected for this study consisted of digital audio recorded telephone interviews of the participants using the open-ended self-reflective questions. The open-ended reflective questions were written to elicit personal opinions and viewpoints of the students participating in the study. Once the student answered the five open ended questions, they exited the study. They were be provided an opportunity to debrief and

reflect on the experience. To aid in the coding process, manual coding was performed to achieve data rich content. There were no discrepant cases identified in the coding process.

### **Issues of Trustworthiness**

Issues of trustworthiness and validity in qualitative research is an important element in designing a quality, comprehensive study. Concepts such as transferability, reliability, and ethics build the foundation of trustworthiness and validity in a qualitative study (Patton, 2015). Trustworthiness is the assertion the findings of the study demonstrate rigor and value and guides the researcher in affirming their findings (Ravitch & Carl, 2016). Rigor and validity are major themes in quantitative studies, whereas credibility and trustworthiness are key in qualitative studies (Cope, 2014).

In qualitative research, employing a phenomenological lens focuses on the lived experiences of participants; identifying the phenomenon through participant perceptions of an experience, employing with data collection methods as interviews and observations, (Ravitch & Carl, 2016). Credibility in qualitative research ensures that those participating in the study are portrayed in an accurate manner (Elo et al., 2014). In qualitative research strategies such as triangulation, reflexivity, prolonged contact and member checking are implemented to ensure trustworthiness. In this study, credibility was assessed via reflexivity. Reflexivity addresses the researcher's assessment of their personal bias, role as researcher, influence, and overall meaningfulness of the study (Ravitch & Carl, 2016). To accomplish this, I created a self-reflective journal to remove my own personal



viewpoints and experiences, to better explore the perspective from the student' viewpoint. In order to ensure that accuracy in documenting the participants perspectives, sharing the final findings with the participants to gain their feedback in the accuracy of the statements and themes will be completed (Cresswell, 2018). In addition to reflexivity, a process involving presenting the data to the participants after the data has been collected is known as member checking. This process allows the researcher to gain insight from those involved in the study to ensure credibility has occurred (Rudestam & Newton, 2015).

Transferability is the ability to apply the findings from one study to another setting or group set. When applied correctly, the results of the research can provide meaning to readers not involved in the study (Cope, 2014). Lincoln and Guba describe thick description as a strategy to ensure transferability by providing a detailed account of the phenomenon to evaluate the transferability to a similar setting or situation (Sheldon et al., 2006)

Dependability is achieved when replication occurs with similar participants and setting. Dependability refers to the consistency or stability of data over a determined timeframe or in similar conditions (Cope, 2014). Selection of appropriate sample sizes, and ensuring participants are identified and described accurately aids in dependability. As part of my self-reflective journal, an audit trail was developed to confirm dependability. An audit trail is an in-depth record documentation the steps taken in the research process.

In addition, this record included the perspectives of the participants, the coding process and emergent themes (Rudestam & Newton, 2015).

The ability for the researcher to maintain a position of neutrality the conducting and reporting in the study checks and balances are important throughout data collection process. Confirmability which differs from objectivity used in quantitative research is the requirement of ensuring the research findings are confirmed (Ravitch & Carl, 2016) To establish confirmability, the results of the study must represent the participants perspective, not those of the researcher (Cope, 2014). I used the processes of reflexivity by using my self-reflective journal to identify and eliminate any biases. To confirm the documented participant responses are their own, I plan to use external audits. This strategy will allow unbiased confirmation of the research methods and findings.

### **Ethical Procedures**

The recruitment of the participants of this study was guided by Walden University's Institutional Review Board (IRB). Informed consent was confirmed prior to the commencement of the study and any data collection. All and/or any actual and potential risks to the participants were clearly outlined on the informed consent form with no foreseeable risks noted. All participants were informed that their participation is voluntarily, and they can withdraw at any time. The telephone interviews were held in a private location at a mutually agreed upon time to ensure the nursing student has a private, quiet place to talk. All electronic responses were encrypted in password protected files. All identifiable student information were removed to maintain anonymity and

confidentiality of the students participating. All electronic documents were encrypted in password protected files. All data was safely stored on my personal computer for no less than five years prior to deleting.

### **Summary**

Qualitative research is defined as a “dynamic, systematic and engaged process of planning for depth, rigor and contextualization of data” (Ravitch & Carl, 2016, p. 65). As a nurse educator, guiding students both clinically and theoretically I wanted to understand how best to provide robust learning experiences for students that can be applied to their roles as graduate nurses to be safe, confident, and competent in their practice. I chose a phenomenological lens to apply to my research model. Phenomenology focuses on the lived experiences of participants; identifying the phenomenon through participant perceptions of an experience, employing with data collection methods as interviews and observations, (Ravitch & Carl, 2016). The data was collected via audio recorded telephone interviews. Once collected the data was coded until themes no longer emerge. All participants will complete an online informed consent. In Chapter 4, I discuss the results and data analysis of this study.

