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The Use of Standardized Patients to Minimize Anxiety in Undergraduate Nursing Students in the Clinical Setting

Katherine Flynn
St. Catherine University
May 17, 2012
Abstract

Anxiety in undergraduate nursing students in the clinical setting is caused by many factors, including fear of harming patients, difficulty transitioning, and unsupportive relationships. This has negative effects which include compromised student learning, decreased clinical performance, increased risk for patient harm, and a long term effect of worsening of the nursing shortage. The issue of student anxiety in the clinical setting must be addressed by nurse educators. Implementing the use of standardized patients (SPs) is one strategy that may minimize anxiety while preparing students to enter the clinical setting. Standardized patients are trained to portray an illness or a scenario, while interacting with students to create a realistic, low-risk learning experience. Advantages of SPs for students include the realistic clinical experience in a non-threatening, low-risk environment; the integrative learning experience; the positive, meaningful experience; constructive feedback; and common learning experience for students. Advantages for faculty include control and consistency, versatility and practicality, and the constructive feedback faculty gain. The large expenses and increased faculty workload associated with SPs continue to create barriers for their implementation within nursing education; these barriers are compounded by the lack of evidence supporting the use of SPs to decrease student anxiety. Further research is needed to support the use of SPs as a strategy to decrease undergraduate nursing student anxiety in the clinical setting.
Undergraduate nursing students face many challenges as they work through the difficult and often stressful nursing curriculum. The clinical experience is a critical part of this curriculum because it helps students apply their knowledge through actual patient care (Yoo & Yoo, 2003). Unfortunately, the clinical setting is also what students frequently state as a major source of anxiety (Melo, Williams, & Ross, 2010; Penn, 2008; Shaban, Khater, & Akhu-Zaheya, 2012). Although anxiety in the clinical setting is not a new phenomenon in undergraduate nursing, little has been done by nurse educators to address the issue (Moscaritolo, 2009). The need to manage student anxiety in the clinical setting will always exist, but minimizing its negative effects is still a possibility. A potential strategy to minimize the negative effects of anxiety in the clinical setting is through the implementation of standardized patients (SPs). Standardized patients are trained to portray an illness or a scenario, while interacting with students to create a realistic, low-risk learning experience (Becker, Rose, Berg, Park, & Shatzer, 2006). Although new to undergraduate nursing education, SPs are widely accepted in medical schools and nurse practitioner programs and have been used for decades as methods of teaching and evaluation.

**Purpose**

The purpose of this paper is to outline the causes and effects of student anxiety in the clinical setting, summarize the advantages and disadvantages of implementing SPs, and discuss how the use of SPs can potentially minimize student anxiety in the clinical setting.
Student Anxiety in the Clinical Setting

Experience in the clinical setting is highly valuable for students, yet the time devoted to clinical education is limited due to a lack of resources and availability. This is why the quality of the experience must be maximized in order for students to have successful outcomes (Scholtz, 2009). Unfortunately, the clinical experience is also a considerable source of student anxiety. Anxiety is a condition or a feeling characterized by tension, uneasiness, or discomfort that is caused by the presence of prolonged stress or multiple stressors (Cook, 2005; Watt, Murphy, Pascoe, Scanlon, & Gan, 2011). High levels of anxiety decrease the quality of the clinical experience and undergraduate nursing students are prone to high levels of anxiety every time they enter the clinical setting.

Causes

Three major causes of student anxiety in the clinical setting for undergraduate nursing students include fear, difficulty transitioning, and unsupportive relationships.

