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THE USE OF ACTORS AS STANDARDIZED PATIENTS IN MENTAL HEALTH NURSING
SIMULATIONS TO INCREASE CONFIDENCE AND DECREASE ANXIETY IN PRE-
LICENSURE NURSING STUDENTS

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ABSTRACT

The use of actors as standardized patients in mental health nursing simulations to educate pre-licensure nursing students is still a relatively new educational method in the nursing field. As using actors as standardized patients becomes a more common practice among nurse educators, research is necessary to provide insight into whether standardized patient simulation is an effective teaching method. **PURPOSE:** To investigate the literature concerning the use of actors as standardized patients in mental health nursing simulations to increase confidence and decrease anxiety in pre-licensure nursing students. **DESIGN AND METHODS:** A systematic review of the literature was conducted using the PubMed and CINAHL databases with the search terms 1) actors or standardized patients; 2) pre-licensure nursing students; 3) mental health as the setting; 4) simulation as the intervention; and 5) confidence or anxiety as study outcomes. Results were limited to original research articles in English written in the past 10 years. In total, ten articles were selected and included as part of the systematic review. **RESULTS:** Current evidence is in agreement that using actors as standardized patients in mental health nursing simulations increases confidence and decreases anxiety in pre-licensure nursing students. All studies measured confidence and anxiety levels immediately post-simulation experience. **CONCLUSION:** There are currently no standardized measures for confidence and anxiety levels. Each study utilized different measures, which is a limitation to the systematic review. Future research should focus on reliable and valid assessment measures and study designs to evaluate if the change persists past the immediate intervention phase.

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CHAPTER 1

Introduction

According to the American Association of Colleges of Nursing, there are approximately 330,000 nursing students and 647 nursing bachelor's degree (BSN) programs in the United States (American Association of Colleges of Nursing [AACN], 2018). Nursing is a growing and very in-demand profession. Statistics collected by The Bureau of Labor showed that employment of registered nurses is projected to grow 15 percent from 2016 to 2026 which is a much higher rate than the average for all occupations (Registered Nurses Summary, 2018). The shortage of nurses is caused by an increased number of hospitalized patients who are older and more acutely ill as well as expanded opportunities in various primary care settings (AACN, 2018). The National League for Nursing stated that in 2014, lack of clinical placements was the main obstacle to expanding the capacity of the program for 41 percent of BSN programs (Nursing Education Statistics, 2018). An increase in capacity of nursing programs would allow more nurses to be educated and help combat the nursing shortage in the United States. With the increases of nursing students, new, innovative and effective ways to deliver nursing education content also continues to grow. Nursing is constantly changing based on new technology and information being learned, and thus, nursing education must also advance (AACN, 2018). With the growing demand for nurses, the demand for high quality programs to deliver nursing education also increases.

The essential function of the nurse's role has remained consistent despite advancing technology and that is to make sure the right person is providing the right care for the patient at the right cost; in other words, the nurse is a patient-advocate first and foremost (AACN, 2018). Nursing schools educate students to provide minimally competent care and to have a basic

understanding of many specialty areas such as pediatrics, obstetrics and gynecology, critical care, community health, home health care, and psychiatry. The pre-licensure curriculum is designed to prepare students for work within the growing and changing health-care environment and the health-care system is in turn demanding more from nurses. Nursing education has shifted to making sure students transcend the traditional areas, such as chemistry and anatomy, to enable them to gain a deeper understanding of health promotion, disease prevention, screening, and genetic counseling. Nurses today also are required to have a global perspective and understand how health problems may have a social cause, such as poverty and environmental contamination, as well as have insight into human behavior, cultural differences, and ethics. The increased complexity of health problems and increased management of these problems out of the hospitals require highly educated and well-prepared nurses at the pre-licensure level. In a typical four-year nursing education program, the curriculum focuses on the nursing sciences and emphasis moves from the classroom to health facilities in the junior and senior years; this is where students are exposed to clinical skills, nursing theory, and the varied roles nurses play in the health-care system (AACN, 2018).

Due to the changes in the healthcare field, like expanding technology, nursing educators are constantly looking for different ways to educate nurses and adapt the curriculum. Nursing programs are now investigating alternative ways to educate students outside of traditional clinical settings. Nursing simulation is a rapidly growing method to deliver nursing education content. The National League for Nursing has stated that simulation as a delivery method is a necessary teaching approach that prepares students for the role of being a professional nurse (National League for Nursing, 2015). While simulation has many educational benefits to the nursing students, nursing educators are also using simulation because it is a safer teaching

method than hands-on clinical experiences (Fay-Hillier, Regan, & Gallagher Gordon, 2012). The hospital is a high-fidelity, live environment that does not leave much room for error and can be dangerous to patients if the nursing student is not adequately prepared for the experience.

Simulation provides a safe setting for students to practice skills and receive feedback from peers and clinical evaluators (Fay-Hillier, et al., 2012).

One form of simulation that nurse educators have incorporated into nursing curriculums is the use of standardized patients (SPs). According to Choi (2013):“a standardized patient is a person who is trained to accurately, repeatedly, and realistically recreate the history and physical findings, as well as the psychological and emotional responses, of the actual patient. The advantages of using standardized patients include their ability to accurately and consistently portray a case and to provide evaluative data” (p.e385). Standardized patients can be individuals, volunteers, or paid actors who portray patients in a realistic and consistent manner, using case studies and role-playing in the simulated learning experience (Keltner, Grant & McLernon, 2011). Nursing and other health-care professions have a long history of using simulation. Standard simulation focuses around skills labs where manikins are used as patients and traditional inpatient clinical experiences focus significantly on observation only; the use of standardized patients allows nursing students to practice their skills in a different way than these other traditional teaching methods (Shanholtzer & Herzog, 2016).

The use of standardized patients in simulation experiences for nursing students has increased in frequency over the past decade however, the use of standardized patients in undergraduate education is still not a common practice among many nursing programs (Shanholtzer & Herzog, 2016). Some of the barriers to the use of standardized patients are the

cost associated with hiring trained actors or the time and resources necessary to train the actors (Keltner et al., 2011).

Although the use of standardized patients is still fairly infrequent among nursing education institutions, the use of standardized patients is increasing in the mental health nursing field specifically because many nursing programs have difficulty accessing enough clinical sites for their students (Alexander & Dearsley, 2013). At some institutions, mental health is combined with other courses, giving students less clinical time in this essential area of nursing practice. Other undergraduate nursing programs have even eliminated mental health nursing clinical rotations entirely due to the absence of inpatient psychiatric facilities. One reason for the limited access to clinical sites is due to the recent economic downturn. There were budget cuts to private and public mental health facilities which has caused closures of these facilities and changes in the services they provide which limit possible clinical placement opportunities for nursing students in undergraduate baccalaureate nursing programs (Alexander & Dearsley, 2013).

Another reason nursing programs often lack mental health clinical sites is due to a recent change in delivery of mental health services that requires less inpatient psychiatric care and increased outpatient services; this allows for less patient observation time due to the nature of the delivery of outpatient services (Jack, Gerolamo, Frederick, Szajna, & Muccitelli, 2014). Compounding the shortage of clinical sites is the increased patient acuity on many inpatient mental health units, causing an increase in nursing student anxiety levels (Jack et al., 2014). Safety of the nurse and patient is a priority in all areas of nursing, but simulation is even more essential in the mental health nursing field where a lack of clinical sites can lead to nursing knowledge deficits due to lack of exposure (Jack et al., 2014). Lack of exposure to mental health nursing also limits the pool of nurses who want to work in this specialty area (Jack et al., 2014).

Nursing programs are also not able to guarantee exposure to uniform experiences during mental health clinical rotations due to variations in patient conditions that have less predictable outcomes than other specialty areas (Jack et al., 2014).

A simulation with standardized patients is most successful and provides a realistic experience if actors maintain their roles from start to finish, portray emotions that are very similar to those of real patients, and improvise when the simulation does not follow the exact script or go as planned (Nunes de Oliveria et al., 2015). Following a mental health simulation using standardized patients, one undergraduate nursing student said, “Even though some of what I said was awkward, this gave me a chance to practice and get better for future interactions with real patients” (Webster, 2013, pg. 647).

The benefits of standardized patients in mental health simulations are not limited to just psychiatric nursing. Many skills learned during mental health nursing simulations using standardized patients can be applied to all areas of nursing such as communication skills and building therapeutic relationships with patients. Patients with mental health issues are also seen in all areas of clinical practice and are not just limited to psychiatric institutions (Barlett & Buston, 2015).

While there is a need to continue to conduct research into the integration of standardized patients into simulation for pre-licensure mental health nursing student education, there are already some studies that highlight the outcomes of these simulations. The purpose of this thesis is to conduct a systematic review of the literature published in the last ten years on the use of actors or standardized patients in mental health nursing simulations for pre-licensure student nurses. As such, seeking to answer the question: Does the use of actors as standardized patients

during mental health simulations with pre-licensure nursing students increase confidence and decrease anxiety?

DEFINITIONS

Standardized Patient (SP):

There are currently many different definitions for the term “standardized patient” that are used by researchers. The following definitions are some of the most common definitions used in nursing research.

