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Standardized Patients in Occupational Therapy Education

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A Thesis Submitted in Partial Fulfillment of the Requirement of the Degree

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This thesis, written under the direction of the candidate's thesis advisor and approved by chair of the Occupational Therapy program, has been presented to and accepted by the Faculty of the Occupational Therapy Department in partial fulfillment of the requirements for the degree of Masters of Science in Occupational Therapy. The content and research methodologies presented are the work of the candidates alone.

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Abstract

The use of standardized patients (SPs) in occupational therapy (OT) education has greatly increased in recent years; however, there is limited research on the perceptions of student's clinical readiness utilizing SPs and whether or not the utilization of SPs prepare students for fieldwork. The purpose of this study was to examine the perceptions of SPs in OT education and the perceived clinical readiness of students. The use of SPs has been thoroughly researched in other healthcare related fields. It is important that the same critical attention be given to their use in our own field, which emphasizes the importance of clinical readiness in the development of future professionals.

A survey was given to the OT students of Dominican University of California who have had experience with the curriculum, which utilizes SPs. Students were asked to rate their own perceptions of readiness in a number of skills, which were practiced using SPs. Students were also asked to answer qualitative questions regarding their experiences in the simulated environment with SPs.

Results indicated that four common themes emerged to the perceptions on the effectiveness of SPs. The use of SPs helped implement observational skills, bring classroom information to practical experience, identified the impact of secondary health conditions/comorbidity, and had effect on student performance due to anxiety. Further studies should be conducted to support this growing area of OT education.

Introduction and Statement of Problem

Healthcare providers take part as important roles in many people's lives. Regardless of whether or not a person is a doctor, a nurse, or an occupational therapist, the aim of healthcare providers is to possess clinical knowledge, show empathy and compassion, effectively communicate with patients and perform the skilled tasks they are trained to do. This clinical competence can be greatly improved through experience. In order to provide this experience in a safe environment during education simulation is used.

In a medical educational setting treatment can be simulated by using a setting similar to what would be encountered in the field and a simulated or standardized patient (SP). This provides students an opportunity to interact with a living person, practice the required skills, and avoid risk of injury or harm to an actual patient who may be vulnerable. Clinical competence is the foundation of occupational therapy (OT) education (Polatajko, Lee, & Bossers, 1994) and will be used throughout an occupational therapist's career to improve the care that they provide.

While SPs are used throughout healthcare professions and research has explored their efficacy (Issenberg, Mcgaghie, Petrusa, Gordon & Scalese, 2005), little research has been done with regard to their use in OT education. More research is required to expand on the effective use of SPs in OT education when preparing students for their fieldwork and thus for their future careers.

The purpose of this study is to examine the use of SPs currently in OT education and the perceptions of OT students. Because the use of SPs is fairly novel within the field it is important to understand how they are being utilized and whether or not they are being used effectively. By surveying students who have experience with SPs in their own education, we can also evaluate the perceptions of students on the effectiveness of using SPs in the classroom.

A thorough evaluation of the literature was done to find any research on SPs in OT education. This was followed by surveying OT students at Dominican University of California. Ideally, this study will be expanded in the future and validated by similar studies at similar universities. This will not only increase the knowledge base for OT educators, but can help to inform the future of OT practice as a whole.

Literature Review

Standardized Patients

History of standardized patients.

In 1963, Dr. Howard S. Barrows became the first person to utilize SPs when he taught at the University of South Carolina (Hardee & Kasper, 2005). To evaluate his students, Barrows wanted to present his students with a patient, who could present signs and symptoms, repeated exactly the same way for each student (Sokolowski & Banks, 2011). Barrows introduced a "programmed patient" to simulate a neurological condition to assess his students' clinical skills (Barrows & Abrahamson, 1964). This patient was "Patty Dugger," a woman with paraplegia, diagnosed with multiple sclerosis (MS). This SP medical case came from a patient's medical chart who was admitted at the Los Angeles County Hospital (Sokolowski & Banks, 2011). At that time, the use of SPs was not common and therefore not viewed as a legitimate educational tool. The Associated Press printed headlines, which included "Hollywood Invades USC Medical School" (Rep, 2012). Barrows published his method with Stephen Abrahamson in 1964, "The Programmed Patient: A Technique for Appraising Student Performance in Neurology" in the *Journal of Medical Education* (Rep, 2012).

After publishing his findings regarding SPs, Barrows held workshops for physicians that aimed to enhance their skills through receiving immediate feedback using SPs (Rep,

2012). Educators recognized the significance of students encountering realistic clinical scenarios without endangering patient's well-being (Rep, 2012). Since then medical schools have incorporated SPs in their teaching curriculum (Hardee & Kasper, 2005).

Research has shown that SP encounters are a helpful tool in teaching and assessing clinical skills acquirement in medical students and residents (Simons, Palmer, Bedinghaus, Cohan & Torre, 2003). SPs in conjunction with medical education have successfully taught communication and physical examination to residents, medical students, and practicing physicians. Research has demonstrated high acceptance of the use of SPs in health education and confirmed their benefit in teaching (Hardee & Kasper, 2005).

Real patients versus standardized patients.

Prior to the use of SPs in medical education, real patients were used to prepare students for clinical practice. Since the adoption of SPs, they have become utilized widely across several health fields. According to Anita Heurer (2013), a simulated patient is a healthy individual who is trained to simulate a patient's illness in a standardized manner. However, SPs are individuals who may or may not have a real disease, but are trained to demonstrate a medical case in a reliable way (Collins & Harden, 1998). Most importantly, "a Standardized Patient is a person who has been coached to accurately and consistently recreate the history, personality, physical findings, and emotional structure and response pattern of an actual patient at a particular point in time" (Heurer, 2013, p. 198).

The intention for the use of SPs in healthcare education is to prepare students for clinical situations that they might experience (Harder, 2010). Additionally, students can receive feedback and re-direction in a non-threatening environment. As reported by Heurer, "effectiveness of simulation has been demonstrated in the teaching of basic science and clinical

knowledge, procedural skills, teamwork, and communication as well as assessment at the undergraduate and graduate medical education levels" (Heurer, 2013, p. 198).

With the use of SPs, the instructor has prepared the scripts of cases ahead of time including learning objectives (Hardee & Kasper, 2005). Effort is put into simulations to facilitate an environment as realistically as possible and students are asked to demonstrate a combination of skills in the context of the environment. Afterwards, the students' responses and actions would be evaluated to see if they were prepared for the situation (Harder, 2010). Overall, a 'simulated patient' is an individual who takes on a role to reach the simulation's learning outcomes (Churchouse & McCafferty, 2012). SPs have influenced medical schools by providing a method of teaching, evaluating, and providing students a constructive report of his or her performance (Heurer, 2013). By giving appropriate feedback, SPs provide students with the experiences needed to provide quality care to the public.

The use of standardized patients in healthcare education.

Although integrating SPs in medical education was first met with criticism, it has proven to be a useful tool in developing clinical competence across a range of medical education programs (Rep, 2012). SPs have become ubiquitous among most medical programs, however, it has gained popularity in OT education within the last two decades (Liu, Schneider & Miyazaki, 1997). A vast majority of North American medical schools use SPs in some capacity (Lindstrom-Hazel & West-Fraiser, 2004). In addition to medical schools, they are used in pharmacology programs, nursing schools, dentistry schools, and with rehabilitation therapists, such as occupational therapists and physical therapists (May, Park & Lee, 2009).

In OT education, incorporating SPs fills a gap that existed between education and fieldwork or practice (James, 2001). Students are evaluated on their knowledge during their

coursework, but the use of SPs allows for an evaluation of broader clinical competence. This clinical competence would take into account the following: the knowledge of the condition, the use of assessments and treatments and perhaps most importantly, therapeutic use of self while communicating with the patient (Watts, Brollier & Schmidt, 1988).