Fear. Fear is a major contributor to anxiety and can be linked to a number of different sources (Kitchie, 2008). Students often fear failure and worry about their ability to succeed, whether it’s specifically in the clinical setting or in the nursing program as a whole (Frank, 2012; Moscaritolo, 2009). Fear of mistakes also causes anxiety for students (Timmins & Kaliszer, 2002). Making a dangerous or harmful mistake in the clinical setting can be a student’s worst fear, along with the consequences that follow (Melo et al., 2010). This fear typically relates to students’ fear of causing patient harm, particularly in the more vulnerable and unfamiliar patient populations, such as pediatrics (Lassche, Al-Qaaydeh, Macintosh, & Black, 2012). The study by Lassche et al. sought to identify causes of student worry before and after pediatric clinical rotations. The cause of worry that decreased the least in students, from pretest to posttest, was
related to their fear of causing children harm. Even after interacting with the pediatric population, fear of causing harm still caused anxiety for students. Fear related to unfamiliar patient populations can also be applied to psychiatric patients (Penn, 2008). Students feel heightened anxiety when interacting with patients in psychiatric settings due to the stereotypes and stigmas associated with this patient population. Students may freeze with anxiety because they can become panic stricken and afraid while working with unfamiliar populations (Penn). Lastly, students fear the unknown of the clinical setting (Scholtz, 2009; Shipton, 2002). Students do not know what to expect and they become anxious about what they will face in the clinical setting, whether it’s bodily fluids or patient death (Melo et al.; Timmins & Kaliszer). Clearly, the fear experienced by nursing students is related to many different aspects of the clinical setting and is a significant cause for student anxiety.

**Difficulty transitioning.** As students transition from classroom to clinical, they are expected to transfer their knowledge and skills as well. Unfortunately, students are unable to make this transition smoothly because nurse educators do not effectively integrate clinical learning experiences into classroom teaching (Benner, Sutphen, Leonard & Day, 2010; Watt et al., 2011; Yoo & Yoo, 2003). The educational environment of nursing programs is structured much more simply when compared to the complexity of the clinical setting (Yoo & Yoo). Students often experience reality shock, increased anxiety, and decreased confidence; they may forget basic nursing skills, forcing them to relearn everything within the clinical setting (Watt et al.). This inadequate preparation by nurse educators makes students feel insecure about their nursing skills, which only exacerbates the pre-existing feelings of inadequacy many students experience (Yoo & Yoo). In addition to these feelings of inadequacy, students often have unrealistic expectations of themselves when entering the clinical setting. Students whose
expectations are unrealistically high, who believe they are expected to do everything right on the first attempt, and who have a tendency to strive for personal perfection, tend to experience high levels of anxiety (Melo et al., 2010). Reality shock, feelings of inadequacy, and unrealistic expectations combine to create a difficult transition for students and result in high levels of anxiety.

**Unsupportive relationships.** In the clinical setting students often rely on support from more experienced nurses or physicians to guide them. If the appropriate support is not available, students can experience high levels of anxiety and receive an inadequate clinical experience. The most important support comes from the clinical instructor (Cook, 2005; Melincavage, 2011; Timmins & Kaliszer, 2002). At times, clinical instructors can become unsupportive, overly critical, intimidating, and harsh. When clinical instructors only focus on the evaluation component of clinical rotations, they often bring attention to the negative aspects of student performance (Melincavage). Clinical instructors can also become inconsiderate of student inexperience and their disinviting behaviors may contribute to increased anxiety levels in students (Cook).

Unsupportive behaviors from staff nurses also play a large role in student anxiety. Staff nurses often make nursing students feel belittled and humiliated in the clinical setting, purposefully distancing themselves from students (Melincavage, 2011; Watt et al., 2011). More experienced nursing staff may create an unfriendly atmosphere and show little interest in teaching, making students feel excluded from the patient care team and that they are a nuisance to the staff (Shaban et al., 2012; Shipton, 2002; Timmins & Kaliszer, 2002). Similar feelings are described by students regarding their relationship with physicians. Students may feel ignored, invisible, and unacknowledged by physicians and that their patient concerns are not taken
seriously. Simply approaching physicians to discuss patient issues can become an anxiety-
provoking experience for students (Vannaja, 2005).

Lastly, the relationships students have with peers can become harmful. With competition
in nursing programs becoming a concern and the main focus for some students, this unsupportive
relationship often causes anxiety, particularly in the clinical setting (Melincavage, 2011; Shipton,
2002). Instead of learning to collaborate and succeed as a team, students are working in isolation
in an attempt to be better than their peers. This competition between students negatively affects
the opportunity provided by the clinical setting and minimizes learning for all students.