Choi (2013) stated that:

“a standardized patient is a person who is trained to accurately, repeatedly, and realistically recreate the history and physical findings, as well as the psychological and emotional responses, of the actual patient. The advantages of using standardized patients include their ability to accurately and consistently portray a case and to provide evaluative data” (p.e385).

Keltner, Grant & McLernon define standardized patients as:

“individuals, volunteers, or paid actors who portray patients in a realistic and consistent manner, using case studies and role-playing in the simulated learning experience (2011, p.36).

Churchouse and McCafferty (2013) suggests that an actor in simulation is:

a person who is given a history to portray and act as a patient in the clinical encounter with the healthcare student and allows the student to practice intangible skills like communication skills and therapeutic relationships.

A standardized patient is not an actor, but a person who allows students to practice tangible skills like a physical examination. However, many researchers use the term standardized patient or stimulated actor interchangeably and do not consider a difference between them (Beigzadeh, Bahmanbijari, Sharifpoor & Rahimi, 2016). For the purposes of this paper, the term

“standardized patient” will be used to describe the actors who participate in the mental health nursing simulations.

Actors: “individuals who perform or depict certain characterizations and roles through mannerisms and verbal and nonverbal communication” (Keltner et al., 2011, p.36).

Mental Health Nursing Competencies: the ability of the course facilitator to “integrate knowledge, skills, and attitudes. Develop confidence and decrease anxiety and fear. Improve therapeutic communication techniques. Provide consistent experiences” (Shanhotlzer & Herzog, 2016, p.4).

Simulation: “an educational strategy using guided experiences that replicate important elements of reality in a fully interactive environment to achieve specific goals related to learning or evaluation” (Keltner et al., 2011, p.36).

Role-playing: “acting out or performing certain characterizations and actions in an artificial environment” (Keltner et al., 2011, p.36).

Experiential learning: “experience as the source of learning and development” (Doolen, Giddings, Johnson, Guizado de Nathan, & Badia, 2014, p.55).

Confidence: “being comfortable and being relaxed. Feeling secure” (Haavardsholm & Naden, 2009, p.486).

Anxiety: “a common, subjective human emotion that can be defined as a feeling of uneasiness, uncertainty, worry, or fear that triggers the body's stress response in reaction to a perceived or real threat” (Frazier et al., 2002, p.58).

CHAPTER 2

Background

Learning theory

Often traditional clinical experiences in the hospital setting in nursing are based on a social learning theory developed by Albert Bandura in 1977. Bandura states that behavior is learned from the environment through observational learning. In other words, nursing students learn what to do by watching rather than being active participations (Bandura, 1977). Simulation however is an environment that allows students to be active participants in their learning and is based on a different learning theory. Simulations are approached with a constructivist worldview of learning meaning that nursing students are adults who come prepared to actively participate in learning experiences with prior knowledge— most often from the classroom setting (Zapko, Gemma Ferranto, Blasiman, & Shelestak, 2018). The constructivist conditions for instruction include the provision of complex and relevant learning environments, opportunities for social negotiation, and a safe environment for self-reflective practices. Kolb's (1984) theory of experiential learning aligns with a constructivist view of learning and is chosen as the framework for many standardized patient encounters. According to Kolb (1984), learning is a process, not an outcome, where the development of new knowledge is a result of transforming real-life experiences. There are two processes in the transformation of experience: (1) grasping the experience (apprehension) and (2) transforming the experience (comprehension) (Kolb, 1984). Nursing students can take what they learn in the classroom and apply it to the simulation setting using the conceptual model developed by Kolb. In addition, nursing students gain knowledge based on their personal interpretation of the mental health standardized patient experience and the ability to empathize with the standardized patient which is a key difference in simulations

using manikins and simulations using standardized patients (Robinson-Smith, Bradley, & Meakim, 2009).

Simulation

The clinical education experiences of nursing students has remained virtually unchanged for decades. Clinical experiences still follow the traditional delivery of the apprenticeship model and are in-person with real patients in real settings. Traditional clinical experiences often focus on tasks or skill performance, such as medication administration, and do not always encourage the development of critical thinking or clinical decision making in students. Students in traditional clinical experiences often spend their time caring for one or two patients and team-building aspects of care are not emphasized (Zapko et al., 2018). Simulation is constantly changing and improving to provide better patient outcomes by increasing nursing students' knowledge and working to improve competencies that are not typically learned in the traditional hospital setting.

While it is unclear when the use of simulation to educate nursing students began, the International Nursing Association for Clinical Simulation and Learning (INACSL) was established in 1976. The purpose of this group is to meet bi-yearly to discuss teaching in a practice laboratory and ways to improve teaching with nursing simulation (History - INACSL, 2015). Simulation is frequently used and its validity as a teaching method has been established through multiple research studies. In a landmark study, The National Council of State Boards of Nursing (NCSBN) conducted the National Simulation Study to explore whether clinical time can effectively be replaced with simulation time. The researchers found that simulation can be an appropriate and beneficial educational tool for the clinical education of nursing students and does not adversely affect student education (Hayden et al., 2014). Zapko et al (2018) found that

having students experience simulations is a valuable method of clinical instruction and when conducted well, simulations can lead to increased student satisfaction and self-confidence. The NLN also encourages the use of simulation in nursing education; the NLN says that simulation is an alternative to face-to-face clinical experiences and can take many forms, including human patient simulation using manikins and/or standardized patients, virtual and computer based simulations, simulation done to teach psychomotor skills, or role play (NLN, 2015). For more than a decade, the NLN has promoted simulation as a teaching methodology to prepare nurses for practice across the continuum of care in today's evolving health care environment. Simulation provides a rich learning opportunity for students to integrate theory with practice while making real-time clinical decisions in an environment that does not put patients at risk (NLN, 2015).

According to Li (2007), simulation is described as “a strategy — not a technology — to mirror, anticipate, or amplify real situations with guided experiences in a fully interactive way” (p.3). Simulation fidelity is the physical, contextual, and emotional realism that allows persons to experience a simulation as if they were operating in an actual healthcare activity (Li, 2007). Currently, there are five main methods of simulation that are used to educate nurses: task trainer simulation, manikin-based simulation, virtual reality simulation, computer-assisted instruction, and standardized patient simulation (Li, 2007). Task trainer simulation allows the student to practice skills on task trainers to ensure safety to patients. An example of this would be using a task trainer to practice blood draws. Usually, these task trainers will focus on just one skill. Task trainers allow nursing students to practice clinical techniques like inserting IV lines or indwelling catheters without risk to a real patient. Similarly, manikins also allow nursing students to practice skills without fear of harming a real patient. There are low, mid, and high fidelity manikins

which range in their technological abilities. Li (2007) defines fidelity as “the physical, contextual, and emotional realism that allows persons to experience a simulation as if they were operating in an actual healthcare activity” (p.18). Manikins can often communicate, have vital signs, blink, cry, and even have chest expansion with breaths. There are multiple manikin options depending on the learning objectives and goals of the course for which the manikin is used. Virtual reality simulation is a very new form of simulation that is not commonly used that provides nursing students with high fidelity training using true-to-life tactile sensations. Computer-assisted instruction also uses innovative technology to immerse students in the learning experience, however, it is a very low fidelity form of simulation because it focuses on visual learning only. Educators may also combine types of simulation to create a hybrid experience (Li, 2007). The use of standardized patients in simulation to educate nursing students will be reviewed in more detail.

Actors as Standardized Patients

Actors are frequently used as standardized patients in simulation experiences. These actors portray patient scenarios, events, and clinical symptoms in a variety of simulated settings and attempt to make the experience as similar to a true clinical setting as possible. Incorporating actors as standardized patients is useful because students have an opportunity to improve their skills in a safe, nonthreatening environment and are given the opportunity to debrief the scenarios as well as practice therapeutic communication skills with a live actor (Keltner et al., 2011). In mental health nursing simulations specifically, actors are useful because they provide authenticity with interactions and emotional responses that a manikin cannot provide regardless of the level of fidelity. Creating an authentic environment is essential to nursing students’ outcomes and having an effective experience (Barlett & Buston, 2014). Students are able to

increase their communication and empathy skills more successfully with a person rather than a manikin (Bartlett & Butson, 2014).

There are some challenges in using standardized patients for mental health nursing simulations. Actors must be trained, and in some cases, paid, and simulation rooms must be properly set up with the correct equipment and props. Providing a consistent experience without any unexpected issues can be difficult when working with actors rather than manikins because there are less predictable outcomes when using live actors who are improvising in their roles (Barlett & Buston, 2014). Using actors in simulation also is challenging because actors may become physically or mentally exhausted—especially when asked to repeat the simulation multiple times in a day. Taking breaks allows time to decompress, recharge, and refocus the actor's energy on the next scenario which allows for a more successful simulation experience (Jacobs & VanJaarsveldt, 2016).