## Chapter 4: Results

The purpose of this study was to explore ADN nursing student's perceptions of their confidence and competency following a simulated video recorded and self-reflection in the nursing skills practice. I used qualitative, phenomenological, interpretative design to obtain their perception of how participating in the activity affected their confidence and competence to perform the skill. The research question was created to gain an understanding of the lived experiences of the students. The research question for this study was:

RQ1: What are the lived experiences of nursing students undergoing video recording while engaging in a basic nursing skill learning activity?

In this chapter, I discuss the setting, demographics of the participants, data collection and analysis, evidence of trustworthiness, and results.

### **Setting**

Nursing students for this study were recruited from an ADN program in the southwest section of the United States. All students recruited were enrolled in a medical/surgical course and participated in low fidelity simulation/skills practice and video recording. The participants were all interviewed via audio recorded interviews with open ended interview questions. It was not possible to assess whether there were any personal or organizational conditions that could have influenced the experiences of the participants at the time of the study, nor was there any mention of any such issues during the interview process.

## Demographics

### Sample Characteristics

The sample population consisted of 10 second semester students enrolled in a ADN nursing program in the southwest United States. The age range of participants was 22-26. All but one of the participants were between the ages of 22 - 25 (91%). Female and male nursing students were invited to participate. Gender was not equally represented; female represented 70% of the participants. Table 1 provides a summary of the characteristics of the sample population.

**Table 1**

*Demographic Characteristics of the Study Sample (N = 10)*

Characteristic	# of participants	Percentage	Mean
Age			23.7
22-25	9	90%	
26-30	1	10%	
Gender			
Male	3	30%	
Female	7	70%	

## **Data Collection**

### **Participants**

Data was collected as described in Chapter 3. The data for this study was collected from 10 participants via audio recorded telephone interviews using open ended interview questions and demographic surveys. The recruitment requirements included nursing students at least 18 years old, currently enrolled at a medical/surgical course at an ADN nursing program located in the southwest United States with experience in participating in a low fidelity simulation and video recording.

### **Location/Frequency/Duration of Data Collection**

Due to the COVID pandemic and the cancellation of face-to-face classes, the original recruitment process was modified to accommodate at a distance learning. Flyers were posted on the course online bulletin board and emailed to the students enrolled in the medical/surgical course by their instructor. Interested students contacted me via email and an initial screening call was scheduled to provide the students with detailed information about the study and to verify that they met the inclusion criteria. The recruitment and data collection process took place over an 8-week period.

### **Initial Screening and Informed Consent**

I followed the research protocols as outlined in the informed consent. Twelve participants were screened (Appendix B) to determine they met the inclusion criteria. This was accomplished by discussing the aim of the study, participant eligibility criteria, and time commitment to participate with each interested student. Students were instructed

to respond via email regarding their desire to participate in the study. Two participants emailed their decision not to participate and 10 participants agreed to participate. All participants received and reviewed their consents via email. Those who agreed to participate, signed the consent form, and returned it to me via email. Participant names were not included in any data collected; an individual identifier was created and used for each participant. Participants were reassured all responses would be held confidential and their identities would not be revealed in any report of the study.

### **Open Ended Interviews**

The purpose of this study was to explore ADN nursing student's perceptions of their confidence and competency following a simulated video recorded and self-reflection in nursing skills practice. To align with a qualitative research process, the interviewer conducts face-to-face, telephone, or focus group interview (Cresswell, 2018). I created and used an interview protocol (Appendix B) to collect data from the participants. Each interview lasted 25-35 minutes. Each participant answered all the questions. Interviews were conducted via telephone, with a digital audio recording device.

At the conclusion, each participant was asked if they had anything else, they wanted to share. Participants were thanked for sharing their feelings and experiences and for being a part of the study. Starbucks gift cards for \$5.00 were emailed to the participants in appreciation of their time.

**Field Notes and Observations**

During the interviews process, I paid special attention to the inflection of the participants' voice, tone, emphasis on content, and wrote field notes. The interviews were recorded using an electronic recorder. I transcribed and coded each interview. All four interview questions were appropriate for the study and participants.

**Reflexive Journal**

I used a reflective journal to evaluate my interpretation of the data gleaned from the interview and data collection process. The process of keeping a reflective journal allowed me to evaluate my response to the interview, reflect on its meaning and evaluate any potential biases and review the data more objectively.

**Audit Trail**

Throughout the data collection process, an audit trail was maintained to record the researchers' logic and evaluate the efficacy of the study. To maintain this during the interview and data collection process, an audit trail was used to accurately monitor the interview process, data collection, and ensure any personal bias did not interfere with the data collection process.