Effects

Anxiety in the clinical setting has negative effects that are both short-term and long-term.
It leads to compromised student learning and decreased clinical performance, increased risk for
patient harm, and worsening of the nursing shortage.

Compromised student learning and decreased clinical performance. High anxiety
levels adversely affect student learning and progress in the clinical setting (Lassche et al., 2012;
Melo et al., 2010; Shipton, 2002; Watt et al., 2011). There is an inverse relationship between
anxiety and student learning: as anxiety increases, learning decreases (Penn, 2008). In the
clinical setting, anxiety can affect each of the learning domains, influencing students’ ability to
perform at a cognitive, affective, and psychomotor level (Kitchie, 2008). Cognitive deficits occur
as a result of high anxiety levels, such as misinterpretation of information or blocking of memory
and recall. This is most likely due to a panic type of reaction related to the stress of the clinical
setting (Meisenhelder, 1987). Beyond cognitive effects, anxiety also causes students to struggle
while performing simple clinical tasks (Yoo & Yoo, 2003). Clinical performance is affected and
students are unable to perform basic nursing skills that they performed with ease in the nursing
laboratory. Anxiety also causes students to focus more on the feared outcomes rather than the learning activities or nursing tasks at hand. This compromises their learning and decreases their clinical performance, taking away from their overall clinical experiences.

**Increased risk for patient harm.** Due to the fact that anxiety causes decreased learning and clinical performance in students, student anxiety now puts patients at risk for harm. Patients are at risk when unprepared nursing students enter the clinical setting, forced to relearn skills on real people. Patients can also be put at risk when newly graduated nurses who did not receive an adequate clinical experience enter the workforce. Inadequate clinical experiences can create inadequate nurses. Anxiety in undergraduate nursing programs can result in psychological impairment that carries over into a nurse’s professional life and ultimately affects the quality of patient care (Shaban et al., 2012).

**Worsening nursing shortage.** High levels of student anxiety in the clinical setting is the reason some students fail out of nursing programs and the reason others choose to leave nursing programs. This inability to retain students in nursing programs contributes to our country’s chronic nursing shortage (Melincavage, 2011: Melo et al., 2010).
Implementing Standardized Patients

The effects of student anxiety in the clinical setting can be detrimental if ignored, which is why nurse educators have a responsibility to intervene (Melincavage, 2011; Penn, 2008). The causes and effects of anxiety are apparent in the literature and this issue is clearly unavoidable. However, that does not mean it is unmanageable. Although evidence supporting strategies to reduce student anxiety in the clinical setting is limited, the use of standardized patients (SPs) is one strategy that must be considered.

Definition

The definitions of SPs are vast and varying throughout the literature. According to Becker et al. (2006), SPs are “individuals who have been carefully trained to present an illness or scenario in a standardized, unvarying manner” (p. 103). Luctkar-Flude, Wilson-Keates, and Larocque (2012) add that SPs “provide helpful verbal and written feedback to the learner . . . and are encouraged to create authentic emotional responses, producing realistic patient care scenarios” (p. 449). Robinson-Smith, Bradley, and Meakim (2009) also state that SPs “replicate authentic patient problems and provide credible interactions for students” (p. 204). The general process for creating SP experiences for students has many steps. Faculty must first develop the patient, creating a problem, a history, and a script for the SP to use as a guide during the student interaction. SPs must be hired and undergo hours of training to accurately and consistently portray the patient that has been created by the faculty. Students then prepare to interact with the SPs in the role of a nurse. After individual interactions between SPs and students, SPs provide students with verbal and written feedback.