Some research suggests that role-playing with standardized patients and simulators (i.e. SimMan[®]) are comparable as teaching strategies in regard to student outcomes in most domains (i.e., cognitive, affective, and psychomotor). However, role-playing appears to be superior in the affective or emotional domain which is an essential component of mental health nursing (Keltner, et al., 2011). The presence of real people within scenarios adds to the authenticity of the experience, particularly when focusing on patient-centered simulations that emphasize empathy, communication, clinical judgment, and decision making (Keltner et al., 2011).

Mental Health Nursing Education and Competencies

The use of standardized patients may improve the competency of nursing students who work with patients with mental illnesses no matter the clinical setting (Doolen et al., 2014). Nursing programs in the United States use national standards to set for mental health nursing to

dictate the nursing curriculum. According to the American Nurses Association (2012), the goal of mental health nursing is to promote mental health through assessment, diagnosis, and treatment of behavior problems, mental disorders, and comorbid conditions across the lifespan. Mental health nursing began during the late 19th century when the practice of treating mentally ill patient changed from focusing on restrictive care in asylums to medical and social treatment for the mentally ill. Since then, the scope of practice for mental health nursing has been consistently evolving. Recently, the emphasis of mental health nursing is focused on integrated care of those persons with co-occurring medical and psychiatric disorders (American Nurses Association, 2012). Considering the changes in delivery of mental health services and the goals of mental health nursing, many experts have established core competencies for pre-licensure nursing student education. According to Gilje et al. (2007) the eight critical competencies required of mental health nursing students include therapeutic communication, therapeutic use of self, nursing process, safety, clinical learning, dialogue, faculty guidance, and professional conduct. Gilje et al. (2007) state there are many more mental health nursing competencies and that the eight they developed are just a few critical competencies that should be universally incorporated into pre-licensure nursing student curriculum. Significant importance is placed on teaching therapeutic communication in nursing programs; this core competency is mandated by national nursing organizations such as the American Association of Colleges of Nurses AACN (Kameg et al., 2010). Other experts, including, Shanholtzer and Herzog (2016) state that the core competencies for teaching mental health nursing while using actors as standardized patients are to “integrate knowledge, skills, and attitude, develop clinical imagination, develop confidence, make mistakes and learn from them, improve communication, and consistent experiences” (p.3). For the purpose of this study, the focus will be on the core competency of confidence.

Confidence plays a role in lowering students' anxiety levels and decreasing anxiety makes students more receptive to learning. Therefore, anxiety will be studied in addition to confidence.

Confidence

According to McCabe, Gilmartin, and Goldsamt (2016), "confidence in one's ability to effectively carry out a task within a specific situation is an important aspect of nursing practice and a focus of nursing education" (p.54). Self-confidence is an important predictor for success in professional nursing roles, job satisfaction, and career longevity. Research has shown that individuals' self-confidence is a predictor of their ability to perform effectively in new situations (McCabe et al., 2016). There is evidence to support the connection between the use of simulation and improving one's self-confidence and critical thinking skills among pre-licensure students (McCabe et al., 2016). Students who participate in simulation as a primary method for learning skills and assessment report greater self-confidence and clinical competence than those who do not complete simulation experiences (McCabe et al., 2016). Using high fidelity simulation is a viable education innovation that supports students' development as confident practitioners of nursing care (McCabe et al., 2016). Improving confidence among pre-licensure nursing students is essential to creating competent nurses. Increasing nursing student confidence also works to help decreasing anxiety due to interdependence of the two concepts.

Anxiety

Overall, according to Wedgeworth (2016), "Nursing students report higher levels of anxiety than the overall population of college students, in part due to competition for entrance into programs, course structure, long hours of clinical experiences, and working with very sick persons" (p.23). This excessive anxiety may lead to poor role transition, burnout, poor job performance, or new nurses leaving the profession all together (Wedgeworth, 2016). In young

new registered nurses age 24 and younger, psychological distress (anxiety, depression, irritability) is higher than that of healthcare providers of all ages and is a significant factor contributing to nurse turnover (Wedgeworth, 2016). The study by Wedgeworth (2016) examined students' anxiety levels throughout the four years of a pre-licensure nursing program.

Wedgeworth found that students experienced the most anxiety at the beginning of their clinical nursing courses each semester. Wedgeworth also stated that anxiety levels increase as students' progress through nursing programs, with the highest levels of anxiety existing in the most experienced students due to the increasing complexity of the patients with whom students are interacting. Identification of areas that cause significant anxiety, like the beginning of clinical courses at the beginning of the semester, may allow faculty to evaluate the curriculum and develop interventions to assist students to decrease anxiety (Wedgeworth, 2016). This review of literature seeks to answer the question: Does the use of actors as standardized patients during mental health simulations with pre-licensure nursing students increase confidence and decrease anxiety?

CHAPTER 3

Methods

Literature Search

The search for literature was based around the research question: Does the use of actors as standardized patients during mental health simulations with pre-licensure nursing students increase confidence and decrease anxiety? The inclusion criteria for articles included 1) actors or standardized patients; 2) pre-licensure nursing students; 3) mental health as the setting; 4) simulation as the intervention; and 5) confidence or anxiety as study outcomes. Initially, two databases, PubMed and CINAHL were searched using the key terms “actors OR standardized patients” AND “nursing students OR student nurses” AND “simulation” AND “mental health or mental disorder or psychiatric illness” AND “confidence OR anxiety.” The parameters placed on the search were peer reviewed, within the past 10 years, and English only. The search of the PubMed database resulted in 19 articles. Seventeen articles were selected and the other 2 were immediately excluded because they were not relevant to the topic. Many of the articles excluded were looking at graduate nursing programs rather than pre-licensure programs. The search of the CINAHL database resulted in 17 articles. Four articles were immediately discarded because they were duplicates from PubMed or not relevant. Other databases searched were Proquest Nursing and Allied Health and PsycInfo. Both databases resulted in less than 20 articles—all of which were duplicates or not relevant to the topic.

Data Evaluation

After full text evaluation of the 30 articles initially selected for review, 20 articles were excluded for not meeting the inclusion criteria. Many of the articles that were excluded did not include standardized patients or were not specific to mental health simulations. Ten articles met the criteria for inclusion in this review. Appendix I is the PRISMA flow diagram for article

selection. The included articles were assessed for level of evidence and quality according to the John Hopkins Nursing Evidence Based Practice Evidence Rating Scale which is Appendix II. The articles were then reviewed by my thesis advisor and consensus was met on both the level of evidence and quality score for each article.

Data Analysis

The articles were reviewed and data were extracted from each article using the Matrix Method which is Appendix III (Garrard, 2017). The Matrix Method aided in summarizing the data. Topics in the summary tool include author, year, and title; purpose; sample and setting; design; competencies measured: confidence and anxiety; findings; strengths, limitations, and evidence grade. These categories were then synthesized into key themes.

CHAPTER 4

Results

The previous chapters have given an overview of the topic of the use of standardized patients in pre-licensure mental health nursing simulations to increase confidence and decrease anxiety.

This chapter will analyze the results obtained from the systematized literature search to provide an accurate representation of what is currently known about the topic. Ten articles were selected for inclusion in this review (Choi, 2012; Doolen, Giddings, Johnson, Guizado de Nathan, & Badia, 2014; Kameg, Szpak, Cline, & Mcdermott, 2014; Martinez, 2017; Miles, Mabey, Leggett, & Stansfield, 2014; Robinson-Smith, Bradley, & Meakim, 2009; Sarikoc, Ozcan, and Elcin, 2017; Webster, 2014; Webster, Seldomridge, and Rockelli, 2012; Yong-Shian, MCouns, Chng, Tan, & Yobas, 2016). Five of the articles focused on confidence, three of the articles focused on anxiety level, and two articles looked at both confidence and anxiety.

Actors used as standardized patients in simulation. All of the studies with the exception of one (Miles et al., 2014) either trained the actors themselves or used previously trained/ professional actors (Choi, 2012; Doolen et al., 2014; Kameg et al., 2014; Martinez, 2017; Robinson-Smith et al., 2009; Sarikoc et al., 2017; Webster, 2014; Webster et al., 2012; Yong-Shian et al., 2016). In most cases, the actors were given educational materials and had rehearsals prior to the simulation. One study used the teaching assistants (TAs) for the course to be the actors for the simulation (Miles et al., 2014). The actors also played a variety of patients with different diagnoses during the simulations. Five studies included standardized patients with depression/ suicide ideation (Choi, 2012; Kameg et al., 2014; Miles et al., 2014; Robinson-Smith et al., 2009; Sarikoc et al., 2017). Three studies included standardized patients with anxiety (Doolen et al., 2014; Kameg et al., 2014; Miles et al., 2014). Three studies included patients with schizophrenia (Choi, 2012; Doolen et al., 2014; Martinez, 2017). Two studies included

standardized patients with bipolar disorder (Doolen et al., 2014; Miles et al., 2014). Two studies included standardized patients with hallucinations/psychosis (Miles et al., 2014; Sarikoc et al., 2017). One study included standardized patients who were playing assault victims (Martinez, 2017). One study included standardized patients with PTSD (Webster et al., 2012). Finally, one study was unspecific in the type of mental health diagnoses used during the simulation (Yong-Shian et al., 2016). The studies also varied in the length of the simulations. Two simulations had shorter simulations lasting 3-5 minutes (Kameg et al., 2014; Martinez, 2017). Most studies' simulations lasted approximately 10-20 minutes (Doolen et al., 2014; Miles et al., 2014; Robinson-Smith et al., 2009; Webster, 2014; Webster et al., 2012). One study was significantly longer lasting 50-90 minutes (Choi, 2012). Two studies did not specify the length of their simulations (Sarikoc et al., 2017; Yong-Shian et al., 2016).