Benefits of standardized patients.

Medical schools utilize SPs as a means of teaching and evaluating students, which makes them an appropriate scope of research for the development of student clinical decision. The integration of SPs in medical education presents medical conditions and experiential learning on demand for the student's benefit (Rosen, McBride & Drake, 2009). The main argument for the application of simulation in medical schools is that the acquisition of knowledge and skills is an active process, and demands the utilization of student-centralized, interactive teaching methods (Rosen et al., 2009). According to Rosen and colleagues, the qualities of interactive teaching methods with the use of SPs are associated with comprehension of material learned, and improved student retention and satisfaction (Rosen et al., 2009). In addition, medical students and practicing physicians have reported difficulties in distinguishing SPs from real patients (Hardee & Kasper, 2005).

Standardized patient-based learning activities allowed instructors to tailor case studies appropriately for the level of learners (Bramstedt, Moolla & Rehfield, 2012). Therefore, a patient's medical case could be portrayed consistently for all students creating a standardized performance assessment opportunity (Bramstedt et al., 2012). SPs offered students the chance to safely perform skills, incorporate their knowledge of theory on patients with no risk, and the opportunity to reflect on mistakes without harming patients (Rosen et al., 2009).

A systematic review was conducted to explore the features of simulated education from 1969 to 2003 and concluded that simulation facilitates effective learning (Issenberg, Mcgaghie, Petrusa, Gordon & Scalese, 2005). Features of simulated education that were found across most curriculums included: repetitive practice, curriculum integration, controlled environment, and contextual learning (Issenberg et al., 2005). In addition, SPs can enhance the skills and attitudes of medical students needed in a clinical setting (Cantrell & Deloney, 2007). The literature presented illustrates that SPs allows students to practice their clinical and interpersonal skills before meeting actual patients in a real clinical setting. Furthermore, integrating SPs in medical education provides students an opportunity to demonstrate competencies and a chance to be evaluated by faculty members of their respective professions.

Disadvantages of standardized patients.

Although many studies highlight the benefits of integrating SPs in medical education, other studies found disadvantages in using SPs. Unlike real life patients who possess true symptoms of their conditions, a narrow range of conditions can be simulated (Barrows, 1993). As a result, few clinical skills can be assessed (Barrows, 1993). During clinical skills evaluations, the evaluator, a faculty member or skilled instructor who is familiar with the skills tested, assesses the student's performance with the SPs. Accurately evaluating an individual's performance is a difficult task for the evaluator. Evaluators may fail to incorporate evidence-based criteria when scoring the skills of the student (Gorter et al., 2000). Lastly, providing SPs into an educational curriculum can become costly and validation of benefits is crucial. According to King and colleagues, the costs of planning a SP program includes: creating case studies, recruiting individuals to be SPs, training, laboratory rental, medical supplies, reuseable and consumable products, technological and audiovisual equipment, evaluators and

other related expenses (King, Perkowski, Rogers & Pohl, 1994). Current literature has not revisited the disadvantages of SPs in medical education, therefore, findings are still applicable to the present day.

Preparation of standardized patients.

SPs are trained prior to interacting with students. There are specific characteristics that are imperative for a SP to posses. Given that a SP will be portraying a patient with a condition, he or she need to have a knowledge base of the condition and at least a cursory acting skill set. The SP will need to take the case study and background histories provided by the instructor and use that to embody a character with accurately portrayed symptoms. In some programs, a SP will be responsible for assessing the skill of the student and this will require more in-depth training. Assessing the skill of a student requires keen observation skills and the ability to remember items from the checklist provided by the instructor as well as the students' performances (Wallace, 2007).

Since each program's curriculum is designed individually, variations may exist between trainings. In one example of a SP training program, it is suggested that there are four training sessions, lasting a minimum of three hours, and a final practice exam. A training manual is given to the SP to outline key points and summary of what will be covered during each training session (Wallace, 2007).

The purpose of the first training session is to familiarize SP with cases. During the first session, a checklist and the guide to the checklist are introduced to the SP to give an overview of the case. All SPs read through the training manual and checklist together and must also watch a student and SP encounter on video. The SPs will also begin their own individual process of coming to know the patient they will be portraying and other expected performance

requirements. In the second session SP learn to use the checklist and brief interviews between SP and coach, who takes on the role of the medical student. In the third session SPs are given the opportunity to put their performance and checklist activities together for the first time. Wallace suggests implementing two practice encounters. Each encounter focusing on: authenticity and standardization of performance, accuracy of performance and checklist use, and writing effective feedback. The fourth session, described as the first dress rehearsal, is the final training session for the SPs (Wallace, 2007).

According to Wallace (2007), "the final preparation session is done in the context of a single case with an uninitiated clinician (in the role of the medical student) running a single encounter with each of the SPs one after another in order to verify the authenticity of their performances" (p. 260). The practice exam entails the participation of all SPs and all administrative support staff. The administrators of the exam and staff support such as any assistants will run the practice exam as if it were the actual exam.

As previously mentioned, these training programs will vary as much as the curriculums of each program will. In another SP training program described by Hayward, Blackmer and Markowski (2006), the training session only took one hour and focused on only the portrayal of the condition assigned to them and then complicating the condition with a comorbid psychosocial issue, a communication deficit, a cultural difference or an ethical dilemma. This suggests that the instructor observed and assessed the students and that the focus was on clinical reasoning than a skill based assessment. The training will vary depending on the needs of the program.

Clinical Reasoning

Clinical reasoning is often used interchangeably with other terms such as problem solving, clinical readiness, clinical judgment and critical thinking (Alfaro-LeFerve, 2009).   Clinical reasoning is described as a variety of cognitive processes. Processes of clinical judgment include: collecting cues and information, recognizing problems, processing information (this includes interpreting signs and symptoms, considering alternatives and consequences), identifying problems, establishing goals/outcomes, taking action, and evaluating outcomes (Alfaro-LeFerve, 2009). The refinement of clinical reasoning skills elicits the development of clinical competence and readiness, which is the combination of knowledge, skills, and professional behavior (Salavatori, Bapiste, & Ward, 2000). Essentially, the ability for a health care provider to clinically reason effectively is a crucial professional skill needed to provide safe, high quality care.

Clinical reasoning in occupational therapy.

Academic and clinical competence serves as the foundations of OT education (Polatajko, Lee, & Bossers, 1994). Clinical reasoning in OT can be described as "the reflective thought process that therapists undergo to integrate client evaluation information and develop and implement intervention plan" (Hammel, Brasic, Bagatell, Chandler, Jensen, Loveland, & Stone, 1999). Within OT, there are five types of clinical reasoning that are applied in practice. Mattingly and Fleming (1994) recognized five types of clinical reasoning employed by occupational therapists: procedural, narrative, conditional, pragmatic and interactive.

Narrative reasoning is recognized as the primary reasoning employed by occupational therapists. Narrative reasoning focuses a client's present condition and what is in store in the future for the client and after. Pragmatic reasoning looks at the barriers in practice such as

environment constraints, financial resources, and temporal limitations. Occupational therapists take these factors in mind to create a plan that meet with the client's needs. Procedural reasoning follows the decision making process seen in the medical model; occupational therapists focus on diagnosis, strive to alleviate symptoms and improve function. In order to gain information on a client to individualize treatment, an occupational therapist utilizes interactive reasoning.

Interactive reasoning establishes rapport between the occupational therapist and client by the occupational therapist discovering what is important to the client and collaborating with him or her to agree on the best treatment for them (Mattingly & Fleming, 1994). The last type of reasoning an occupational therapist may employ is conditional. Conditional reasoning is highly complex because it integrates procedural and interactive reasoning. Conditional reasoning enables the occupational therapist to evaluate what sort of plan may bring the greatest amount of change while helping the client believe in their potential (Doyle Lyons, Blesedell, & Crepeau, 2000).