It is important to understand that the intent of SPs is not to replace the actual patient encounter with an SP encounter, but rather to supplement it through an integrative and
standardized approach (Becker et al., 2006). According to Robinson-Smith et al. (2009), standardized patients are a promising instructional method that should be used to enhance current teaching strategies. Scenario-based experiences that attempt to recreate clinical environments are a powerful learning experiences for students (Luctkar-Flude et al., 2012) and for students to obtain any practical knowledge, they need to experience the causes and effects of their actions, solving problems in real situations (Yoo & Yoo, 2003). This is the learning opportunity that SPs create for students.

**Advantages for Students**

The use of SPs has several advantages for students. SPs provide a realistic clinical experience in a non-threatening and low risk environment, an integrative learning experience, a positive and meaningful experience, constructive feedback, and a common learning experience for students.

**Realistic clinical experience in a non-threatening, low-risk environment.** In the clinical setting, students are expected to learn in a high-intensity, high-risk environment. With the use of SPs, the clinical setting and patient interaction is recreated in a non-threatening, low-risk environment. This controlled environment reduces student anxiety and allows for safe student-patient interactions, which is required for adequate clinical education (Gibbons et al., 2002). With the use of SPs, learning can occur without fear and high levels of anxiety. However, the experience is not diminished. Students are still able to experience patient responses to their nursing interventions (Robinson-Smith et al., 2009). In fact, when SP experiences are well thought out to meet the specific needs of nursing students, the SP method can be more effective than the actual clinical setting (Yoo & Yoo, 2003).
**Integrative learning experience.** Through the use of SPs students can practice integrating skills related to each domain of learning, including nursing skills, physical and psychological assessment skills, and interpersonal communication skills. The greatest benefit of SPs is that students can practice these things safely and with real people (Anderson, Holmes, LeFlore, Nelson, & Jenkins, 2010). Standardized patients are used most effectively when students are learning some of the most basic skills, common to all beginning nursing students (Becker et al., 2006). This list includes medication administration, moving and positioning, and communication techniques when interviewing or taking patient histories (Anderson et al.). Another advantage of SPs compared to other teaching methods is the opportunity for students to experience more real life, student-patient interactions. This interaction is essential for students to gain competence and confidence with communication skills and SPs are able to provide that unique opportunity (Robinson-Smith et al., 2009). Standardized patients break down the barrier between classroom and clinical, allowing students to apply the knowledge they gain in the classroom to a realistic clinical experience before entering the intimidating clinical setting. Whether practicing new skills or gaining experience through student-patient interactions, the use of strategies such as SPs helps integrate classroom and clinical and promotes student learning in each of the three domains (Benner et al., 2010).

**Positive and meaningful experience.** In previous studies, students have agreed that SP experiences are positive and enjoyable (Anderson et al., 2010; Becker et al., 2006; Ebbert & Connors, 2004; Luctkar-Flude et al., 2012; Robinson-Smith et al., 2009). In a study conducted by Robinson-Smith et al., students stated that SP experiences provided practice for reality, they enjoyed the experience, and it motivated them to learn. The results of the study showed that SP experiences increased student self-confidence, critical thinking, and satisfaction with learning. In
Standardized Patients and Student Anxiety

a study by Ebbert and Connors, students enjoyed the challenge and felt they were able to integrate theory and knowledge. Overall, students describe SP experiences as positive, creative, and meaningful (Becker et al.); students like having real people as part of their learning (Anderson et al.); and the experience is satisfying and provides more real interactions (Luctkar-Flude et al.).

**Constructive feedback.** Standardized patients provide students with immediate feedback from a unique perspective. Students are able to see immediate feedback because SPs react, in the role of the patient, to their nursing actions (Becker et al., 2006). Commonly, students are also given a checklist from SPs upon completion of their student-patient interactions, indicating what expectations they did and did not meet (Anderson et al., 2010). This allows students to review their performance from the perspective of the patient and find opportunities for growth or improvement. Feedback from this unique and invaluable perspective cannot be replicated in the actual clinical setting. In a study by Gibbons et al. (2002), students rated feedback from SPs as the most valuable when comparing evaluations from faculty, self, and SPs. Feedback from SPs was also helpful when videotaping was performed. Students viewed the videos afterwards to constructively critique their own performance and learned by seeing themselves in action in the recreated clinical setting. While watching the videos, students were also able to compare their critique with the feedback from the unique perspective of the SPs (Becker et al.).