Confidence

Seven articles in total conducted between 2009 and 2017 looked at confidence level related to using actors as standardized patients in pre-licensure mental health nursing simulations (Choi, 2012; Doolen et al., 2014; Martinez, 2017; Robinson-Smith et al., 2009; Sarikoc et al., 2017; Webster, 2014; Yong-Shian et al., 2016).

Study Design. The eight studies used a variety of designs to obtain their results. One study conducted interviews with the nursing students following simulation (Choi, 2012) while another had students complete an investigator developed questionnaire regarding the experience (Doolen et al., 2014). One study used a quasi-experimental design (Webster, 2014). The evaluation tool used for the quasi-experimental study was a 14-point checklist of criteria designed by the investigators to examine the effectiveness of the use of standardized patients to teach therapeutic communication skills in psychiatric nursing (Webster, 2014). Three studies used a mixed-methods design (Martinez, 2017; Sarikoc et al., 2017; Yong-Shian et al., 2016). The quantitative

evaluation tools used for these studies were the Mental Health Nursing Clinical Confidence Scale (Martinez, 2017), the Student Information Form, Motivation and Learning Strategies Scale (MLSS), Perceived Learning Scale (PLS), and Educational Method Evaluation Form (Sarikoc et al., 2017), and the Self-Confidence in Learning Scale (Yong-Shian et al., 2016). Martinez (2017) used a verbal de-brief that was audio-recorded for the qualitative measure in the study. The other two mixed methods studies used open-ended evaluation forms as the qualitative measures in the studies. Finally, one study used a descriptive format and calculated means using the Student Satisfaction and Self-Confidence in Learning Survey (Robinson-Smith et al., 2009). The sample sizes ranged from 11-112 participants. Participants ranged from second year to fourth year pre-licensure nursing students.

Study findings. All of the studies found positive correlations between the simulation using standardized patients and increasing students' confidence. Most studies found that the students believed that the experience gained in simulation was applicable to their clinical practicum (Choi, 2012; Webster, 2014; Doolen et al., 2014). Some studies also stated that students who had prior experience working with patients with mental illnesses had higher levels of confidence (Robinson-Smith et al., 2009; Yong-Shian et al., 2016).

Choi (2012) had standardized patients who had diagnoses of schizophrenia and major depressive disorder. From the individual interviews with the 11 study participants, four themes and nine sub-themes were identified—one of them being an increase in confidence following the simulation. One student in the study stated, “I think one of the advantages from simulation is to experience the atmosphere of the setting. I felt the environment of psychiatric unit was clearly different from that of general units, which was quite helpful to have in my clinical practicum”

and another said “If I did not have the simulation using psychiatric standardized patient, I could not say anything to the real patient and I would make many mistakes at my clinical practicum.”

Webster (2014) used pre-post evaluations to examine changes in confidence level. Webster found that confidence, on a 5-point scale, was a mean of 3.26 initially and 4.46 following the simulation indicating a significant increase in confidence ($p=.050$).

Doolen et al. (2014), used a questionnaire following the simulation experience to measure confidence. Almost all of the 94 participants (95.75%) stated that the standardized patient encounter scenarios successfully prepared students for the mental health clinical environment by increasing their confidence and 98.94% said the encounter scenarios were valuable and allowed them to evaluate their own competencies/performance. In the open-ended portion of the questionnaire one student also stated, “I felt that this simulation truly gave me the confidence and feedback that I needed” (p.60).

Sarikoc et al. (2017) used the Motivation and Learning Strategies Scale developed by Pintrich et al. (1991), as well as the Perceived Learning Scale by Rovai et al. (2009), and a qualitative evaluation form which included 13 questions focused on self-evaluation. Both the experimental ($n=43$) and control ($n=43$) groups completed a pre test and watched a video display of a sample interview with a patient who is depressive with suicidal ideation and a patient with hallucination. The pre test included a student information form, the Motivation and Learning Strategies Scale, and the Perceived Learning Scale. Then the experimental group completed mental health interviews with the standardized patients and participated in a debriefing session. The control group had no intervention. The two groups then took a post test which included the Motivation and Learning Strategies Scale and the Perceived Learning Scale. The experimental group achieved higher scores on the Motivation and Learning Strategies Scale and the Perceived

Learning Scale than the control on the post-test following the simulation ($p < 0.005$). The self-evaluation found that students in the experimental group felt more confident following the simulation specifically in performing interviews with patients having mental problems than the control group.

Robinson-Smith et al. (2009) also evaluated students' confidence using the Student Satisfaction and Self-Confidence in Learning Survey with 112 participants. The participants were junior level nursing students enrolled in a 4-year BSN program. The intervention consisted of a 15 minute interview between a standardized patient and a nursing student. The standardized patient's diagnosis was a young female college student who was depressed six months following the death of her mother. The students also participated in a debriefing session following the simulation experience. The mean for satisfaction with learning through standardized patients following the simulation on a 5-point scale—5 being strongly agree—was 4.60. The mean for self-confidence in learning with standardized patients on the same scale was 4.28 and the mean for the effect of standardized patients in improving critical thinking was 4.56. Faculty who facilitated the simulation also stated that they noticed a significant increase in confidence following the simulation experience. All data for this study were collected post-intervention. The study also did not use a control group because all students enrolled in the program participated in the simulations.

Martinez (2017) used surveys pre and post simulation to assess confidence levels as well as the Clinical Confidence Scale developed by Bell, Horsfall, and Goodin in 1998; which includes 20 items that are scored from 1 (slightly confident) to 4 (completely confident). The pre and post simulation surveys were investigator developed based on the current literature in nursing simulations and included a 13-item knowledge assessment questionnaire. The simulation

experience consisted of a five minute encounter between a nursing student and a standardized patient. The standardized patients displayed symptoms of schizophrenia, anxiety, aggression, and other challenging behaviors. The participants were 15 pre-licensure students enrolled in a psychiatric course taught in the second semester at a public university's nursing department in a large urban city on the U.S. west coast. After all students completed the simulation experience, students were given time to debrief with the facilitator. The confidence levels before the simulation had a mean of 30.15 with a standard deviation of 7.876 and a range of 15-60. Following the simulation, the mean increased to 45.13 with a standard deviation of 6.906 and a range of 15-60. The paired t-test showed that the increase was statistically significant $t=5.68$ and $p<0.0001$. The qualitative video-recorded debrief also had positive feedback from students who stated that the simulation was "helpful" and a "good learning experience" (Martinez, 2017, p.43).

Yong-Shian et al. (2016) also used a mixed methods approach with their 95 participants. The 95 participants consisted of Year 2 undergraduate nursing students taking the mental health nursing course at the National University of Singapore. All 95 students took part in a standardized patient interaction. The study did not specify how long these interactions lasted or what diagnoses the standardized patients portrayed. The study also did not specify whether or not students took part in a debriefing session, however, all students completed the Self-Confidence in Learning Scale both pre and post intervention. Prior to the simulation, the mean was 30.22 with a standard deviation of 3.93. There was a significant increase in confidence following the simulation with a mean of 32.77 and standard deviation of 3.50 and $t=5.29$ and $p<0.000$. The eta squared statistic (0.23) indicates a large effect size. The study also had an open-ended evaluation to collect qualitative data. The evaluations showed that students had a positive view of the simulation experience. One student said, "[Using standardized patients] is more interactive and I

get the opportunity to build my confidence in communicating with mental patients” (Yong-Shian et al., 2016, p.171).

While the researchers had different approaches in terms of their methods, they all yielded similar results. Each study is in agreement that mental health nursing simulation on the pre-licensure level using standardized patients increases students’ confidence levels in general when caring for a mental health patient. Increasing students’ confidence levels is essential to creating competent nurses who are able to communicate therapeutically with mental health patients.

Anxiety

Five articles in total conducted from 2012-2014 looked at anxiety levels related to caring for a person with mental illness after participating in a standardized patient simulation (Choi, 2012; Kameg et al., 2014; Miles et al., 2014; Webster, 2014; Webster et al., 2012).

Study Design. The five studies used a variety of designs to obtain their results. One study conducted interviews with the nursing students following simulation (Choi, 2012), one used a group debrief and individual written reflection assignment to analyze their performance in the video-recorded simulations (Miles et al., 2014), and one used a mixed methods design which evaluated participants on a five-point Likert scale as well as an open-ended evaluation form (Webster et al., 2012). The final two studies used a quasi-experimental design to evaluate students (Kameg et al., 2014; Webster, 2014). The first quasi-experimental study measured anxiety using an anxiety visual analog scale and the State-Trait Anxiety Inventory (STAI) (Kameg et al., 2014). The State-Trait Anxiety Inventory is a way to quantify anxiety by using a 40 item survey pre and post simulation. A low score indicates mild anxiety while a higher score indicates severe anxiety. The second quasi-experimental study measured anxiety using a 14-point checklist of criteria designed to examine the effectiveness of the use of SPEs to teach therapeutic

communication skills to decrease student anxiety in psychiatric nursing (Webster, 2014). The sample sizes ranged from 11-117 participants. Participants ranged from second year to fourth year pre-licensure nursing students.