Development of clinical reasoning and readiness in occupational therapy.

The goal of an OT program is to develop clinically competent practitioners for entry-level practice. In current OT education, problem-based learning, lecture, fieldwork level I, and the use of SPs are methods of developing clinical readiness and competency (Salvatori, 1996). Each of these aspects of the curriculum provide a unique vantage and together prepare students for level II fieldwork.

Problem-based learning (PBL) is a type of adult learning method that has been used by medical educators for over 25 years (Lindstrom-Hazel & West-Frasier, 2004). PBL consists of students working together as a team to obtain knowledge needed to create solutions for a problem created by a faculty member (Scaffa & Wooster, 2004). It is not based on lectures;

rather PBL is focused on the problem solving process. Students meet with the faculty member facilitating the problem to seek guidance on working throughout the problem given to them. The faculty member monitors each team to ensure the teams are on track in the process of problem solving. The problem is often a case study of a patient where students must evaluate, and create a treatment plan, or make recommendations. Students perceived PBL to facilitate the development of his or her clinical reasoning skills (Hammel, et al., 1998; Scaffa & Wooster, 2004).

Students are self-directed in the problem solving process. Students consider options, research effectiveness of interventions, consider client factors and make decisions to create an appropriate treatment. Advocates of PBL have emphasized that PBL is the only known method for student to learn to clinically reason and develop clinical readiness (Bruhn, 1992). Numerous researchers have provided evidence on the relationship between student perceptions of PBL and clinical reasoning; students expressed how PBL was able to enhance their teamwork, filter out unnecessary information, and develop their communication skills (Hamel et al, 1999; Stern & D'Amico, 2001; Scaffa & Wooster, 2001).

Importance of fieldwork.

The purposes of fieldwork level I and II differ in the responsibilities expected of the students. Level I fieldwork, which can be referred to as a clinical internship, is integrated in the first two years of the OT education curriculum. The purpose of level I fieldwork "is to introduce student to the fieldwork experience and develop a basic comfort level with and understanding of the needs of client" (American Occupational Therapy Association, 1999, p.581). With such broad guidelines, this gives the student and fieldwork supervisor flexibility in fieldwork schedule and responsibilities. Fieldwork I is required to give students the opportunity to learn through

direct observation and participation in OT practice (Johnson, Koeing, Piersol, Santaluci, & Wachter-Shuts, 2006). Level I fieldwork supervisors do not always have to be occupational therapists fieldwork educators, for a supervisor can also be other professionals such as activity coordinators, psychologists, nurses, and more (American Association of Occupational Therapy, 1999).

In contrast to Level I fieldwork, Level II fieldwork guidelines are much more precise. In fieldwork II, the student is exposed to different clinical settings and various clients across the lifespan. Under the supervision and guidance of a licensed OT, students are expected to develop and demonstrate clinical reasoning skills through the application of occupation; "The goal of Level II fieldwork is to develop competent, entry-level, generalist occupational therapists" (ACOTE, 1999, pg. 581). During a student's Level II fieldwork, the student learns to apply the knowledge and skills he or she had learned during the didactic portion of the OT program, thus, the emergence and application of clinical reasoning. The link between fieldwork and clinical readiness is apparent in studies conducted by researchers gathering student perceptions (Johnson, Koeing, Piersol, Santaluci, & Wachter-Shuts, 2006; Scaffa & Smith, 2004; Hezberg, 1993). Level II fieldwork is recognized as the final process before a student enters the real world of practicing OT. It is crucial to build a foundation of clinical skills for fieldwork because elements of the curriculum prepare students for the profession.

Identifying the gap.

Clinical competency is often evaluated through written tests, client satisfaction surveys and supervisor ratings (Salvatori, Baptiste, & Ward, 2000). Knowledge is crucial for clinical performance, however, there is no warranty that a student knows how to apply what has been learned unless the student is able to display the skill or the student perceived he or she is able to

apply it to real life context (Salvatori, 1996). According to Nagi (2006), " hands-on application of knowledge taught in the classroom provides a clearer, yet simultaneously more complex, perspective regarding that knowledge. What is experienced through action will be learned more vividly than what is merely read, or heard in a classroom." (p. 166). Current literature lacks evidence regarding effective methods of preparing students for the complexities of fieldwork. Fieldwork is an essential aspect of the OT curriculum before a student enters the profession.

While PBL provides practice in clinical reasoning and tabletop examinations assess a student's knowledge base, there is little done to assess readiness for students preparing for fieldwork. There is a gap between clinical reasoning on paper and being prepared to treat patients in the field. Although the application of SPs have been recognized in OT education, there are few studies in literature exploring student perceptions on the effectiveness of the use of SPs and readiness for fieldwork.

Statement of Purpose

The use of SPs in OT education has greatly increased in recent years; however, there is limited research on the perceptions of students' clinical readiness utilizing SPs and whether or not incorporating SPs prepare students of fieldwork. The purpose of this study is to examine the use of SPs in OT education and the perceived clinical readiness for fieldwork utilizing SPs from students. The importance of determining whether SPs are beneficial in OT education is that the OT profession values fieldwork education as a crucial component in the development of future professionals.

Theoretical Framework

Concepts of adult learning theory such as andragogy and transformative learning theory were utilized to guide this thesis. The dimensions of adult learning and education are viewed as both collaborative and participatory. Adults must interact with their environment and others in order to gain experience and knowledge. Since this thesis is based on the perceptions of readiness for clinical practice with the use of SPs in OT students, andragogy and transformative learning theory are the most suitable theories (Knowles, Holton, & Swanson, 2005).

Andragogy

The learning theory of andragogy, developed by Malcolm Knowles values the experience of the adult learner (Knowles, Holton, & Swanson, 2005). The term andragogy is defined as "the art and science of helping adults learn…" (Knowles et al., 2005, p. 61). Knowles claimed that the theory of andragogy, which is the approach for adult learning, is distinctly different from pedagogy, the teaching of children (Leonard, 2002). One aspect of andragogy is self-directing learning which learners are in the process of building their own learning experience (Leonard, 2002). "In particular, they identify their own learning goals, find learning resources, implement learning strategies, and determine their own learning outcomes" (Leonard, 2002, p. 226). This theory assumes that the adult learner must be driven to develop the knowledge and skills to meet the demands of the profession (Leonard, 2002). Knowles predicated on six basic assumptions about learners: the need to know, the learner's self-concept, the role of the learner's experiences, the readiness to learn, orientation to learning, and motivation (Knowles et al., 2005).

The first assumption, *the need to know*, is the assumption that adults have a need to know why they should learn something before learning it (Knowles et al., 2005). The facilitators assist learners to become aware of "the need to know" by helping them to recognize the benefits of

learning to improve their performance (Knowles et al., 2005). The second assumption, *the learner's self-concept*, assumes that an adult has the ability to be responsible for his or her own lives, decisions, and actions (Knowles et al., 2005). In addition, an adult's self-concept can shift from being a dependent personality to an independent self-directed human being (Bastable & Dart, 2011). When the adult achieves his or her self-concept, a psychological need will be seen by others, which becomes fulfilled (Knowles et al., 2005). The third assumption is *the role of the learner's experiences*, which ascertains that "adults come into an educational activity with both a greater volume and a different quality of experience from that of youths" (Knowles et al., 2005, p. 65). The fourth assumption of *readiness to learn*, describes that the adults readiness to learn the required materials and their capability of doing so in order to manage tasks during real life situations (Knowles, et al., 2005). Therefore, an adult's readiness to learn pertains more towards the developmental tasks of social roles (Bastable & Dart, 2011). The fifth assumption is *orientation to learning,* which explains "adults are motivated to learn to the extent that they perceive that learning will help them perform tasks or deal with problems that they confront in their life situations" (Knowles et al., 2005, p. 67). In this case, orientation of learning has shifted to being problem centered (Bastable & Dart, 2011).