**Variations in Planned Data Collection**

Due to the COVID-19 pandemic and social distancing requirements all interviews were held via telephone and digital audio recording for the safety of the participant and the researcher. During the coding process, I had planned to use Max QDA, a computer assisted data analysis program to assist with the coding process. As the data analysis



process began, due to the data rich nature of the open-ended interview questions, it was necessary to code each transcription by hand, to not miss any important data.

### **Data Analysis**

The data analysis process was conducted solely by manual coding. Manual coding was used to identify themes and subthemes from the information provided by the respondents. Initially, all ten interviews were transcribed and reviewed for accuracy. Next, after the transcription process was completed, the first coding cycle began, and initial codes were identified. After analyzing data across the ten cases, 23 initial codes were documented (Appendix D). From the 23 first-cycle codes, two main themes and five sub themes emerged. . The emergent themes and subthemes are displayed in Table 2 below. There were no discrepant cases noted.

Themes and subthemes were developed and prioritized during the data analysis process and verified by the number of participants who identified similar feelings or experiences. Theme 1, emerged from the data as lacking confidence and knowledge, and sub-themes include recognizing inadequacies, recognizing the need for practice, and feeling stressed.

Theme 2 emerged from the data as feeling confident and knowledgeable and the sub-themes include feeling prepared to preform clinical skills and learning through self-reflection.

### **Evidence of Trustworthiness**

Trustworthiness is the assertion the findings of the study demonstrate rigor and value and guides the researcher in affirming their findings (Ravitch & Carl, 2016). To demonstrate trustworthiness in this study, credibility, reliability, transferability, and confirmability were confirmed.

#### **Credibility**

In this study, credibility was achieved via reflexivity and data saturation. The use of reflexivity allowed me to assess my own personal biases, evaluate my role as the researcher, as well as to evaluate the meaningfulness of my study. I created a self-reflective journal during the process to remove my own personal viewpoints and experiences. Saturation was achieved when that data from the first nine interviewed were preliminary analyzed, and no new themes emerged with the tenth interview. Data saturation occurred with a sample size of nine and one additional interviewed obtained no new information.

#### **Transferability**

Transferability is the ability to apply the findings from one study to another setting or group set and provide meaning to readers not involved in the study (Cope, 2014). To achieve transferability, obtaining rich data, thick description, and an external audit was used. Thick description is a strategy to ensure transferability by providing a detailed account of the phenomenon to evaluate the transferability to a similar setting or situation (Sheldon et al., 2006). An external audit was another way transferability was

achieved. This occurs when external readers not directly involved in the study process reviews the results of the data analysis. A line-by-line analysis was performed by my committee chair to ensure the codes and themes were aligned with the information provided by the participants.

### **Dependability**

Dependability refers to the consistency or stability of data over a determined timeframe or in similar conditions (Cope, 2014). For this study, the researcher ensured consistency of the data collection by ensuring the interviews were conducted in a similar manner and analyzed using the same processes for each participant. In addition, an audit trail was developed to confirm dependability. An audit trail is an in-depth record documentation the steps taken in the research process. The audit trail was maintained in my self-reflective journal throughout the research process and contained the perspectives of the participants, the coding process and emergent themes (Rudestam & Newton, 2015).

### **Confirmability**

To establish confirmability, the results of the study must represent the participants perspective, not those of the researcher (Cope, 2014). During this study, the process of reflexivity was used to identify and eliminate biases. For this process a self-reflective journal was used. This journal was helpful to document my impressions during data collection, after the interview, and as themes and patterns emerged. In addition, to verify

confirmability, an audit trail was used to verify participant responses were accurate. This strategy allowed for unbiased confirmation of the research methods and findings.

## **Results**

The study results were organized into themes and subthemes. 23 initial codes were developed from the data collected.

Themes and subthemes were developed and prioritized during the data analysis process, with two themes emerging: *lacking confidence and knowledge* and *feeling confident and knowledgeable*. Subsequent subthemes were developed: *Recognizing inadequacies*, *recognizing the need for practice*, *feeling prepared to perform clinical skills and learning through self-reflection* are sub themes that emerged. Table 2 below illustrates themes and subthemes identified.

**Table 2**

*Emergent Themes and Subthemes from the Data*

Theme 1: <i>Lacking Confidence and Knowledge</i>	Subtheme <i>Recognizing inadequacies</i> <i>Recognizing the need for practice</i> <i>Feeling stressed/nervous</i>
Theme 2: <i>Feeling Confident and Knowledgeable</i>	Subtheme <i>Feeling prepared to perform clinical skills</i> <i>Learning through self-reflection</i>

### **Theme 1: Lacking Confidence and Knowledge**

To explore the participants' experiences as nursing students undergoing video recording while engaging in a basic-nursing skill learning activity, I asked the participants to describe perceptions of a video recorded skills demonstration, and their self-evaluation of their performance. Through candid and reflective interviews, the participants described in detail how this experience affected their learning and ability to correctly perform the skills. As the participants shared their experiences, themes emerged that represented their experiences and reflections in their learning. Theme 1: Lacking Confidence and Knowledge is detailed in Table 3.