Study Findings. Similarly, all of the studies that focused on anxiety also found that the simulation was a helpful experience to decrease anxiety levels in students (Choi, 2012; Kameg et al., 2014; Miles et al., 2014; Webster, 2014; Webster et al., 2012).

Webster (2014) found that students acknowledged that they found practicing communication with a more difficult patient in the simulated environment decreased their anxiety when engaging with “real patients.”

Choi (2012) used in-depth individual interviews with eleven students to collect qualitative data. The students expressed being initially nervous for the mental health rotation, but feeling less anxious following the simulation. One said, “To think about practice in a psychiatric unit is a kind of horror. I had a concern that my lack of training would stimulate the patients to attack me. But in the simulation, I felt that I was safe” (p. 93). While another noted, “I thought I could learn without fear because the SP was not a real psychiatric patient, which made me feel free during the simulation” (p.93).

Kameg et al. (2014) used a quasi-experimental approach to measure anxiety with their 69 participants. Participation in the study required completion of the pretests before the simulation experience and completion of the posttests after the simulation and debriefing. The study included two scenarios: one had a patient who was depressed with suicidal ideation and another had a patient with anxiety. Each standardized patient interaction lasted about 3-5 minutes. The researchers used an anxiety visual analog scale as well as the State-Trait Anxiety Inventory. The results of the visual analog scale prior to the simulation was a mean of 47.9 with a standard

deviation of 20.62. Following the simulation, the mean decreased to 42.9 with a standard deviation of 22.66. For the visual analog scale $t= 2.07$ with $p= 0.022$ meaning that there was a significant decrease in anxiety. The State-Trait Anxiety Inventory results prior to the simulation were STAI Y-1 (State) having a mean of 1.87 and a standard deviation of 0.53 and STAI Y-2 (Trait) with a mean of 1.95 and a standard deviation of 0.50. Post-simulation these scores changed to STAI Y-1 (State) with a mean of 1.83 and a standard deviation of 0.51. For STAI Y-1 $t=0.51$ and $p=0.167$ meaning that the decrease in anxiety was not significant for this category. STAI Y-2 however did have a significant decrease with a mean of 1.83, a standard deviation of 0.51, $t=4.15$ and $p < 0.01$. The results of the STAI from this study were unexpected as one might expect scores on STAI Y-1 (state) to attenuate and scores on STAI Y-2 (trait) to remain relatively stable. STAI Y-1 was administered immediately before STAI Y-2, so it is possible that the state anxiety measures influenced the measures of trait anxiety.

Miles et al. (2014) measured anxiety, among other data, using a written reflection tool with open-ended prompts for students after watching the video-recorded simulations. Of the participants, 4/76 stated being nervous prior to the simulations, but saw the simulation as a positive experience after it was finished. A theme identified throughout the written responses was the significance of practicing. Students were able to recognize the value of the simulation and how it would help them throughout their clinical experience. One student said, "For me, I was nervous to do the recording, but it wasn't as bad as I thought it would be. Yes, I did have points during the interview where I didn't know what to say or where to take the interview next, but I feel like it was good practice before I got to clinical, so at least I had some foundation about communication with patients with mental illness. The chance to practice communication was noted to decrease anxiety by the course facilitators and teaching assistants. Another student

mentioned in their reflection, “I thought it was nice to get a little practice beforehand, as well as feeling like I can learn to talk with people who have mental illnesses.” Overall, the simulation had a positive influence on students and their ability to perform well in clinical despite some of them being nervous prior to the simulation.

Webster et al. (2012) used a mixed methods design to evaluate students’ anxiety levels. There were two simulations scenarios that took place with standardized patients and lasting approximately 15 minutes. Both cases were PTSD diagnoses. The students participated in a debrief after the simulations. For their quantitative measure, they used a 5-point Likert scale which range from strongly agree to strongly disagree for 15 items regarding the standardized patient simulation experience. Students rated the simulation as a positive learning experience, noting that the SP experience was both realistic and challenging. Students also said it helped them learn to interact and communicate effectively, and they were able to meet course objectives through this activity. In the open-ended evaluation, students also commented that they felt better prepared to communicate and had less anxiety to care for a mental health patient.

Although again the researchers had different ways of collecting data, they all seem to be in agreement on their results. Overall, each researcher found that using standardized patients in mental health nursing simulations is beneficial to decreasing student anxiety, fear, and nervousness. The students felt that they were more prepared and were able to apply what they learned in the clinical setting.

Quality of Findings

The articles that were reviewed have varied levels of strength and quality. The included articles were assessed for level of evidence and quality according to the John Hopkins Nursing Evidence Based Practice Evidence Rating Scale which is Appendix III. According to this scale,

most articles were Level 3 in strength meaning that they are non-experimental, qualitative, or meta-synthesis studies (Choi, 2012; Doolen et al., 2014; Martinez, 2017; Miles et al., 2014; Webster et al., 2012). Three articles were considered Level 2 which are quasi-experimental studies (Kameg et al., 2014; Robinson-Smith et al., 2009; Webster, 2014; Yong-Shian et al., 2016). Only one article was rated as Level 1 which is an experimental study or randomized control trial (RCT) (Sarikoc et al., 2017). No articles were Level 4 or Level 5 which are expert opinions – Level 4 being the opinion of an expert panel while Level 5 is the expert opinion of an individual. All articles were considered to be “Good” which is the B rating in the quality of the evidence (Choi, 2012; Doolen et al., 2014; Kameg et al., 2014; Martinez, 2017; Miles et al., 2014; Robinson-Smith et al., 2009; Sarikoc et al., 2017; Webster, 2014; Webster et al., 2012; Yong-Shian et al., 2016). All of the studies analyzed were sufficient in sample size, but were all too small to be able to make definitive conclusions regarding the use of standardized patients. However, all studies had reasonably consistent results. Additionally, all ten studies used reliable and valid measures (Choi, 2012; Doolen et al., 2014; Kameg et al., 2014; Martinez, 2017; Miles et al., 2014; Robinson-Smith et al., 2009; Sarikoc et al., 2017; Webster, 2014; Webster et al., 2012; Yong-Shian et al., 2016).

CHAPTER 5

Discussion

Summary of Findings

The overall finding from this review regarding the use of actors as standardized patients in mental health nursing simulations is that standardized patient simulations help pre-licensure nursing students in increasing confidence and decreasing anxiety. Mental health is an area of nursing that causes students to have a significant amount of anxiety due to the unpredictability and potential danger of mental health patients (Choi, 2012). Implementing a simulation experience into the rotation is one way that educators can address the students' anxiety and help to decrease levels prior to entering the clinical setting or during the clinical rotation because the outcome of a simulation is more predictable than a traditional clinical setting. Simulations using actors as standardized patients for mental health nursing are realistic because students can empathize with real people. According to the study by Wedgeworth (2016), students experience the most anxiety related to clinical rotations at the beginning of each new rotation. The use of simulation at the beginning of the semester may be most effective in decreasing student anxiety prior to interacting with real patients in the traditional clinical setting during mental health rotations. Simulation using actors as standardized patients allows students to practice their therapeutic communication skills and overall care for mental health patients in a realistic manner without the risk of harming a patient or placing themselves in danger. The ability to be active in clinical and to apply knowledge learned in class is important to students being able to develop their therapeutic communication skills and the simulated setting gave students an opportunity to work on those essential skills. Patients with mental health diagnoses are present in all areas of nursing, so it is important that every pre-licensure student is not uncomfortable about interacting with mental health patients. Using actors as standardized patients in pre-licensure nursing

simulation is just one nursing education practice that may aid students in increasing their confidence and decreasing their anxiety in working with this population.

Strengths

One strength of a literature review is that it provides an assessment of the current research that is currently available. For this study, there is fairly limited research on the use of standardized patients as actors in mental health nursing simulations. The literature review was able to determine the need for future research. The literature also identified experts in this field of study. Two articles included in the review had the same author (Webster, 2014; Webster et al., 2012) who is an expert in the use of standardized patients in mental health nursing simulations. Finally, a strength of the literature review is that it brought together the results of many different studies that had a variety of methodologies to provide a complete picture of the current results of the current research in the area of using actors as standardized patients to increase confidence and decrease anxiety in mental health nursing simulations.

Limitations

All ten articles abstracted (Choi, 2012; Doolen et al., 2014; Kameg et al. 2014; Martinez, 2017; Miles et al., 2014; Robinson-Smith et al., 2009; Sarikoc et al., 2017; Webster, 2014; Webster et al., 2012; Yong-Shian et al., 2016) used a pre-post study design. According to the U.S. Department of Education, a pre-post study design examines whether participants in an intervention improve or regress during the course of an intervention. With an educational study, this design can often cause problems because without reference to a control group, it cannot answer whether the participants' improvement or decline would have occurred anyway, even without the intervention (Identifying and Implementing Educational Practices Supported By Rigorous Evidence: A User Friendly Guide, 2005). The only study that mentioned a control

group was the study by Sarikoc et al. (2017). Although this study had a control group, most measures were compared within the experimental group using a pre-post design in addition to the comparison with the control group.