**Common learning experiences.** Students interact with SPs one at a time, but are then given the opportunity to discuss their experiences with each other afterwards. In a study by Becker et al. (2006), students participated in post-interview group discussions. An unexpected outcome of this study was the popularity of the group discussions. Students appreciated the
unique opportunity to talk with their classmates, exchanging ideas and opinions about the “same patient.” They felt they were able to learn more by discussing their experiences and SP interactions with each other, as opposed to sitting through a faculty-led lecture or a post-clinical session where each student shared different patient interactions. This common ground for students is another opportunity that SPs provide and cannot be created in the real clinical setting.

**Advantages for Faculty**

In addition to creating advantages for students, the use of SPs has several advantages for nurse educators. These include control and consistency, versatility and practicality, constructive feedback, and congruence with nurse educator core competencies.

**Control and consistency.** Through the use of SPs, faculty can develop patient problems and scenarios based on the curricular objectives of the course. For example, if students learn about respiratory issues that week, faculty can create an SP with asthma. If students learn about cardiac issues, faculty can create a patient with heart failure. Nurse educators are also able to control the complexity of the clinical problem based on students’ abilities or where they are in the program (Becker et al., 2006). This control allows educators to provide consistent learning experiences for students instead of relying on the patient experiences available to students in the hospital setting (Anderson et al., 2010).

**Versatility and practicality.** Standardized patients are a tool available to nurse educators to be used in a variety of situations. Faculty can use SPs for teaching new skills or to evaluate students on previously learned skills (Anderson et al., 2010). They are practical as well, because when SPs are present, another teacher exists in the classroom. Standardized patients can become standardized instructors (Gibbons et al., 2002). Standardized patients can be used to objectively evaluate students, for summative evaluation, formative evaluation, or to determine clinical
competency before entering the clinical setting (Ebbert & Connors, 2004). According to Becker et al. (2006), SPs are able to accurately record the results of student performance. For a 5-item dichotomous yes/no checklist, SP accuracy was 83% and for a 30-item checklist accuracy was 76%. Using SP experiences to facilitate the evaluation process eases the workload of faculty and takes the focus off of evaluation within the clinical setting. Also, SPs can be used in conjunction with manikin-based simulations. Standardized patients can fill the role of caregiver or family member to provide students with a more complex simulation experience and a different interaction experience (Anderson et al.).

**Constructive feedback.** Although the feedback of SPs is generally directed towards students, it can be used to the advantage of nursing faculty as well. Based on student performance during SP experiences, faculty members are able to identify gaps in the curriculum and highlight their personal areas of teaching strengths and weaknesses. For example, if a majority of students struggle with similar aspects of the SP interaction, it becomes clear to faculty what portion of the teaching was ineffective. Standardized patient experiences can also help identify students needing remediation prior to entering the clinical setting (Robinson-Smith et al., 2009). If a small portion of the class does poorly when the majority of the class succeeds, it is clear that ineffective teaching was not the issue. Those students simply need more support or education before they are ready to enter the clinical setting.

**Congruence with nurse educator core competencies.** Nurse educators use the core competencies developed by the National League of Nursing (NLN) to guide their practice on a daily basis (Halstead, 2007). It is essential that teaching strategies, such as the use of SPs, are congruent with the principles of the core competencies. Appendix A demonstrates how the use of SPs supports each of the core competencies of nurse educators.
Disadvantages of Standardized Patients