**Table 3**

*Theme 1: Lacking Confidence and Knowledge*

Subthemes	Participants' response
Recognizing inadequacies	P1, P2, P3, P4, P5, P6, P7, P8, P9, P10
Recognizing the need for practice	P1, P2, P3, P4, P5, P6, P7, P8, P9, P10
Feeling Stressed/Nervous	P3, P4, P5, P6, P8, P10

#### ***Recognizing Inadequacies***

Clinical confidence and competence are not learned in the classroom, but mastery is achieved in clinical setting where learning and practice can occur (Lundberg, 2008). Students participating in the study had the ability to watch and re-watch their performances, allowing the student an opportunity to evaluate the safety and accuracy of the performance of the skill. One student noted that "After watching, I realized I was

trying to recap a dirty needle. That is a very unsafe thing” and another shared, “Watching and re-watching helped me identify what I needed to fix”. The ability to reflect on one’s performance, skills, decision making provides opportunity for learning and growth clinically (Bussard, 2016).

### ***Recognizing Need for Practice***

Identifying the need for practice was a central theme with the participants. Deliberate practice with immediate feedback (watching and re watching the skills video) during the learning process increases student knowledge and skill retention, which will apply to safety, confidence, and competence in the clinical setting. (DeBorough & Prion, 2017). For example, one participant stated, “Had I not practiced and reviewed prior to the final video, I probably would have forgotten some of the steps. I don’t want to do that at clinical”. Another student shared, “Because I recorded and re-recorded so many times, it helped me with muscle memory. The more I practiced, it became second nature”.

### ***Feeling Stressed and Nervous***

Feelings of stress and nervousness were identified by many participants. Student’s lack of knowledge and skills in the clinical setting can lead to feelings of anxiety and nervousness (Jamshidi et al., 2016). Participants identified causes of stress and nervousness to include as knowing their instructors would view, not liking “viewing” themselves on video, not knowing what was “normal” in a patient assessment, and inadequate feeling of confidence, for example.

One student said, “I knew right away I missed some things. I struggled with proper terms and kept forgetting steps. Another said, I don’t know if I’m the only one, but I was stressed out”. A third included, “I was very nervous and had trouble verbalizing what I was doing. I forgot the names of the pulses.” Nervousness and stress in some cases appeared to affect the student’s ability to recall previously learned information and processes. Opportunities for practice, repetition and reflection have positive impact on the students clinical skill acquisition and on their feelings of confidence (Doody & Condon, 2013).

### **Theme 2: Feeling Confident and Knowledgeable**

Confidence is defined as one’s ability to apply knowledge and skills learned and translate it into clinical practice (Zieber & Sedgewick, 2018). Students reported the importance of feeling prepared and knowledgeable when performing clinical nursing skills. Instilling confidence early in the learning process sets a solid foundation for knowledge acquisition and implementation of skills (Lundburg, 2008). The participants reflections developed themes of feeling confident and knowledgeable. Table 4 illustrates those perspectives.

**Table 4**

*Theme 2: Feeling Confident and Knowledgeable*

Subthemes	Participants’ response
Feeling prepared to perform clinical skills	P1, P2, P7, P8, P9, P10
Learning through self-reflection	P1, P2, P3, P4, P5, P6, P7, P8, P9, P10

### ***Feeling Prepared to Perform Clinical Skills***

Feeling prepared to care for patients and safely perform the skills practiced clinically was a frequent response from students. Students reported deliberate practice of the assigned skills, coupled with the watching and re-watching of their performances aided in the learning of the skills, leaving student's feeling prepared. One student shared, "With the limited amount of clinical time due to COVID, I have not had many opportunities to practice in clinical, this assignment really helped me with confidence. I feel like I would be able to successfully do this in clinical". Another stated, "After these videos I feel less awkward and reassured that I will be able to do this in the clinical setting" Simulated practice aids the nursing student in the learning of basic nursing skills, as students practice the skills in the defined order to gain confidence and safety at the bedside (Sebold et al., 2017).

### ***Learning Through Self-reflection***

All participants reported positive experiences of their learning through self-reflection. In the self-reflective process, the student ability to reflect on one's actions, decision making, and psychomotor skills in this assignment supported the learning process and overall learning outcomes (Bussard, 2016). One participant stated, "After watching myself, I want to do better in being able to give the patient information in an organized manner" and another reported "After watching myself perform the Foley insertion, I noticed I tested the integrity of the balloon of the foley. I know now that is not the standard of practice". In the self-reflection learning process, students identified



safety issues such as testing the integrity of the balloon and areas of wanting to improve, such as proving education in a more organized.