All of the studies also used different interventions varying in the diagnosed included in the simulation, length of the simulation, and level of training of the actors. In all of the studies, confidence and anxiety were never measured the same way or on the same scale so synthesizing the findings of the studies can be difficult and a limitation to the literature review. Confidence and anxiety were also measured immediately post-intervention, so the lasting impacts of the simulations were not measured.

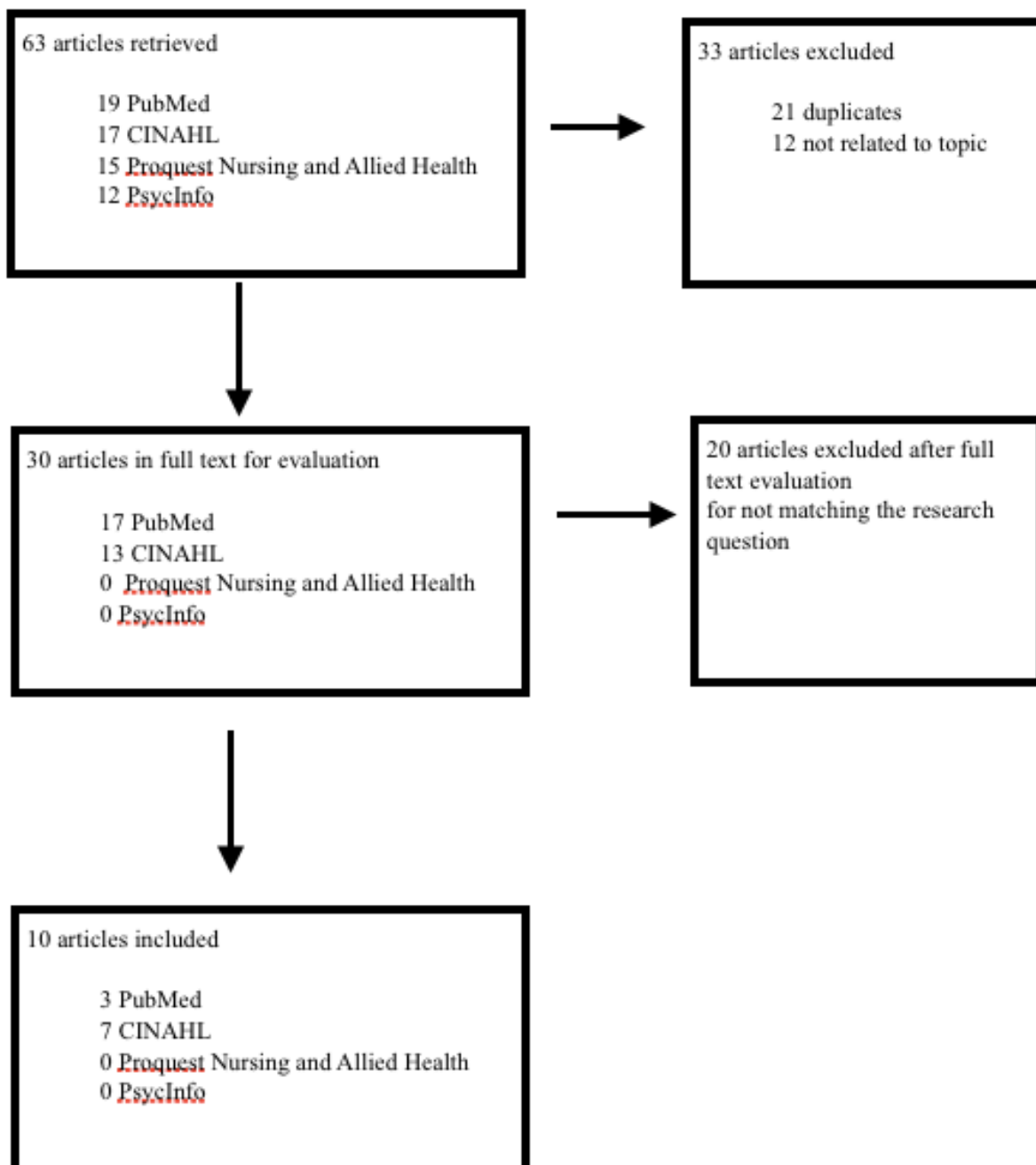
Another limitation is that all of the studies used convenience samples that were overall small. The largest sample size was 112 participants which in comparison to the population of pre-licensure nursing students, is very small. The studies that were included were also not limited to studies in the United States. A study from Singapore (Yong-Shian et al., 2016), South Korea (Choi, 2012), and Turkey (Sarikoc et al., 2017) were all used in the literature review. The remaining studies took place in the United States. Teaching methods within nursing education may vary between different countries, so including these studies may have influenced the results of the literature review.

Another limitation to the literature review is the potential that relevant articles were missed. Although there was a comprehensive search of literature where important studies were identified, it is possible that a study was unintentionally not included. There also is the potential for publication bias meaning that studies with significant results are more likely to be published than those with null results.

Area for Future Research

The use of actors as standardized patients in mental health nursing simulations is still a fairly infrequent practice among nurse educators at this time and for this reason, it is an area that needs further research. Further studies would benefit from expanding the research scope to include more or different mental health nursing competencies. Additionally, further studies would benefit from using a different study design than a pre-post design because that design limits studies. Further research may use a control group to compare the actors as standardized patients to the use of manikins or traditional clinical settings. This research is important because nursing education is becoming increasingly important as the national nursing shortage continues to get worse.

APPENDIX I: PRISMA FLOW DIAGRAM



APPENDIX II: The Johns Hopkins Nursing Evidence-based Practice Rating Scale

JHNEBP EVIDENCE RATING SCALES

STRENGTH of the Evidence	
Level I	Experimental study/randomized controlled trial (RCT) or meta analysis of RCT
Level II	Quasi-experimental study
Level III	Non-experimental study, qualitative study, or meta-synthesis.
Level IV	Opinion of nationally recognized experts based on research evidence or expert consensus panel (systematic review, clinical practice guidelines)
Level V	Opinion of individual expert based on non-research evidence. (Includes case studies; literature review; organizational experience e.g., quality improvement and financial data; clinical expertise, or personal experience)

QUALITY of the Evidence		
A High	Research	consistent results with sufficient sample size, adequate control, and definitive conclusions; consistent recommendations based on extensive literature review that includes thoughtful reference to scientific evidence.
	Summative reviews	well-defined, reproducible search strategies; consistent results with sufficient numbers of well defined studies; criteria-based evaluation of overall scientific strength and quality of included studies; definitive conclusions.
	Organizational	well-defined methods using a rigorous approach; consistent results with sufficient sample size; use of reliable and valid measures
	Expert Opinion	expertise is clearly evident
B Good	Research	reasonably consistent results, sufficient sample size, some control, with fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence
	Summative reviews	reasonably thorough and appropriate search; reasonably consistent results with sufficient numbers of well defined studies; evaluation of strengths and limitations of included studies; fairly definitive conclusions.
	Organizational	Well-defined methods; reasonably consistent results with sufficient numbers; use of reliable and valid measures; reasonably consistent recommendations
	Expert Opinion	expertise appears to be credible.
C Low quality or major flaws	Research	little evidence with inconsistent results, insufficient sample size, conclusions cannot be drawn
	Summative reviews	undefined, poorly defined, or limited search strategies; insufficient evidence with inconsistent results; conclusions cannot be drawn
	Organizational	Undefined, or poorly defined methods; insufficient sample size; inconsistent results; undefined, poorly defined or measures that lack adequate reliability or validity
	Expert Opinion	expertise is not discernable or is dubious.

**A study rated an A would be of high quality, whereas, a study rated a C would have major flaws that raise serious questions about the believability of the findings and should be automatically eliminated from consideration.*

Newhouse R, Dearholt S, Poe S, Pugh LC, White K. The Johns Hopkins Nursing Evidence-based Practice Rating Scale. 2005. Baltimore, MD, The Johns Hopkins Hospital; Johns Hopkins University School of Nursing.