Transformative learning theory

Transformative learning, developed by Jack Mezirow, focuses on an individual's development through gaining personal meaning from experience. Individuals obtain their experience through interaction and communication with others and in an attempt to understand the world through their own perceptions of those experiences. In transformative learning, habits of mind play a major role in how an individual learns from experiences. Habits of mind are set assumptions an individual possess based on culture, personality, and background. In order for an

individual to go through the transformative learning process, habits of mind must be challenged by experiences. Once an individual's habits of mind are challenged, the individual responds by altering their habit of mind. Altering a habit is mind is achieved through a reflection process (Cranton, 2006).

To further understand the manner in which students learn using the theory of transformative learning and how habits of mind are challenged, Mezirow argues that there are three types of knowledge that serve as the foundation of the theory. The three types of knowledge are communicative, instrumental, and emancipatory. Instrumental knowledge allows people to manipulate the context, predict observable physical and social occurrences, and to be able to respond and adapt to those events that are occurring. Communicative knowledge is the knowledge that depends purely on the need for humans to understand each other through all forms of communication, which may be through language, gestures, and/or body language. Emancipatory knowledge appears when the learner challenges communicative and instrumental knowledge. Emancipatory is concerned with an individual's ability to have self-determination and self-reflection. To further explain emancipatory knowledge, Taylor and Cranton (2012) states "emancipatory knowledge comes from a process of critically questioning ourselves and the social systems we live in" (pg. 521). Once an individual is able to question what they perceive, the beginning of transformative learning has come into effect.

Reflection is a crucial step in transformative learning theory. Learning occurs when an individual has the capacity to critically reflect on perceptions and assumptions that are communicated to us; thus, once this is achieved an individual can change their habit of mind. The complexity of critically reflecting on prior habits of mind is associated with adult life and is regarded as necessary for productivity and wellbeing (Cranton, 2006).

Although transformative learning theory emphasizes an individual reflecting upon experiences to change habit of mind, transformative learning is completely voluntary. According to Kasworm and Bowles (2012), transformative learning is often fostered in high education settings due to higher education "inviting" students to think and be challenged beyond undergraduate education. It can be inferred that individuals choosing to pursue higher education enter the learning environment with open exploration.

Relevance of framework to thesis

The Dominican University of California's OT program, which is divided into two cohorts, (entry level master's students and BS/MS students) was incorporated in this study. The adult practice course, known as Occupations of Adults and Seniors (OAS) at Dominican University of California, consists of a lecture course along with two skills labs. OAS is divided into two semesters. The first semester, OAS I, teaches a variety of conditions and disabilities patients may have and also protocols and treatment strategies. The second semester, OAS II, is an advanced form of OAS I in which more conditions and disabilities are presented. In this study, OAS I skills lab was the focus.

One of the skills labs in OAS I consisted of students learning various procedures and protocols regarding standardized and nonstandardized assessment tools used in OT practice to determine the need for OT. The skills labs covered motor and sensory assessments, range of motion (ROM) and manual muscle testing (MMT), and bed, shower bench, toilet and wheelchair transfers. During each skills lab, students spent time familiarizing and practicing the assessments on each other. The students were then tested by applying the skills they had learned to SPs in what was referred to as a "skills checkout." Students were presented with a synopsis of what the condition the SP may or may not present two weeks prior to their skills check

out. Generally, during each "skills checkout" students were assigned into groups of two or three before demonstrating their skills in the skills checkout individually. Each group had 10 minutes to interact and observe the SP to determine what protocols to apply while considering their initial interaction with the SP. Once 10 minutes had commenced, each student individually performed the required skills to assess the SP while the evaluator observed and evaluated the student.

Both transformative learning theory and andragogy are interrelated within our thesis when students participated in skills lab course and checkouts. Transformative learning theory is recognized when students have to reflect upon their experiences and being a part of the higher education dynamic. Students took part in communicative knowledge when collaborating with their peers to discuss what measures to take in the simulated environment. Instrumental knowledge is seen when students manipulate the instruments, environment, and conduct trial and error. Lastly, a student must critically reflect what was communicated to them within the skills lab and the case study given while critically reason with the appropriate assessment tools to utilize when interacting with the SPs and the conditions the SPs manifest.
The theoretical framework of andragogy directed the implementation and development of the SP program. The learning experiences provided by the SPs were not only limited to the development of course content comprehension but also establishing skills and behaviors necessary for fieldwork and clinical practice.

Again, adult learning theory emphasized that students required the implementation of subject matter and practice-specific learning to effectively apply the knowledge they have gained (Knowles et al., 2005) The Occupations of Adults and Seniors I curriculum tailored the environment during a skills checkout to resemble a real life medical setting. Students were given

the opportunity to practice within the tailored environment and receive feedback before their final skills checkout.

Methodology

Design

This study was a mixed-methods, descriptive study comprised of both quantitative and qualitative data to explore OT students' perceptions of comfort level and skill level when assessing and interacting with SPs that are used in the curriculum to prepare them for fieldwork. Measures of a quantitative Likert scale and qualitative open-ended questions were utilized in a questionnaire structure to develop further information from the participants regarding their perspectives and personal experiences.

Subjects

The sample population for recruitment was the OT students of Dominican University of California. Participants were second year OT undergraduates and second year OT entry level master's students. The Institutional Review Board for the Protection of Human Subjects (IRBPHS) of Dominican University reviewed the proposal for this research and was approved after a Full Board Review (Appendix A). Sampling methods included non-probability sampling and convenience sampling. Participants must have taken the adult practice course, Occupations of Adults and Seniors I, in the OT program in order to fulfill inclusion criteria. Out of the 36 students who met the inclusion criteria, 29 responded. There were 4 students who did not complete the qualitative portion of the survey.

Data Collection Procedures

Instrumentation consisted of two researcher-modified 8-item questionnaires and four open-ended questions that was created and hosted on surveygizmo.com. The questionnaires used

a seven point Likert scale displaying the level of comfort and level of skill. The participants

rated their perceived level of comfort and skill to each category associated with skill assessments

when interacting with a SP. On the Likert scales, a one signified the lowest level of comfort and

a seven signified high level of comfort with a particular skill. Qualitative data was obtained

through three researcher-developed questions, which asked the participants to reflect upon their

experiences.

Researchers informed students in two OT classes, which comprised the target

population. Once researchers had introduced the potential for participation to students in the

classroom, an email blast (see Appendix B) was sent out to the potential participants. A flyer

was also posted in the OT department (see Appendix C) informing potential participants about

the email that contained the survey. The survey was open for approximately six weeks from

February 6, 2014 to March 20, 2014. The participants received emails weekly beginning mid

way through the time period as a reminder to participate in the survey.

Data Analysis

The survey was conducted through surveygizmo.com and confidentiality was maintained

because no personally identifying information was collected. Questions that could reveal the

identity of subjects were not asked. For example, because there was only one male student in

each cohort being surveyed, no question regarding gender was asked in the demographics

section. All files containing data from the survey were password protected and were stored on a

password-protected computer. Data collected from the participants was destroyed one year after

completion of thesis.

Quantitative and qualitative data was analyzed using descriptive statistics. Descriptive

statistics of the quantitative data sets were provided by surveygizmo.com and the researchers

analyzed the qualitative data. The qualitative data analysis was an ongoing process. Initially, codes were assigned by categorizing the content of the responses. Key phrases were identified to assist in grouping into most salient, overarching themes.

In order to ensure authenticity and reliability, two researchers analyzed the qualitative data for themes and compared their results. Data analysis was subject to external validation from the capstone research advisor.