Clear evidence exists to support the use of SPs Standardized patients for both students and faculty. Unfortunately there are two major disadvantages related to the use of SPs: increased time requirements and costs. These are two factors that can be difficult to find more of, especially in nursing education. With the implementation of SPs, faculty workload and time requirements are typically increased. Nurse educators are required to spend long hours developing the problems, histories, and scripts related to each SP experience (Becker et al., 2006). Ebbert and Connors (2004) estimated each SP learning experience takes at least 10 hours to develop. After SP scenarios are developed, implementing them can be costly. Standardized patients are hired and undergo hours of training to ensure they accurately portray each patient scenario (Becker et al.). Typically, SPs are paid on an hourly basis and can end up costing an average of $100 per student, per SP experience (Ebbert & Connors). This cost is covered by student fees and portions of the nursing program budget. Some argue that implementation of SPs is definitely worth the price, as the benefits outweigh the costs (Ebberts & Connors). However, a consensus on whether or not SP experiences are worth the time and money they require to create and implement is yet to be reached in the literature. Regardless of this split in the literature, several recommendations are presented for nurse educators to address the existing barriers (see Appendix B).
Standardized Patients and Anxiety

Overall, SPs are a promising instructional method with advantages for both students and faculty. There is extensive literature supporting the fact that students enjoy the experience and find it generally helpful. However, the fact that students enjoy the experience is not enough to convince nurse educators to put in extra time or enough to convince nursing programs to make the financial investments necessary to implement SPs in curricula. Evidence related to the use of SPs is needed to prove they make a substantial difference in nursing education. Using SP experiences in undergraduate nursing students to minimize anxiety in the clinical setting is potentially helpful and substantial, but does adequate evidence exist to support this claim?

A study conducted by Becker et al. (2006) evaluated the use of SPs in senior undergraduate students enrolled in a psychiatric nursing course. Data were collected from a control group and a treatment group using two instruments: a Communication Knowledge Test (CKT) and a Student Self Evaluation of the SP Encounter (SSPE). After analyzing the pre-test and post-test data collected from the students, results showed no significant difference between the control group and the treatment group. Although these statistical findings do not support that the use of SPs is more effective than traditional methods of teaching communication skills, the qualitative analysis of the students’ responses to the open-ended questions showed there was an overall positive response to the SP experience. Student responses to open-ended questions also showed that the least-liked aspects of the SP experience focused on students’ feelings of anxiety. Students were anxious prior to interviewing the SP, similar to students’ feelings of anxiety surrounding the real clinical setting. Students reported that feelings of anxiety quickly dissipated once starting their SP interactions. Perhaps exposing students to SPs and allowing them to manage their feelings of anxiety in a created clinical setting would increase their ability to
manage anxiety in the real clinical setting, thereby lessening its negative effects. However, based on the results of this study conducted by Becker et al., we do not know if or how anxiety was affected after the SP experience. It is difficult to say whether this exposure to SPs and a realistic, anxiety-provoking situation created by faculty would be helpful once students entered the real clinical setting.

A similar study by Robinson-Smith et al. (2009) was conducted in a junior year psychiatric nursing course. Student satisfaction, self-confidence, and critical thinking related to SP experiences were evaluated and faculty and student comments related to the SP experience were collected. Based on a 5-point Likert scale, the results are as follows: Satisfaction with learning through SPs ($M=4.6$); self-confidence in learning through SP care scenarios ($M=4.28$); and effect of SP care scenarios on critical thinking ($M=4.56$). Student comments showed that their SP experience provided great practice for reality and they valued feedback received from the SPs. Negative student comments were related to anxiety and 23% of students described being nervous before SP interviews. Researchers believed this was due to the patient population. Due to stereotypes and stigmas, students often feel heightened anxiety when working with patients in a psychiatric setting. However, after the SP experiences, written feedback collected from faculty described improvement in student confidence and a decrease in anxiety when students interviewed real hospitalized patients. The qualitative data collected from faculty show that SP experiences may in fact decrease student anxiety in the clinical setting. If the students’ initial anxiety was related to the patient population they were working with during SP experience, then using SPs to expose students to different patient populations would help reduce anxiety in the clinical setting. Also, findings from this study showed positive results for student self-confidence after SP experiences. Since feelings of inadequacy are known to be a cause of student anxiety,
we can assume that feeling self-confidence would help decrease anxiety and therefore increase learning in the clinical setting.