APPENDIX III: MATRIX TABLE

Author (s), Year, Title	Purpose	Sample and Setting	Design/ Intervention	Competencies Measured	Findings	Strengths, Limitations, Evidence Grade
Choi, Y., 2012. Exploring Experiences of Psychiatric Nursing Simulations Using Standardized Patients for Undergraduate Students. <i>Asian Nursing Research</i> , 6, 91-95.	This study was conducted to explore and understand the experiences of nursing students related to psychiatric simulation using standardized patients and to identify the value of such simulations in relation to the psychiatric clinical practicum.	Eleven undergraduate students participated from a nursing school that incorporated psychiatric nursing simulations into its integrative nursing education system. 10/11 of the students were female. The study took place at Red Cross College of Nursing at Chung-Ang University in Seoul, South Korea	This study was designed using qualitative research. Students were individually interviewed regarding their experiences with the psychiatric nursing simulation post-simulation. The interviews lasted between 50 and 90 minutes. A thematic content analysis was conducted to derive themes from subthemes, which were derived from contents of the interview. The 4-hour psychiatric nursing simulation used SPs portraying patients with schizophrenia and major depressive disorder	Anxiety: learning practice without fear Confidence: gaining confidence in the clinical practicum	Simulation was useful to develop themes including: Learning practice without fear Gaining confidence in clinical practicum Feeling safe during the simulation Communication with the SP without concern	Limitations: Small sample size (11 participants) Gender disparities Potential for bias No control group Strengths: Individual interviews In-depth information about the characteristics of the participants researched Strength grade: Level 3 Quality grade: B

Author (s), Year, Title	Purpose	Sample and Setting	Design/ Intervention	Competencies Measured	Findings	Strengths, Limitations, Evidence Grade
<p>Doolen, J., Giddings, M., Johnson, M., Guizado de Nathan, G., & Badia, L. O., 2014.</p> <p>An Evaluation of Mental Health Simulation with Standardized Patients</p> <p><i>International Journal of Nursing Education</i> Scholarship, 11(1), 55–62.</p>	<p>To evaluate if a simulated learning experience using SPs was effective in teaching pre-licensure nursing students the skills necessary for mental health nursing.</p> <p>In the simulation, baccalaureate nursing students had the opportunity to interact with SPs, who had been trained to demonstrate symptoms of bipolar disorder, anxiety, and schizophrenia.</p>	<p>A group of undergraduate nursing students enrolled in a senior level, mental health nursing class participated (94 mental health undergraduate nursing students over three semesters participated).</p> <p>The study took place at the School of Nursing at the University of Nevada in Las Vegas</p>	<p>The students' experience with the SP entailed two learners pairing up to interview the patient.</p> <p>The interaction phase was limited to 20 minutes, and most learners finished the interview before reaching the time limit.</p> <p>After the simulated experience, nursing students, the mental health faculty, and the SP debriefed for 20 minutes.</p> <p>Students completed a questionnaire following the simulation to give feedback on the experience.</p> <p>Each item on the questionnaire had three choices, yes, no, and somewhat.</p> <p>Space for additional comments.</p>	<p>Confidence level</p>	<p>Students felt they were able to (1) recognize and assess signs and symptoms of anxiety, bipolar disease, and schizophrenia, (2) develop interview and therapeutic communication skills, and (3) promote patient safety</p> <p>Students reported the SP encounter decreased their fear of interviewing live mental health patients and was effective in preparing them for their mental health clinical rotation</p>	<p>Limitations: Simulation may have been too rushed Potential for bias No control group</p> <p>Strengths: In-depth description of how standardized patients were trained Large sample size (94 participants) and multiple semesters of students</p> <p>Strength grade: Level 3 Quality grade: B</p>

Author (s), Year, Title	Purpose	Sample and Setting	Design/ Intervention	Competencies Measured	Findings	Strengths, Limitations, Evidence Grade
<p>Kameg, K. M., Szpak, J. L, Cline, T. W., Mcdermott, D.S., 2014.</p> <p>Utilization of Standardized Patients to Decrease Nursing Student Anxiety</p> <p><i>Clinical Simulation in Nursing</i>, 10 (11), 567-573.</p>	<p>To evaluate if incorporating standardized patients into the mental health specialty helps to decrease student anxiety and ultimately improve patient outcomes</p>	<p>69 baccalaureate nursing students in their senior year enrolled in the psychiatric mental health nursing course. Mean age: 23 years. 76% were female. 91% were Caucasian.</p> <p>The study took place at Robert Morris University in PA, USA</p>	<p>A quasi-experimental design was used to assess if SPs can reduce student anxiety as measured by an anxiety visual analog scale and the State-Trait Anxiety Inventory (STAI).</p> <p>Participants completed both pretests and posttests and participated in debriefing. The study included two scenarios: one had a patient who was depressed with suicidal ideation and another had a patient with anxiety. Each standardized patient interaction lasted about 3-5 minutes.</p>	<p>Anxiety level</p>	<p>A paired t-test using pre-VAS and post-VAS scores revealed a significant decrease in the level of anxiety after the simulation experience with the SPs</p>	<p>Limitations: Small number of participants (69) Gender disparities Potential for bias No control group</p> <p>Strengths: Qualitative and quantitative data collected</p> <p>Strength grade: Level 2 Quality grade: B</p>

Author (s), Year, Title	Purpose	Sample and Setting	Design/ Intervention	Competencies Measured	Findings	Strengths, Limitations, Evidence Grade
<p>Martinez, A. J. S., 2017.</p> <p>Implementing a Workplace Violence (WPV) Simulation for Undergraduate Nursing Students: A Pilot Study</p> <p><i>Journal of Psychosocial Nursing</i>, 55 (10), 39-44.</p>	<p>Evaluate the simulation's effectiveness in enhancing undergraduate students' knowledge about WPV, increasing their confidence and ability to recognize signs of aggression, and practice evidence-based interventions to de-escalate agitated patients.</p>	<p>15 undergraduate nursing students currently enrolled in a psychiatric nursing course taught in the second semester. Three male and 12 female students participated. Ages ranged between 18 and 54. Participants were recruited based on their assigned psychiatric clinical day matching the scheduled simulation day. No students declined to participate. The simulation was conducted in a simulation laboratory at a public university's nursing department in a large urban city on the U.S.'s west coast.</p>	<p>Mixed- methods study.</p> <p>Post- simulation surveys and the Mental Health Nursing Clinical Confidence Scale were used to measure the aims yielding qualitative and quantitative data</p>	<p>Confidence level</p>	<p>Increase in students' confidence and knowledge was obtained post-simulation.</p> <p>Confidence levels increased from pre-assessment (mean = 30.15, <i>SD</i> = 7.876, range = 15 to 60) and post-assessment (mean = 45.13, <i>SD</i> = 6.906, range = 15 to 60)</p> <p>Students rated the simulation as useful.</p> <p>The use of a SP created an experiential learning environment for participants.</p>	<p>Limitations: Small number of participants (15) Gender disparities Potential for bias No control group</p> <p>Strengths: Qualitative and quantitative data Wide range of ages of students</p> <p>Strength grade: Level 3 Quality grade: B</p>

Author (s), Year, Title	Purpose	Sample and Setting	Design/ Intervention	Competencies Measured	Findings	Strengths, Limitations, Evidence Grade
<p>Miles, L. W., Mabey, L., Leggett, S., & Stansfield, K., 2014.</p> <p>Teaching Communication and Therapeutic Relationship Skills to Baccalaureate Nursing Students: A Peer Mentorship Simulation Approach</p> <p><i>Journal of Psychosocial Nursing</i>, 52 (10), 34-41.</p>	<p>To evaluate the effectiveness of a model for teaching undergraduate nursing students communication and therapeutic relationship skills experientially through simulation with peer mentorship and support from the perspective of the students who participated in the model.</p>	<p>The simulations took place at a private university located in the western United States</p> <p>117 junior undergraduate nursing students</p>	<p>Second-semester and senior nursing students participated in video-recorded SP simulations, with senior students portraying the patient.</p> <p>Following the simulation, senior students provided feedback to junior students on their use of communication skills and other therapeutic factors.</p> <p>Junior students completed a written assignment, in which they identified communication skills, personal strengths and weaknesses, and use of genuineness, empathy, and positive regard.</p>	<p>Anxiety level: Significance of Practicing</p>	<p>5 overarching themes arose from student feedback: (a) impact of seeing oneself , (b) significance of practicing , (c) opportunity for self-evaluation, (d) value of getting below the surface, and (e) power of transforming insight to goal setting.</p> <p>This experiential learning exercise provided students with an awareness of their individual baseline skills, allowing them to become more secure and comfortable with expanding their therapeutic communication and relational skills.</p>	<p>Limitations: Gender disparities Potential for bias No control group Standardized patients were other students rather than trained actors</p> <p>Strengths: Video recording gave students a good chance to reflect on themselves Large sample size (117 students)</p> <p>Strength grade: Level 3 Quality grade: B</p>