### **Summary**

Evidence based nursing research is used to advance evidence based practice to improve outcomes for patients, families, providers and the health care system in general (Grove et al., 2021). “I hear and I forget, I see, and I remember, I do, and I understand.” (Confucius) relates to the theoretical model driving this study; knows, knows how, shows how, and does. In the learning of nursing skills, the student begins at the knows stage (Miller, 1990).

The student must not only “know” the step of each skill, but also understand the rational, as well. To learn the skill, the students must have didactic knowledge and understanding of the skill. Conversely, once the student has reached the “knows how the student gains a deeper understanding by analyzing, practicing, and interpreting the concepts being learned. Miller contends that simply knowing how a task is completed does not demonstrate competence (Miller, 1990)

In Chapter 4, I discussed the research questions, the research setting, the interviewees’ demographics, and the data collection method, including the challenges encountered. Also, I explained the data analysis process, trustworthiness, and the results of the study. In Chapter 5, I provided a detailed discussion of the summary of the research, the conclusions, limitations, implications for future, and recommendations for further studies.

## Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to explore ADN nursing student's perceptions of their confidence and competency following a simulated video recorded and self-reflection in nursing skills practice. A qualitative, phenomenological, interpretative design was used to capture a thick, rich, detailed description of the with videotaped skill practice with self-reflection on the quality of their performance and how the activity affected their confidence and competence of the skill. This study provided important insights of the lived experiences of nurses undergoing video recording while engaging in a basic nursing skill learning activity.

Factors that helped guide the analysis were the perceptions and experiences of the nursing students collected during interviews, ways in which the participants understood and explained these experiences, and the ability to evaluate how to improve in these skills with findings in the literature, and whether the study findings extended the current body of literature. To makes sense of the data, I compared emergent themes with the issues raised by the literature.

### **Key Findings**

Key findings were derived and prioritized during data analysis by manual hand coding. From this study, two major themes emerged from the data that described the lived experiences of nursing student's undergoing video recording while engaging in basic nursing skills practice: lacking confidence and knowledge and feeling confident and knowledgeable. Lacking confidence and knowledge are a common theme amongst

participants in this study. Components that contributed to the knowledge deficit include identifying inadequacies, identifying the need for repetition and practice, and having feelings of anxiety or nervousness in the ability to complete the skill or being video recorded. Feeling confident and knowledgeable are other emergent themes from the study. Students who identified with feeling confident and knowledgeable felt prepared through intentional practice, which includes independent learning and the recording and reviewing the performance.

In this chapter, I discuss interpretations of the findings, limitations, recommendations, and implications of the study.

### **Interpretation of Findings**

I used Miller's Assessment of Clinical Skills theory to guide this study and to direct my understanding of what are the lived experiences of nursing students undergoing video recording while engaging in basic nursing skills practice. This theory was appropriate for my area of interest, which focuses the learning of clinical skills and demonstrating competence of basic nursing skills. In this study I sought to answer the following four questions: (a) Before you watched your video, how would you have critiqued your performance? (b) How did you feel after watching yourself perform the task? (c) Did this activity affect your perceptions of feeling competent in performing the skill? (d) When you reviewed your video recording what did you notice about yourself that you wanted to change? (e) What did you want to do the same? Lacking confidence

and knowledge and feeling confident and knowledgeable are themes which emerged from this study.

The interpretation of the study findings aligns with the existing literature and participant perceptions captured during interviews. The implications of these findings are intended to support and enriching the learning experiences of student nurses undergoing a video recorded skills practice.

### **Theme 1: Lacking confidence and knowledge**

**Recognizing inadequacies.** All ten participants (100%) identified inadequacies after watching their videos with their skills demonstrations. Two participants (20%) identified inadequacies before watching their skills demonstration video. The types of inadequacies ranged from minor inadequacies, a student not recalling the medical term or a word to a major safety issues, such as potentially re-capping a dirty needle. Participant 6 said “I know right away I missed things. I know my skills aren’t great. I have limited experience with hands on skills”.

Participants verbalized that identifying mistakes independently aided them in the learning of the nursing skills for their skills practice assignment. Participant 4 stated “I think the practicing was most helpful, because I recorded and re-recorded so many times, it helped me with muscle memory”. The ability to watch and re watch the skills practice demonstration videos and self-assessing and reflecting assists student in the learning process, recognizing strengths and weaknesses and take more accountability for their learning (Yoo et al., 2009).

**Recognizing the need for practice.** Repeated practice and learning through trial and error provides that student an opportunity to reinforce the newly learned skills, motivates the student in the learning the new skill, and the importance of practice, and positive experiences (Paul, 2010). Participant 1 stated “I practiced a lot to prepare for this assignment. That helped a lot with clinicals”. Another participant shared “had I not practiced and reviewed prior, I probably would have forgotten some steps. I don’t want to do that at the bedside”. The need for practice and repetition of the skills was verbalized by all participants in the study. Additionally, the participants identified that watching and re-watching their videos aided them in identifying their mistakes, and in some cases the ability to correct them. Highlighting importance of practice and repeated practice through trial and error with positive reinforcement helps motivate the student in learning the new skill (Paul, 2010).