Yoo and Yoo (2003) conducted a study to compare the SP teaching method to traditional methods, examining the effects on sophomore level nursing students’ overall clinical competence. Clinical judgment was evaluated with the use of a written test; clinical skills and communication skills were evaluated with a checklist completed by the SP and nursing faculty. Results showed that the SP method was more effective than traditional methods in helping students identify patient needs, perform basic nursing cares, and use more effective communication skills. These findings suggest that learning in a realistic and complex situation is more conducive to internalizing skills. Students that are able to internalize skills would feel more confident performing these skills in the real clinical setting. Again, as students’ skill strength and self-confidence increase, feelings of anxiety are likely to diminish.

Luctkar-Flude et al. (2012) conducted a study comparing the use of High Fidelity Human Simulators (HFS), Standardized Patients (SP), and Community Volunteers (CV) in an undergraduate nursing health assessment course. The study was designed to investigate students’ satisfaction, self-efficacy, and performance behaviors related to each of the three methods. Results showed that performance behaviors were significantly greater with HFS, but learners were significantly less satisfied with the use of this method. The lower satisfaction likely results from the lack of realism this method provides. Although HFS provides less realism, it may provide a more low-stress learning opportunity for students than the SP method. In this study, students actually preferred the realism of the SP method, but experienced higher levels of anxiety when interacting with SPs compared to computerized simulators. This is likely because they were communicating with real people. This study brings up an interesting point: perhaps as
realism increases, student anxiety increases. If this is the case, then is exposing students to real people and triggering high anxiety levels in the learning environment helpful when students reach the point of entering the clinical setting?

There are several issues surrounding the use of SPs as a strategy to decrease student anxiety related to the clinical setting and unfortunately, the literature remains inconclusive. Although there is evidence supporting the use of SPs and the general advantages associated with their integration, there is limited evidence directly relating the use of SPs to decreased anxiety in the clinical setting. There is an obvious link between anxiety and SPs, but the nature of the relationship is unclear. Some may argue that SP experiences are simply an added cause for student anxiety in the learning environment whereas others may feel it is a potential cure for student anxiety in the clinical setting. Although SP experiences may cause student anxiety in the learning environment, it can still be argued that they are a beneficial experience. Students feeling anxious prior to patient exposure (whether this is a real patient or an SP) may be unavoidable, but through repeated exposure, anxiety levels decrease. As students are exposed to anxiety they learn to manage it, minimizing its negative effects in the clinical setting and creating a more valuable clinical experience. The opposing viewpoint may argue that if SP exposure causes anxiety then students are less able to learn from these experiences. High anxiety causes SPs to become an ineffective instructional method, much like high anxiety levels compromise student experiences in the real clinical setting. No matter what the setting, high levels of anxiety decrease learning and diminish student experiences. Based on a review of the literature, insufficient evidence exists to support either side of the argument. This is a gap that nursing research must address. In order to support the use of SPs for the purpose of decreasing student anxiety, more evidence defining the relationship between these two significant topics is needed.
Conclusion

Anxiety in the clinical setting is a prominent issue in undergraduate nursing education. This issue must be addressed and strategies implemented to minimize the negative effects anxiety can have on student learning and clinical performance. The use of SPs is one instructional method that may be effective. Although there is evidence that SPs have many advantages for students and faculty, there is minimal evidence to support their use in decreasing student anxiety in the clinical setting. Before nursing education can fully support the implementation of SPs and their related increased faculty workload and budget demands, it must be proven that the use of SPs significantly reduces student anxiety and therefore improves student clinical experiences.
References


cources and coping behaviours during their initial period of clinical training: A Jordanian
perspective. *Nursing Education in Practice, 1-6.*

baccalaureate nursing students in response to appraised clinical stress. *Journal of Nursing
Education, 41*(6), 243-256.

cause stress to nursing students: Fact finding sample survey. *Nurse Education Today,
22*(3), 203-211.

Journal, 32*(1), 4-7.

learning programme as a component of the clinical practicum in final year bachelor of
nursing programme: A pre-post-test analysis. *Journal of Clinical Nursing, 20*(15/16),
2286-2293.