Participants were able to be active in the research process by validating the findings in a second, voluntary survey (see Appendix D), which was sent out via email as well (see Appendix E). This method of triangulation enabled the researchers to confirm the accuracy of their interpretations of the qualitative data.

Results

After collecting data from surveygizmo.com, 25 OT students completed the survey. Fifty-two percent of the survey participants were entry-level Master's students while 48% were part of the BS/MS cohort. The majority of the OT participants were at least 22 years and over. According to the report, 12% were 21 and under, 22-25% were between 22 to 25 years, 32% were 26-30 and 28% were over 30 years old. When participants were asked whether or not they had experience in a hospital setting, 60% of the participants responded that they had prior to the OT program, while 40% responded that they had no experience. Of the 15 participants who responded that they have experience at the hospital setting, 29% had less than one year, 33% had one to five years and the remaining 37% did not answer.

The participants responded to eight questions regarding their level of comfort in performing a set of clinical skills (see Table 1). The questionnaire asked for the participant's comfort level when performing or administering: range of motion (ROM), manual muscle testing

(MMT), sensory assessment, motor assessment, toilet or shower transfer, and hospital bed to wheelchair transfer. The comfort level of the participant's initial communication with the SP and writing SOAP notes after the session were also being assessed. The survey questionnaire gave participants the following choices to rate their level of comfort starting with: extremely uncomfortable, uncomfortable, slightly uncomfortable, neutral, slightly comfortable, comfortable to extremely comfortable.

In the skills checkout, many participants felt either extremely comfortable, comfortable or slightly comfortable in performing eight areas of skills. At the beginning of the skills checkout, the participants were required to communicate with the SP to help build rapport. Many participants felt extremely comfortable (52%) and comfortable (20%) with the initial communication. With administering the sensory assessments, many participants also felt extremely comfortable (16%), comfortable (40%), and slightly comfortable (40%). When many administered the motor assessment they also felt extremely comfortable (8%), comfortable (40%), and slightly comfortable (32%). However, the rest of the participants felt neutral rather than uncomfortable. When measuring ROM, majority of the participants felt either slightly comfortable (32%) or comfortable (40%). With performing MMT, most participants felt comfortable (24%) and slightly comfortable (40%), while the rest perceived their experience with MMT to be extremely uncomfortable, slightly uncomfortable to uncomfortable. The majority of the participants found writing SOAP notes to be comfortable (32%) and slightly comfortable (32%).

Most of the participants were also comfortable in performing transfers during the checkout. For toilet or shower transfer, most felt comfortable (36%), slightly comfortable (28%)

and extremely comfortable (12%). In regards to transferring from the hospital bed to wheelchair,

majority felt comfortable (40%), slightly comfortable (16%) and extremely comfortable (12%).
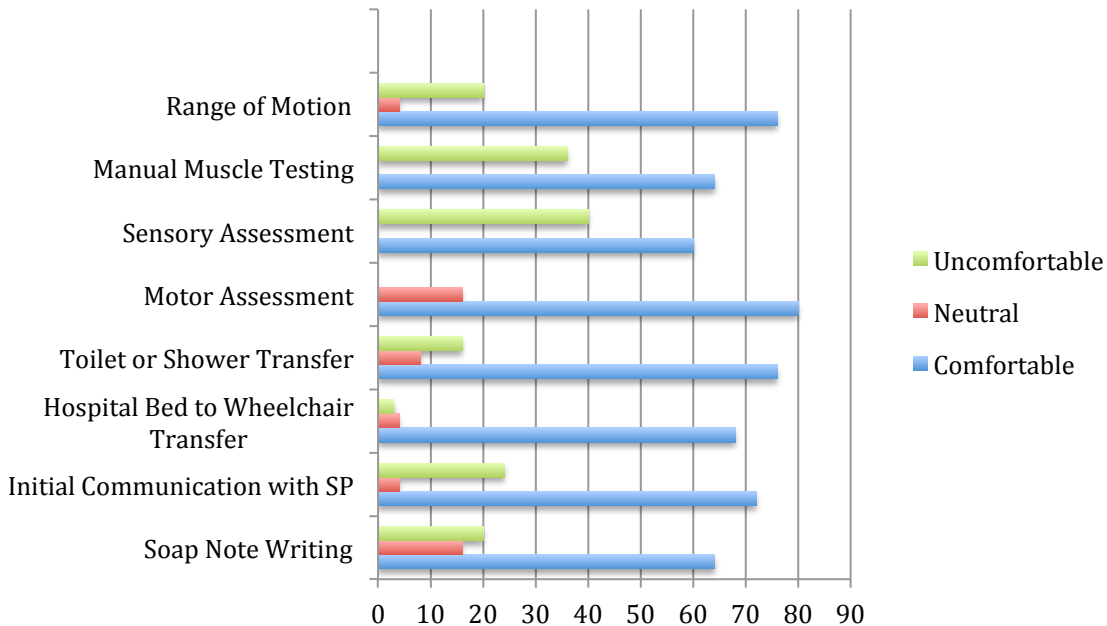
Table 1

Themes

Upon reviewing the results from the qualitative responses, four themes emerged. The

following themes were identified regarding the perceptions of SPs: implementing observational

skills, classroom to practice experience, impact of secondary health conditions/comorbidity, and

effect of anxiety on student performance.

Implementing observational skills.

The SPs simulated more than one diagnosis and the clinical scenario environment had

obstacles such as wheelchairs, patient intravenous (IV) lines and catheter, and placement of the

hospital beds. The participants felt that this enhanced his or her observation skills through the use

of SPs by becoming more aware of the environment and symptoms, which a SP expressed. One participant expressed:

> It is the closest to real life experience I had dealing with a patient myself. They would behave different and point out issues one may not be aware or think of when just having academic knowledge. It also gives the opportunity to use your senses and explore how well your other skills (social/communication skills) are.

> OTs encounter a broad range of issues related to the condition of each patient he or she treats. This includes reports from other health professions of the healthcare team regarding the complications or improvement of the patient. The OT's judgment guides his or her clinical reasoning to provide the most appropriate and effective treatment plan, therefore, observation skills are one of the crucial skills needed in order to make sound, reliable clinical judgments. Through the use of SPs, students needed to observe the person and environment to make the best clinical judgment for communicating, administering assessments, and transferring.

Classroom to practice experience.

Participants felt that demonstrating skills with SPs in simulated clinical scenarios connected what they had learned lecture and textbooks to a psychomotor context. The participants were able to connect mental processes (classroom content) with movement (hands on practice), which supported his or her learning. One participant stated:

> There was a definitely carryover between the materials taught in the classroom and the use of SPs. We learned a lot in the classroom regarding different conditions and the use of various assessments with patients. This helped bridge the gap between classroom concepts and use of assessments and transfer techniques with 'real patients'.

The objective of SPs was not meant to substitute a real patient encounter with an SP encounter but supplement it through an integrative and standardized approach to facilitate learning. Students felt that SPs helped prepare him or her for fieldwork aside from traditional teaching methods because it allowed them to apply what they had learned in the classroom to a realistic clinical experience before entering a real clinical setting. Therefore, through the use of SPs, students perceived they are more confident and knowledgeable when they face his or her first clinical experience.

Impact of secondary health conditions.

Many of the SP scenarios incorporated not only a primary diagnosis but also other comorbidities. Participants perceived that he or she had to change his or her initial plan during the skills lab checkouts due to challenges arising from secondary health conditions alongside the primary diagnosis, which the SPs were presenting.

> Through the philosophy of "learn by doing", I personally gain more insight, awareness, and understanding of diagnoses rather than reading, memorizing, and reciting the same information. It also allowed me to see how different diagnoses present in actual patients, as opposed to how I would envision the condition presenting itself.

In real life clinical situations, a patient may have number of conditions and/or complications as a result of his or her primary diagnoses. Although the participants were given the case study of the SP prior to the skills check out, participants realized and gained awareness on how ambiguous conditions may be.