**Feeling stress/nervous.** Six participants (60%) identified feelings of feeling stressed or nervous participating in the video recorded skills practice assessment. Admi, et al. research revealed that nursing students reported significant more stress related to their studies than non-nursing students. Further, the participants in their study rated the performing nursing tasks without adequate training as their number one stressful situations (Admi, et al., 2018). Participant 7 felt lost in the learning process, stating “It was a lot to learn and practice, especially since we’ve been on our own. I felt lost”. According to Jamshidi, et al. (2016) the lack of clinical experience and skills practice can

cause nursing students to have feelings anxiety and reduced satisfaction with their learning experiences.

In all the six participants they had feelings of stress or nervousness verbalized a lack of knowledge and/or confidence in their ability to correctly perform the skill. Student learning needs are not served when they have not learned the steps and rationales of the skills involved (De, et al., 2016). Those students had not achieved the “knows” and “knows how” stage of Miller’s Assessment of Clinical Skills theory; learning the skill and knowing how to complete the steps properly.

## **Theme 2: Feeling Confident and Knowledgeable**

**Feeling Prepared to preform clinical skills.** 7 participants (70%) reported that after participating in this skills practice assignment they felt prepared to perform the skills they performed in at the bedside. Participant 2 reflected “with the limited amount of clinical time due to COVID, I have not had many opportunities to practice in clinical, this really helped me with confidence. I feel like I would be able to successfully do this at clinical”.

In Brimble’s study, the participating students also found that the ability to practice, review, and reflect was a useful learning modality that equated to clinical competence and success (Brimble, 2008). To support this, Participant 8 reflects, after studying and reviewing the videos, I feel reassured that I will be able to do this in the clinical setting”.

**Learning through self-reflection.** A student who views him/herself on video will reflect on their performance and make improvement for future practice (Bussard, 2016). Learning through self-reflection was a significant sub-theme for this study. All participants (100%) felt the self-reflective process was important to the learning of the skills. Participant 1 stated, “After I watched myself, I want to do a better job in providing patient information”. Participant 4 also shared, “the practice and reflection were very helpful. I started to record and re-watch all of my runs. It was really helpful.”

To support this, in Bussard’s study student nurse participant’s verbalized benefits of the ability to identify errors on their first videos, and with each re-recording and re-reflection, the students made statements such as; “I was able to apply my news skills in the clinical practice” and “I worked on improving myself so I was not as timid”(Bussard, 2016).

### **Findings and Theoretical Framework**

The theoretical framework selected for this study is Dr. George Miller’s Assessment of Clinical Skills, Competence and Performance. Miller’s Assessment of Clinical Skills was chosen as the theoretical frameworks to guide the research and provided a central focus for the analysis of data (Miller, 1990). Based on the findings in this study two emergent themes arose: lacking confidence and knowledge and feeling confident and knowledgeable. All nursing students in this study (100%) identified inadequacies and recognizing the need for practice after watching their video recorded skills practice. Another 60% of participants involved stated feelings of stress or nervous

in the preparation and recording of this assignment. According to Strand, video recorded simulated learning interventions helped nursing students develop, grow, and foster the ability to collaborate clinical scenarios with colleagues, review and reflect on their performances, which ultimately enhances student learning (Strand et al., 2017).

Supporting this, 60% of the students participating in the study stated that after participating in this study, they felt confident to perform these skills safely at clinical and all participants agreed that learning through self-reflection was an important aspect of their learning.

Table 5 below describes the connection of each theme and sub-theme with the related assumptions in Miller's Assessment of Clinical Skills, Competence and Performance.

**Table 5**

*Themes and Theoretical Model*

<b>Emergent Themes</b>	<b>Sub-themes</b>	<b>Assumptions of Miller's Theory aligning to the emergent themes and sub-themes</b>	<b>Findings in this study</b>
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Lacking Confidence and Knowledge	<i>Recognizing inadequacies</i>	The student has not mastered the “knows” (foundational level of Miller’s pyramid)	P5 “I spent a lot of time preparing, I practiced for weeks and weeks and kept re-recording until I was happy with the end result”
	<i>Recognizing the need for practice</i>		
	<i>Feeling Stressed/Nervous</i>		P4 “I felt awkward and weird. I was worried about not doing a good job.
Feeling confident and knowledgeable	<i>Feeling prepared to preform clinical skills</i>	The student has mastered the “does” (action)	P2 “I like how I verbalized the steps; I practiced a lot”
	<i>Learning through self-reflection</i>		

### Limitations of the Study

A convenience, purposeful sampling technique was used in this study for the selection of participants who volunteered and met the inclusion criteria. The sample size and sampling technique were constraints to the transferability of the findings to other populations and place the findings into question.