Author (s), Year, Title	Purpose	Sample and Setting	Design/ Intervention	Competencies Measured	Findings	Strengths, Limitations, Evidence Grade
<p>Robinson-Smith, G., Bradley, P. K., & Meakim, C, 2009.</p> <p>Evaluating the Use of Standardized Patients in Undergraduate Psychiatric Nursing Experiences</p> <p><i>Clinical Simulation in Nursing</i>, 5, e203-e211</p>	<p>To develop and evaluate nursing students' satisfaction with an SP psychiatric clinical encounter in which students performed a mental status exam and suicidal risk assessment</p>	<p>112 junior-level undergraduate nursing students all enrolled in a mental health clinical course</p> <p>Simulations took place at Villanova University College of Nursing in Villanova, PA</p>	<p>Data were collected over 3 semesters from nursing students through the use of a nine-item Student Satisfaction and Self-Confidence in Learning Survey.</p> <p>Means were calculated for 3 subscales: Satisfaction With Learning Through Standardized Patients, Self Confidence in Learning Through Standardized Patient Care Scenarios, and Effect of Standardized Patient Care Scenarios on Critical Thinking.</p> <p>The intervention consisted of a 15 minute interview between a standardized patient playing a patient with depression and a nursing student.</p> <p>The students also participated in a debriefing session following the simulation experience.</p>	<p>Confidence level</p>	<p>Faculty described improvement in student confidence and a decrease in anxiety when students interviewed hospitalized patients, and they were pleased with students' positive reaction to SP encounters.</p> <p>Means were calculated using the NLN Student Satisfaction and Self-Confidence in Learning Survey: Self-Confidence in Learning Through Standardized Patient Care Scenarios (M=4.28)</p>	<p>Limitations: A convenience sample of students in a single school was used. Because all students completed simulations, there was no control group for comparison Student SPs may require more training for portraying patient roles</p> <p>Strengths: Large sample size (112 participants)</p> <p>Strength grade: Level 2 Quality grade: B</p>

Author (s), Year, Title	Purpose	Sample and Setting	Design/ Intervention	Competencies Measured	Findings	Strengths, Limitations, Evidence Grade
<p>Sarikoc, G., Ozcan, C. T., and Elcin, M., 2017.</p> <p>The impact of using standardized patients in psychiatric cases on the levels of motivation and perceived learning of the nursing students</p> <p><i>Nurse Education Today</i>, 51, 15-22.</p>	<p>Evaluate the impact of using SPs in psychiatric cases on the levels of motivation and perceived learning of the nursing students</p>	<p>86 third-year nursing students Gulhane Military Medical Academy School of Nursing in Turkey The students were simple-randomly assigned to either an experimental or control group</p>	<p>Mixed methods Both quantitative and qualitative methods were used. A pre-test and post-test were employed in the quantitative analysis. The experimental group completed mental health interviews with the standardized patients and participated in a debriefing session. Instruments used were : Student Information Form, Motivation and Learning Strategies Scale (MLSS), Perceived Learning Scale (PLS), and Educational Method Evaluation Form.</p>	<p>Confidence level Feeling confident in conducting an interview Feeling confident in asking appropriate questions Feeling confident in decision-making skills</p>	<p>Students in the experimental group felt self-confident in conducting interviews with mentally-compromised individuals, and more competent in practical psychiatric training compared to the students in the control group. The students in the experimental group reported lower anxiety levels related to conducting an interview with the patients. Recommends the use of SPs.</p>	<p>Limitations: Limited number of scenarios Small sample size Strengths: Many different forms of evaluation Control and experimental groups compared Strength grade: Level 1 Quality grade: B</p>

Author (s), Year, Title	Purpose	Sample and Setting	Design/ Intervention	Competencies Measured	Findings	Strengths, Limitations, Evidence Grade
<p>Webster, D., 2014.</p> <p>Using Standardized Patients to Teach Therapeutic Communication in Psychiatric Nursing</p> <p><i>Clinical Simulation in Nursing</i>, 10, e81-e86</p>	<p>To evaluate the effectiveness of standardized patient experiences (SPEs) to teach therapeutic communication skills in undergraduate psychiatric nursing students.</p>	<p>89 senior nursing students enrolled in a psychiatric nursing clinical course in a baccalaureate nursing program</p> <p>Participants ranged in age from 20 to 60. The sample was made up of 78 (87.6%) Caucasian, 5 (5.6%) African-American, and 6 (6.7%) other students. There were 81 (91%) female and 8 (9%) male participants in the group (8).</p> <p>The simulations took place at Salisbury University in Maryland in the United States</p>	<p>A quasi-experimental, one-group, prepost evaluation design was used to examine the effectiveness of the use of SPEs</p> <p>Each student participated in two SPEs, one at the beginning of the semester and one at the end of the semester. During each SPE, they interacted with an SP who had been trained to portray an individual with one of the following diagnoses: Paranoid schizophrenia, bipolar mania, depression with suicidal ideation, obsessive compulsive disorder, borderline personality disorder, dementia, or post traumatic stress disorder</p> <p>The 15- to 20- minute sessions were video-recorded for later review by students and faculty.</p>	<p>Confidence and Anxiety levels</p>	<p>Students described an overall decrease in anxiety during interactions with individuals with mental illness.</p> <p>Students also acknowledged that they found practicing communication with a more difficult patient in the simulated environment gave them the confidence they needed to engage with ‘‘real patients.’’</p>	<p>Limitations: Convenience sample of students used Gender disparities (91% female, 9% male) Racial disparities (87.6% Caucasian, 5.6% African American, and 6.7% other)</p> <p>Strengths: Large sample size (89 students)</p> <p>Strength grade: Level 2 Quality grade: B</p>

Author (s), Year, Title	Purpose	Sample and Setting	Design/ Intervention	Competencies Measured	Findings	Strengths, Limitations, Evidence Grade
<p>Webster, D., Seldomridge, L., and Rockelli, L., 2012.</p> <p>Making It Real: Using Standardized Patients to Bring Case Studies to Life</p> <p><i>Journal of Psychosocial Nursing</i>, 50 (5), 36-41.</p>	<p>Evaluate the effectiveness of the combined use of actors as SPs and case studies/scenarios</p>	<p>14 of 83 students enrolled in a psychiatric-mental health nursing clinical course. The study took place in a classroom/ laboratory setting at a university in the U.S.</p>	<p>Mixed- methods study.</p> <p>Post- simulation evaluations were done with the students using a 5- point Likert scale, ranging from <i>strongly agree</i> to <i>strongly disagree</i> with 15 items about the study.</p> <p>There were two simulations scenarios that took place with standardized patients and lasting approximately 15 minutes. Both cases were PTSD diagnoses. The students participated in a debrief after the simulations.</p>	<p>Anxiety level</p>	<p>Students rated this as a positive learning experience, noting that the SP experience was both realistic and challenging.</p> <p>Students said it helped them learn to interact and communicate effectively, and they were able to meet course objectives through this activity.</p> <p>Students commented that they felt better prepared to communicate and care for an individual with PTSD because of the experience.</p>	<p>Limitations: Did not actually compare the control group to the group that participated in the study Small sample size Risk for bias, only qualitative data collected Not randomly assigned to participate</p> <p>Strengths: All students completed the evaluation instrument Video-recorded study</p> <p>Strength grade: Level 3 Quality grade: B</p>

Author (s), Year, Title	Purpose	Sample and Setting	Design/ Intervention	Competencies Measured	Findings	Strengths, Limitations, Evidence Grade
<p>Yong-Shian G., MCouns, S. S., Chng, M., Tan, C., & Yobas, P., 2016.</p> <p>Using standardized patients in enhancing undergraduate students' learning experience in mental health nursing</p> <p><i>Nurse Education Today</i>, 45, 167- 172.</p>	<p>To explore the learning experience of undergraduate nursing students using standardized patients while practicing their mental status examination and suicide risk assessment skills in mental health nursing module.</p>	<p>A convenience sample of 95 Year 2 undergraduate nursing students at The University of Singapore. 86.3% of participants were female The majority of the students were Singaporean (94.7%) The simulation was conducted at The University of Singapore</p>	<p>A pre- and post-test, single group quasi experimental design was used</p> <p>A standard didactic tutorial session and a standardized patient session were conducted to evaluate the learning experience of undergraduate nursing students learning mental status examination and suicide risk assessment.</p>	<p>Confidence level</p> <p>Self- Confidence in learning scale</p>	<p>The use of standardized patient session had significantly increased students' satisfaction and confidence level before they are posted to a mental health setting for their clinical rotation</p> <p>Qualitative feedback obtained from students showed a positive outlook towards the use of standardized patient as an effective too</p>	<p>Limitations: Convenience sample Gender disparities (86.3% female)</p> <p>Strengths: Quantitative and qualitative data collected Large sample size (95 students)</p> <p>Strength grade: Level 2 Quality grade: B</p>

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ACADEMIC VITA

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Education

The Pennsylvania State University (2015-2019)
Undergraduate student, Schreyer Honors College
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Honors Thesis: THE USE OF ACTORS AS STANDARDIZED PATIENTS IN
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Clinical Experience

- UPMC Presbyterian, *Senior Clinical Capstone on the Surgical-Trauma ICU* (Spring 2019)
- UPMC Altoona, *Patient Care Technician* (August 2018-Present)
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Other Work Experience

- The Pennsylvania State University Residence Life, *Resident Assistant on the Discover House and Health and Human Development Special Living Option Floors* (August 2017-Present)
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Extracurricular Activities

- Gamma Sigma Sigma, *Sister* (Spring 2016-Present), *Recruitment Chair* (Fall 2017), *Alumni Liaison* (Spring 2017), *Assistant Service Vice President* (Spring 2018), *Service Vice President* (Spring 2019)
- No Refund Theatre, *Director, Actress, and THON/ Philanthropy Chair* (Spring 2016-Present)
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- The Student Nurses' Association of Pennsylvania (SNAP), *Member* (Fall 2015-Present)
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Certifications

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