Effect of anxiety on student performance.

A number of qualitative survey responses expressed that the simulated environments with the SPs provoked anxiety, thus creating the need to focus on receiving a satisfactory grade rather

than building skills. The use of SPs in the Dominican University of California OT program were employed as a summative assessment; in this manner, students felt that the stakes were too high on passing the assessment. One participant stated that the ROM and MMT assessment was especially anxiety provoking due to the time constraints and their inexperience with the specific skills.

> Given my lack of comfort level with these assessments, a timed scenario only served to add anxiety. It was finally our chance to practice on 'real' patients and it was not the least helpful. I feel if these standardized patients had been allowed to come to a lab and let us work on them in a non 'test' scenario, it would have been really helpful. But only using them when it is about testing wasn't helpful for me at all.

> This sentiment was echoed by many participants, who appreciated the experience but

hoped for a more formative assessment prior to or instead of a summative assessment. One participant expressed, "I feel it was a bit of a blur because it was so nerve racking to be watched. I think fieldwork has given me the most exposure and will give me the best experience with patients."

Results of Member Checking

In early February of the spring semester, a second email (see Appendix E) was sent inviting the same sections of students to participate in a second survey (see Appendix F). The survey included summarized findings of the four common themes and an opportunity for students to add any other information regarding his or her perceptions of the SPs. Students were asked to assist in determining the accuracy of the four common themes that were presented in the survey by rating their level of agreement or disagreement towards the common theme.

Member checking was utilized to give students the opportunity to correct errors, challenge what were perceived as wrong interpretations and assess the accuracy of the four common themes. It allowed participants to analyze the common themes the researchers created and comment about them. They were able to confirm whether or not the common themes reflected their experience, perceptions, or feelings during the skills check out.

Based on the results, 16 participants responded to the second survey to help validate the common themes (see Table 2). Eight participants strongly agreed, five agreed, one felt neutral, one disagreed, and one was not sure with the theme of the skills check out enabling them to implement their observational skills. Results from the "classroom to practice experience" theme, 11 participants strongly agreed, three agreed, one felt neutral, and 1 disagreed that they were not able to apply what they learned from the adult and seniors lecture course to the skills checkout. In the third theme "impact of secondary health conditions/comorbidity," no definite agreement was established since half of the students demonstrated some level of disagreement, being neutral and unsure of whether the skills checkout helped them be able to identify the impact of secondary health conditions. Lastly, responses regarding the "effect of anxiety of student performance" theme conveyed that a majority of the participants (87.5%) "strongly agree" with anxiety affecting their performance during the skills check out. Overall, student responses indicated that the common themes created by the researchers represented their perceptions of their experience with SPs.
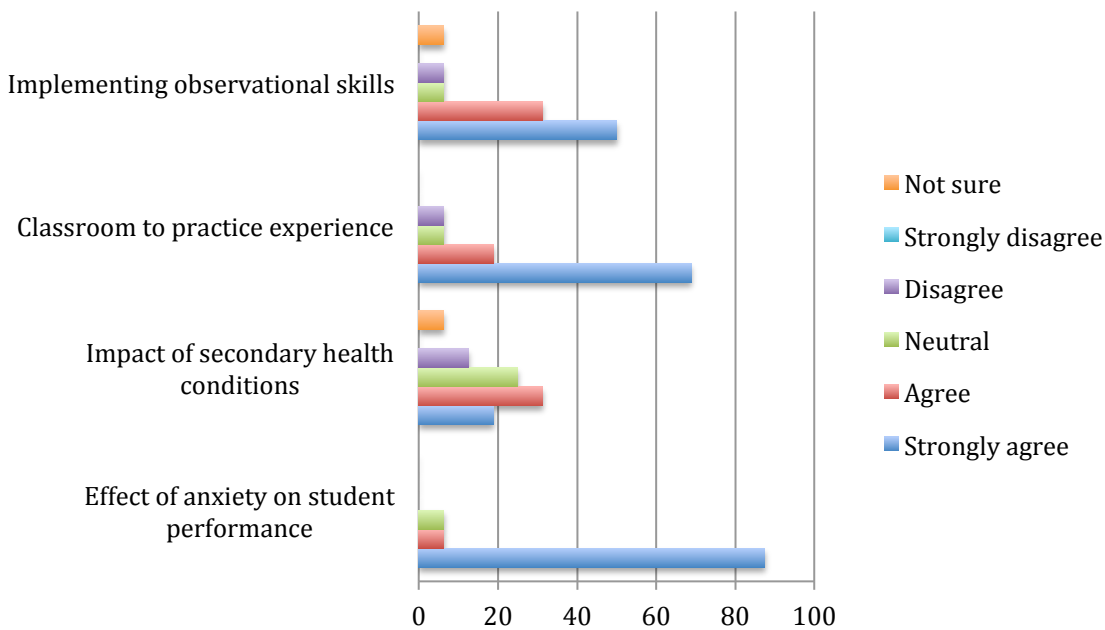
Table 2

Discussion

Potential Limitations

The sample size used in this research was limited by the number of students who have

participated in classes that incorporated SPs into the curriculum. A larger sample size could

have been obtained by including other schools had time constraints allowed it. Further research

on student perceptions of SPs including other institutions and disciplines could be beneficial in

understanding the nature of the use of SPs on a broader scale. The research would also have to

include how institutions' curriculum vary and compare experiences against those

variables. Also, participants were recruited from only one program, which cannot be generalized

for all other OT programs.

The time participants participated in the survey was also a limiting factor. Because

course sequences for the two cohorts varied, more time had elapsed since the BS/MS students'

experiences with SPs had occurred. In this case, some of the BS/MS students may have

difficulty recalling their experiences during the skills checkout. Furthermore, not all participants who completed the first survey completed the second survey. Sixteen of the 25 participants completed the second survey. There is no guarantee that the 16 participants who completed the second survey are the same individuals that completed the first; there is a possibility that an individual that did not participate in the first survey completed the second.

Based on the qualitative results, a few participants did not respond to the open-ended questions directly or fully. Also, another limitation to this survey is that not knowing whether or not the participants respond to the survey questions truthfully. It is a challenge to discover whether participants taking the survey are answering questions honestly or selecting random answers to complete the survey. Participants may have felt encouraged to provide accurate or honest answers while others may not have felt comfortable providing answers that may present them or their program in an unfavorable manner. Since the researchers were unable to see the participant's facial expression while taking the survey, he or she may have been bored or impatient to complete a semi-lengthy survey. The participants may have skimmed through the open-ended questions and given brief responses. Lastly, the survey question answer options may have led to unclear data because each participant may have interpreted certain answer options differently. For example, the answer option "comfortable" may be represented differently to different participants and have its own meaning to each individual participant.

Recommendations

OT programs should provide more opportunities for students to practice with SPs. Some participant responses reported that when he or she practiced with their peers, their peers often "helped" them too much. Also, students may not know how to present diagnoses due to a lack of clinical experience. Implementing opportunities for students to practice with SPs will not only

keep students on track, but provide exposure to becoming comfortable in performing assessments.

Prior to the skills check exam, the skills lab instructor can provide extra time for students to practice performing the required skills on SPs until they feel comfortable with the skills. Providing students the opportunity to practice on SPs while not being graded will produce a more meaningful and less stressful learning experience. During the practice labs, students can benefit from being able to openly ask questions and discuss the client's medical case with their instructor or peers in the process of demonstrating the required skills to gain a sense of ease and comfort on whether or not they are performing the skills properly.

With the added pressure of wanting to pass their skills check assessment, students may not have benefitted due to anxiety. Although anxiety may be a source of motivation to do well in high-pressure scenarios, too much anxiety could cause a student to lose focus (Bastable, 2010). Suggestions for future studies are to examine the effects of anxiety on student performance during assessment skills check exams. An alternative method of evaluation OT programs could implement to alleviate stress is to utilize formative opportunities to develop ease and comfort during the demonstration of skills.