Using an interpretive, phenomenological design requires the researcher’s interpretation of the participants’ statements. Ensuring that my bias did not influence the interpretation of the participants’ responses to the interview questions was challenging. During data collection, I was the primary instrument for data collection and unintentionally could have influenced the responses. To minimize bias, during this study,

interview questions were used, along with an audit trail that provided transparency for all decisions supporting the confirmability of the findings of the study.

Interviews were conducted via phone interviews. This limited the ability to observe the participants body language and facial gestures as they answered the questions. However, after listening to audio tapes repeatedly and reviewing my field notes, I was able to use and analyze the participants tone, intonation, pace, pauses and inflection as a way to capture emotion in response to the open-ended interview questions. I captured descriptive, thick, rich, data by analyzing the participants' voice pace and pauses in speech to convey emotion such as pride, fear, frustration, or apathy in the participants' voice.

The dissertation Chairperson and committee member reviewed all aspects of the project and provided feedback, comments, and questions for clarification regarding the study. The University Research Reviewer (URR) also reviewed all aspects of the project, providing feedback and comments to increase validity.

### **Recommendations**

The recommendations for further research were derived from the strength and limitations of this study. New knowledge gleaned from this study may be used to influence changes in how nursing students learn basic nursing skills. The overarching findings in this study support the literature on the benefits of video recording and self-reflection in the learning of basic nursing skills.

Future studies are needed to explore how video recording and self-reflection continues to benefit the trajectory in the learning of nursing skill acquisition. Future studies are needed to explore nursing students from different program and different regions. This would allow for comparisons across different settings and may highlight additional and more complex nursing skills. Future studies are needed to explore nursing students with a larger sample size since the sample in this study was 10 students. Although a sample size of 10 aligns with an appropriate sample size for phenomenological, interpretative design, as it limits the transferability of the sample and may illuminate additional challenges faced by nursing students.

### **Implications**

Due to over-crowding at clinical sites and lack of student experiences, lack of clinical experiences and the ability to practice nursing skills, students may experience feelings of vulnerability, anxiety, and reduced satisfaction (Jamshidi, et al., 2016). These findings that alternative learning modalities are required to provide opportunities for nursing students to master basic nursing skills When clinical learning experiences are unavailable, (Quinn & McAuliffe, 2019).

### **Implications for Social Change**

Simulated learning interventions provide nursing students the practice to learn complex nursing skills and develop feelings of confidence and competence. All students participating in this study stated the positive experience and satisfaction in their learning

by participating in a video recorded skills practice. Additionally, the ability to watch and re-watch the videos allowed the students to identify inadequacies and correct mistakes.

Implementing video-recording learning experience as part of the standard nursing curriculum contributes to improved student learning experiences and positive social change. The results of the study highlight the need for nurse educators to adapt and design simulated learning experiences to aid nursing students with communication, collaboration, critical thinking, and prioritization. The study results also revealed that students' ability to collaborate, reflect, and discuss critical learning situations has the potential to increase their feelings of confidence, safety, and security in their learning. (Strand et al., 2017)

### **Conclusions**

This study used a qualitative, phenomenological design to explore ADN nursing student's perception of video recording and self-reflection in basic skill acquisition. For this study I recruited nursing students enrolled in a medical surgical course in an ADN program in the southwest section of the U.S.

Currently, clinical agencies and nursing programs are overwhelmed with students and competition for clinical placement. As a result, limited opportunities at the clinical sites create competition for students in patient selection and skill practice and acquisition (Quinn & McAuliffe, 2019). To offset this deficit, simulated learning and video recording is a recognized alternative teaching modality (Brown, 2014).

This study unveils both positive and negative aspects of the lived experiences of nursing students' using video recording and self-reflection while learning nursing skills. Participant 5 shared, "I felt like I did a good job" and Participant 9 stated "I was happy with my performance". Conversely, varied factors that lead to student dissatisfaction and barriers to student learning and feelings of confidence and competence such as feeling lost, stress, nervousness, and stress. Participant 4 stated "it was a lot to learn and practice, especially since we've been on our own. I felt lost"

The study results revealed that students' ability to collaborate, reflect, and discuss critical learning situations have the potential to increase their feelings of confidence, safety, and security in their learning. All participants stated that repetitive practice and reflection played a positive role in the learning process and the development of competence and confidence. The results of this study could be used by educators to design recorded simulated learning activities to help nursing students develop the ability to collaborate, reflect, and discuss critical learning situations that emulate actual patient scenarios and situations. Researchers have identified the need for additional studies that explore alternative learning experiences for students to gain confidence and competence in the learning of basic nursing skills. In addition, I recommend quantitative studies to examine differences in skills acquisition for students who are assigned to recorded simulated learning activities compared to students without this experience.