Yoo, M., & Yoo, I. (2003). The effectiveness of standardized patients as a teaching method for
nursing fundamentals. *Journal of Nursing Education, 42*(10), 444-448.
Appendix A

Table A
Core Competencies of Nurse Educators and the Use of Standardized Patients (SPs)

<table>
<thead>
<tr>
<th>Core Competency</th>
<th>Relationship to the Use of SPs</th>
</tr>
</thead>
<tbody>
<tr>
<td>I: Facilitate Learning</td>
<td>The use of SPs supports nurse educators implementing a variety of teaching strategies and creating opportunities for students to expand their knowledge and skills in each of the three learning domains.</td>
</tr>
<tr>
<td>II: Facilitate Learner Development and Socialization</td>
<td>The use of SPs allows educators to create learning environments that focus on socialization of students and further student development to the nursing role.</td>
</tr>
<tr>
<td>III: Use Assessment and Evaluation Strategies</td>
<td>SP experiences can also be used as a method of formative or summative evaluation for students and to determine clinical competency before entering the clinical setting.</td>
</tr>
<tr>
<td>IV: Participate in Curriculum Design and Evaluation of Program Outcomes</td>
<td>Integrating SPs into the curriculum shows that nurse educators are basing curriculum design on nursing research and trends in nursing education. Results of SP experiences can be used as a component of evaluating program outcomes.</td>
</tr>
<tr>
<td>V: Function as a Change Agent and Leader</td>
<td>Promoting the innovative strategy of SPs and taking action to create change shows that nurse educators are striving to create a preferred future for nursing education.</td>
</tr>
<tr>
<td>VI: Pursue Continuous Quality Improvement in the Nurse Educator Role</td>
<td>Learning the new strategy of SPs shows that nurse educators are committed to lifelong learning themselves. Feedback from SP experiences and the results of their students in SP experiences can be used by educators to see where their teaching strategies need to be improved.</td>
</tr>
<tr>
<td>VII: Engage in Scholarship</td>
<td>Nurse educators can actively work to fill the gap in the literature related to SPs by conducting research on a topic that is still so new to nursing education, then sharing these results with other educators.</td>
</tr>
<tr>
<td>VIII: Function Within the Educational Environment</td>
<td>Nurse educators can use creative strategies to address barriers facing SP implementation, using resources in new ways and collaborating with other disciplines that would benefit from SP experiences.</td>
</tr>
</tbody>
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## Appendix B

### Table B

**Recommendations for Nurse Educators to Address Barriers to Standardized Patients (SPs)**

<table>
<thead>
<tr>
<th>Barrier Addressed</th>
<th>Creative Strategies</th>
<th>Added Benefits</th>
</tr>
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<tbody>
<tr>
<td>Costs</td>
<td>SPs do not have to be trained professionals: Require SP hours as part of the curriculum of graduate nursing students. Ask for volunteers, including theater students or other faculty members. SP experiences do not have to be one-on-one: Use group SP experiences. Perhaps one student is responsible for the head-to-toe assessment, another for administering medications, and a third for completing patient education.</td>
<td>Students will see nurse-patient interactions through the perspective of a patient and gain insight to use in their own practice. Each student still witnesses the entire experience and reaps the benefits of patient interactions. An added benefit is the opportunity for students to learn how to collaborate and communicate with other nurses, a necessary skill to succeed in the clinical setting.</td>
</tr>
<tr>
<td>Faculty Workload and Time Requirements</td>
<td>Use graduate students as a resource: Require nurse educator students to help develop patient scenarios and scripts as part of the graduate curriculum. Promote multidisciplinary SP experiences: Schools of health can collaborate and join resources to create shared experiences for students from different disciplines.</td>
<td>Graduate students will gain experience creating in-depth learning experience for students. Students in nursing, occupational or physical therapy, respiratory therapy, and other health professions can learn from each other and learn how to collaborate as a group to provide superior patient care.</td>
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