Future studies should include expanding the study to other institutions, in order to determine how SPs are used in different programs, and whether those differences or similarities translate into the findings. This could be done by creating a universal tool to measure the effectiveness in the use of SPs. A universal tool could be utilized by other OT programs to examine how SPs teach their students skills and clinical reasoning, and what the students perceptions of their skills may be.

Conclusion

The purpose of this study is to examine the use of SPs in OT education and the perceived clinical readiness for fieldwork utilizing SPs from students. The results of this mixed methods exploratory study indicated that the use of SPs, along with a sequential OT adult practice course, improved the students' self-perception of their level of comfort on various foundational OT related competencies and skills in relation to their perceived clinical readiness for fieldwork. The outcomes from this study support the continued use of SPs' within the OT adults and senior course to enhance students' clinical reasoning, confidence, and competence in their knowledge and skills in their readiness for fieldwork. In addition, the qualitative data from students regarding their level of comfort on various foundational OT related skills and personal perceptions regarding their experience with the SPs provides valuable feedback which can help improve the OT adults curriculum and SIM Lab checkout.

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January 29, 2014

Andrea Battle
50 Acacia Ave.
San Rafael, CA 94901

Dear Andrea:

I have reviewed your proposal entitled *The Use of Standardized Patients in Occupational Therapy Education* submitted to the Dominican University Institutional Review Board for the Protection of Human Participants (IRBPHP Application, #10223). I am approving it as having met the requirements for minimizing risk and protecting the rights of the participants in your research.

In your final report or paper please indicate that your project was approved by the IRBPHP and indicate the identification number.

I wish you well in your very interesting research effort.

Sincerely,

Martha A Nelson

Martha Nelson, Ph.D.
Associate Vice President for Academic Affairs
Chair, IRBPHP

cc: Eira Klich-Heartt

Institutional Review Board for the Protection of Human Subjects
Office of the Associate Vice President for Academic Affairs • 50 Acacia Avenue, San Rafael, California 95901-2298 • 415-257-1310
www.dominican.edu

Subject: Dominican OT Survey

Hello fellow OT students,

We are conducting a survey as part of our capstone project to find out more about the use of standardized patients in occupational therapy education. The survey is brief and should take about 10 minutes to complete, and will ask some questions about your experiences here at Dominican, specifically with regard to your Simulation Lab portion of your curriculum. The survey is completely optional, but your participation will be greatly appreciated!

[Click here for the survey!](#)

Thanks so much for your help!

Andrea Battle, Jessica Borceguin, Joanna Dizon and Lai Zan Saechao

WANTED

Participants for Survey

Please keep a look out in your student email for a link to our survey about the use of standardized patients (SPs).

It is a brief, anonymous survey about your experiences with SPs in this program (Sim Lab) and your help would be greatly appreciated!

For more info contact:

andrea.battle@students.dominican.edu

jessica.borceguin@students.dominican.edu

joanna.dizon@students.dominican.edu

lai.zansaechao@students.dominican.edu

Dear Participant:

By completing this survey you are consenting to add this information to an ANONYMOUS study on the use of standardized patient in occupational therapy education. Your participation will enhance the understanding of the perceived readiness of students after participating in the simulation lab portion of our Occupations of Adults and Seniors curriculum.

The following questionnaire will require approximately 1o minutes to complete. There is no compensation for responding nor is there any known risk. In order to ensure that all information will remain confidential, please do not include your name. If you choose to participate in this project, please answer all questions as completely and honestly as possible. Participation is strictly voluntary and you may stop the survey and refuse to participate at any time.

Thank you so much for your time!

☐ Yes, I understand.

DOMINICAN UNIVERSITY OF CALIFORNIA
CONSENT TO BE A RESEARCH PARTICIPANT

Purpose and Background
Andrea Battle, Jessica Borceguin, Joanna Dizon and Lai Zan Saechao, graduate students in the Department of Occupational Therapy at Dominican University of California, are conducting a research study to examine the perceptions of readiness for Level II fieldwork in occupational therapy students after utilization of standardized patients in a curriculum.

Procedure
I will be asked to complete an anonymous online survey that will take approximately 10 minutes to complete.

Risks and/or Discomforts
I understand that participation involves no physical risk, but may involve some psychological or emotional discomfort and I will be asked to disclose personal opinions and feelings. I may refuse to answer any questions that cause me distress or seem to be an invasion of my privacy. I may elect to stop the survey at any time and may refuse to participate before or after the study has started without any adverse affects.

Benefits
There are no direct benefits to me for participating in this study. From participating, I may

become more aware of my own readiness for Level II fieldwork and may use this awareness to reflect on skills attained through the use of standardized patients in my occupational therapy education.

Costs and Financial Considerations
There will be no cost for me to participate in this study.

Payment/Reimbursement
There will be no payment or reimbursement made to me for participation in this study.

Questions
I have talked to the researchers and/or Dr. Eira Klich-Heartt about any questions I have and have obtained answers. I may call Dr. Eira Klich-Heartt at (415) 257-1314. If I have any questions or comments about participation in this study, I should talk first with the researchers. If for some reason I do not with wish to do this, I may contact the Dominican University of California Institutional Review Board for the Protection of Human Subjects (IRBHS), which is concerned with the protection of volunteers in research. I may reach the IRBHS office by phone at (415) 257-0168, or in writing at Office of Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA, 94901.

Consent
I may print a copy of this consent form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to participate in the study, or to withdraw at any point.

By checking below, I indicate that I have read the research participants' bill of rights and agree to participate in this study.*

☐ Yes, I consent.

DOMINICAN UNIVERSITY OF CALIFORNIA RESEARCH

PARTICIPANT'S BILL OF RIGHTS

Every person who is asked to be in a research study has the following rights:
1. To be told what the study is trying to find out;
2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice;
3. To be told about important risks, side effects or discomforts of the things that will happen to her/him;
4. To be told if s/he can expect any benefit from participating and, if so, what the benefits might be;
5. To be told what other choices s/he has and how they may be better or worse than being in the study;
6. To be allowed to ask any questions concerning the study both before agreeing to be involved

and during the course of the study;
7. To be told what sort of medical treatment is available if any complications arise;
8. To refuse to participate at all before or after the study is stated without any adverse effects. If such a decision is made, it will not affect h/her rights to receive the care or privileges expected if s/he were not in the study.
9. To receive a copy of the signed and dated consent form;
10. To be free of pressure when considering whether s/he wishes to be in the study.

If you have questions about the research you may contact me at andrea.battle@students.dominican.edu. If you have further questions you may contact my research supervisor, Dr. Eira Klich-Heartt at (415) 257-1314 or the Dominican University of California Institutional Review Board for the Protection of Human Subjects (IRBPHS), which is concerned with protection of volunteers in research projects. You may reach the IRBPHS Office by calling (415) 482-3547 and leaving a voicemail message, or FAX at (415) 257-0165, or by writing to IRBPHS, Office of Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 94901*

☐ Take me to the survey!

SURVEY

Which occupational therapy track are you in?

☐ Entry level Master's

☐ BS/MS 5 Year

Age

◯ 21 and under

◯ 22-25

◯ 26-30

◯ 30 and over

Prior to entering the program, did you have experience in a hospital setting?

◯ Yes

◯ No

If yes, for how long?

◯ Under 1 year

◯ 1-5 years

◯ Over 5 years

◯ Not applicable

What is your comfort level with the following skills?