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## Appendices

## Appendix A: Recruitment Flyer

**You are invited to participate in a research study**

My name is Lisa Aloy. I am a Ph.D. student at Walden University conducting a research about nursing students' perspective of their learning experiences after participating in a video recorded simulated skills acquisition

**To participate you must:**

- Be 18 years or older
- A nursing student enrolled at your college in a medical/surgical course
- Have participated in low fidelity simulation and video recording

**You will be asked to participate in one interview session that is:**

- Private
- About perspectives of your learning experience
- Tape-recorded
- Will contain 4 open ended interview questions

I am available to discuss this in more detail with you. Please contact me at [lisa.aloy@waldenu.edu](mailto:lisa.aloy@waldenu.edu) so that I can answer any questions you may have about participating in the study.

The Institutional Review Board has approved this study

Study #

Expire

## Appendix B: Interview Protocol

### **Interview Protocol**

**Date of Interview:**

**Location of Interview:**

**Start Time:**

**End Time:**

**Code of Interviewee:**

**Name of Interviewer:**

**Recording Mechanism:**

**Introduction to Interview Session:**

Hello, Mr. or Ms. (Participant's Name), thank you for taking your time to meet with me today. As I have already shared with you, this interview will contribute to the information for a research study intended to learn more about the experiences and perspectives of student nurses after a video recording skill acquisition.

You have been asked to participate because you have some experience simulation and clinical skill acquisition, and you are willing to share that experience with me. The questions I will ask you and the answers you give me will be about you and your particular and unique experiences and perceptions. Please feel free to provide as much detail as possible that you are willing to share.

You have already signed a consent, but I just want to mention again that the interview will be tape-recorded. This will allow me to have an accurate record of what you shared with me and not rely on my memory. It will also help me listen attentively to you without needing to write everything down, even though I will be jotting a few things down as well.

### **Interview Questions**

**RQ:** What are the lived experiences of nursing students regarding undergoing video recording while engaging in a basic -nursing skills learning activity?

1. Before you watched your video, how would you have critiqued your performance? Provide specific detail.
2. How did you feel after watching yourself perform the task?
3. Did this activity affect your perceptions of feeling competent in performing the skill?
4. When you reviewed your video recording what did you notice about yourself that you wanted to change? What did you want to do the same?

### **Closing Statement**

I want to thank you very much for taking the time to share your perceptions and feelings with me today. I very much appreciate your contribution to this study. If you think you need to reach out to me with further information, questions, concerns, please do



not hesitate to call or email me. My contact information is XXXXXXXXXXXX. [Thank you.](#)

Lisa Aloy, a PhD student at Walden University conducting research on nursing students' perspective of their learning experiences after participating in a video recorded simulated skills acquisition. You are invited to participate in this study if you are a nursing student enrolled in a medical surgical course at XXXXXXXX.

The purpose of this study is to understand the nursing students' perception of their learning utilizing video recording. If you agree to this study, you answer 5 open ended questions pertaining to the experience and the learning process. The interview process could take up to 20 minutes and will take place after the simulated learning exercise. Your participation is completely voluntary.

You will receive a \$5.00 Starbucks gift card for your participation in this study. Your participation will be completely confidential, and your responses will not be linked to any personal identified information.

The interview will be held on XXXXXXXX.

The Informed Consent will be emailed to you after you agree to participate in the study.

Please email XXXXXXXX if you have any questions.

Thank you.

### Appendix C: Inclusion/Exclusion Criteria

This study will include nursing students enrolled in a medical/surgical course in an ADN program in the southwest U.S. Inclusion criteria include students enrolled in a med/surg nursing course and participated in low fidelity simulation/skills practice and video recording. Exclusion criteria excludes BSN and RN to BSN students and high-fidelity simulation learning experiences, and students who are on academic probation

## Appendix D: Initial Codes

1. Identifying lack of confidence
2. Identifying lack of knowledge
3. Feeling confident before watching video
4. Felt more confident after watching video
5. Spent time preparing but missed tasks when viewed video
6. Re watching videos helped identify areas of weakness/mistakes
7. Identified practice and repetition increased confidence
8. Recognized that they did not know the steps of the skill/lack of knowledge
9. Feeling competent
10. Identified safety issue
11. Identified patient/communication needs
12. Identified need for practice
13. Anxious/nervous
14. Feeling rushed
15. Reviewing video identified areas of weakness
16. Repetition helps develop competence
17. Recognize to effectively communicate with patients
18. Confident with effective communication.
19. Jumble words/not effectively communicate
20. Feels lost

21. Feels unsupported
22. Confidence to do skill at the bedside
23. Lack of fidelity/doesn't feel real