1) Range of motion (ROM) measurement*

◯ Extremely uncomfortable ◯ Uncomfortable ◯ Slightly uncomfortable ◯ Neutral◯
Slightly comfortable ◯ Comfortable ◯ Extremely comfortable ◯ Not Applicable

2) Manual muscle testing (MMT)*

◯ Extremely uncomfortable ◯ Uncomfortable ◯ Slightly uncomfortable ◯ Neutral◯
Slightly comfortable ◯ Comfortable ◯ Extremely comfortable ◯ Not Applicable

3) Sensory assessment*

◯ Extremely uncomfortable ◯ Uncomfortable ◯ Slightly uncomfortable ◯ Neutral◯
Slightly comfortable ◯ Comfortable ◯ Extremely comfortable ◯ Not Applicable

4) Motor assessment*

◯ Extremely uncomfortable ◯ Uncomfortable ◯ Slightly uncomfortable ◯ Neutral◯
Slightly comfortable ◯ Comfortable ◯ Extremely comfortable ◯ Not Applicable

5) Toilet or shower transfer*

◯ Extremely uncomfortable ◯ Uncomfortable ◯ Slightly uncomfortable ◯ Neutral◯
Slightly comfortable ◯ Comfortable ◯ Extremely comfortable ◯ Not Applicable

6) Hospital bed to wheelchair transfer*

◯ Extremely uncomfortable ◯ Uncomfortable ◯ Slightly uncomfortable ◯ Neutral ◯
Slightly comfortable ◯ Comfortable ◯ Extremely comfortable ◯ Not Applicable

7) Initial communication with standardized patient (SP)*

◯ Extremely uncomfortable ◯ Uncomfortable ◯ Slightly uncomfortable ◯ Neutral ◯
Slightly comfortable ◯ Comfortable ◯ Extremely comfortable ◯ Not Applicable

8) SOAP note writing*

◯ Extremely uncomfortable ◯ Uncomfortable ◯ Slightly uncomfortable ◯ Neutral ◯
Slightly comfortable ◯ Comfortable ◯ Extremely comfortable ◯ Not Applicable

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Please answer the following questions as honestly and completely as possible.

9) How did the use standardized patients help you gain insight into a variety of diagnoses through observation?*

10) How did the use standardized patients help you gain insight towards impairments and disabilities?*

11) How did the use of standardized patients help you to demonstrate interpersonal skills needed for effective communication?*

Subject: Follow-up to Dominican OT Survey

Hello again OT students!

For those of you that participated in our survey as part of our capstone regarding the use of standardized patients in occupational therapy education, thank you! We've collected data and are in the process of generating the results. We would like to invite you into our research process by validating the findings in a second, voluntary survey. Your participation to confirm accuracy of the themes interpreted would be greatly appreciated!

Click here for the survey!

Thanks so much for your participation!
Andrea Battle, Jessica Borceguin, Joanna Dizon and Lai Zan Saechao

Dear Participant:

By completing this survey you are consenting to add this information to an ANONYMOUS study on the use of standardized patient in occupational therapy education. Your participation will enhance the understanding of the perceived readiness of students after participating in the simulation lab portion of our Occupations of Adults and Seniors curriculum.

The following questionnaire will require approximately 5 minutes to complete. There is no compensation for responding nor is there any known risk. In order to ensure that all information will remain confidential, please do not include your name. If you choose to participate in this project, please answer all questions as completely and honestly as possible. Participation is strictly voluntary and you may stop the survey and refuse to participate at any time.

Thank you so much for your time!
☐ Yes, I understand.

DOMINICAN UNIVERSITY OF CALIFORNIA

CONSENT TO BE A RESEARCH PARTICIPANT

Purpose and Background
Andrea Battle, Jessica Borceguin, Joanna Dizon and Lai Zan Saechao, graduate students in the Department of Occupational Therapy at Dominican University of California, are conducting a research study to examine the perceptions of readiness for Level II fieldwork in occupational therapy students after utilization of standardized patients in a curriculum.

Procedure
I will be asked to complete an anonymous online survey that will take approximately 10 minutes to complete.

Risks and/or Discomforts
I understand that participation involves no physical risk, but may involve some psychological or emotional discomfort and I will be asked to disclose personal opinions and feelings. I may refuse to answer any questions that cause me distress or seem to be an invasion of my privacy. I may elect to stop the survey at any time and may refuse to participate before or after the study has started without any adverse affects.

Benefits
There are no direct benefits to me for participating in this study. From participating, I may become more aware of my own readiness for Level II fieldwork and may use this awareness to reflect on skills attained through the use of standardized patients in my occupational therapy education.

Costs and Financial Considerations
There will be no cost for me to participate in this study.

Payment/Reimbursement
There will be no payment or reimbursement made to me for participation in this study.

Questions
I have talked to the researchers and/or Dr. Eira Klich-Heartt about any questions I have and have obtained answers. I may call Dr. Eira Klich-Heartt at (707) 481-3115. If I have any questions or comments about participation in this study, I should talk first with the researchers. If for some reason I do not with wish to do this, I may contact the Dominican University of California Institutional Review Board for the Protection of Human Subjects (IRBHS), which is concerned with the protection of volunteers in research. I may reach the IRBHS office by phone at (415) 257-0168, or in writing at Office of Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA, 94901.

Consent
I may print a copy of this consent form to keep.

PARTICIPATION IN RESEARCH IS VOLUNTARY. I am free to decline to participate in the study, or to withdraw at any point.

By checking below, I indicate that I have read the research participants' bill of rights and agree to participate in this study.*

☐ Yes, I consent.

DOMINICAN UNIVERSITY OF CALIFORNIA RESEARCH

PARTICIPANT'S BILL OF RIGHTS

Every person who is asked to be in a research study has the following rights:

1. To be told what the study is trying to find out;

2. To be told what will happen in the study and whether any of the procedures, drugs or devices are different from what would be used in standard practice;

3. To be told about important risks, side effects or discomforts of the things that will happen to her/him;

4. To be told if s/he can expect any benefit from participating and, if so, what the benefits might be;

5. To be told what other choices s/he has and how they may be better or worse than being in the study;

6. To be allowed to ask any questions concerning the study both before agreeing to be involved and during the course of the study;

7. To be told what sort of medical treatment is available if any complications arise;

8. To refuse to participate at all before or after the study is stated without any adverse effects. If such a decision is made, it will not affect h/her rights to receive the care or privileges expected if s/he were not in the study.

9. To receive a copy of the signed and dated consent form;

10. To be free of pressure when considering whether s/he wishes to be in the study.

If you have questions about the research you may contact me at andrea.battle@students.dominican.edu. If you have further questions you may contact my research supervisor, Dr. Eira Klich-Heartt at (707) 481-3115 or the Dominican University of California Institutional Review Board for the Protection of Human Subjects (IRBPHS), which is concerned with protection of volunteers in research projects. You may reach the IRBPHS Office by calling (415) 482-3547 and leaving a voicemail message, or FAX at (415) 257-0165, or by writing to IRBPHS, Office of Associate Vice President for Academic Affairs, Dominican University of California, 50 Acacia Avenue, San Rafael, CA 94901*

☐ Take me to the survey!

SURVEY

These are some of the common themes derived from your responses. How much do you agree or disagree with our findings?

1) Implementing observational skills*
○ Strongly disagree ○ Disagree ○ Neutral ○ Agree ○ Strongly agree
○ Not sure

2) Classroom to practice experience*
○ Strongly disagree ○ Disagree ○ Neutral ○ Agree ○ Strongly agree ○
Not sure

3) Impact of secondary health conditions/comorbidity*

○ Strongly disagree ○ Disagree ○ Neutral ○ Agree ○ Strongly agree ○
Not sure

4) Effect of anxiety of student performance*

○ Strongly disagree ○ Disagree ○ Neutral ○ Agree ○ Strongly agree ○
Not sure

Please answer the following questions as honestly and completely as possible.

5) Is there anything else you'd like us to know?*

Thank You!

Thank you so much for taking our survey! Your response is very important to us.