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## Enhancing Simulation Fidelity in Occupational Therapy Education: Considerations for Standardized Patient Training and Implementation

#### **Abstract**

The use of high-fidelity simulation and standardized patients (SPs) in occupational therapy (OT) education is expanding. However, the implementation of simulation varies across programs, leading to inconsistent outcomes and research limitations. Furthermore, details on SP use and training are lacking in OT literature. This article aims to provide OT educators with considerations for improving simulation fidelity by effectively using highly trained SPs. For example, recruiting SPs from diverse backgrounds is necessary to improve sociological fidelity, and proper training of SPs is required to ensure psychological fidelity. This article also emphasizes the need for standardized training for SPs and recommends following the Association of Standardized Patient Educators (ASPE) guidelines to ensure best practices in OT education. Adequate SP training and ongoing professional development are essential for maintaining simulation fidelity during SP experiences and optimizing student learning outcomes. Implementing SP experiences within the OT curriculum, SP recruitment and training, case development, pre-briefing, and debriefing processes are discussed, with recommendations from current evidence and the authors' experience at an institution accredited by the Society for Simulation in Healthcare. Trained SPs can enhance simulation fidelity and provide students with realistic and compelling learning experiences, better preparing them for fieldwork and clinical practice. While further research is needed to explore the efficacy of SP encounters in OT education and the student experience, this article reinforces the need to standardize the use and training of SPs to enhance simulation fidelity and support the reliability and validity of future research efforts surrounding the use of SPs.

#### Keywords

Education, fidelity, simulation, standardized patients, occupational therapy

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## Enhancing Simulation Fidelity in Occupational Therapy Education: Considerations for Standardized Patient Training and Implementation

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#### **ABSTRACT**

The use of high-fidelity simulation and standardized patients (SPs) in occupational therapy (OT) education is expanding. However, the implementation of simulation varies across programs, leading to inconsistent outcomes and research limitations. Furthermore, details on SP use and training are lacking in OT literature. This article aims to provide OT educators with considerations for improving simulation fidelity by effectively using highly trained SPs. For example, recruiting SPs from diverse backgrounds is necessary to improve sociological fidelity, and proper training of SPs is required to ensure psychological fidelity. This article also emphasizes the need for standardized training for SPs and recommends following the Association of Standardized Patient Educators (ASPE) guidelines to ensure best practices in OT education. Adequate SP training and ongoing professional development are essential for maintaining simulation fidelity during SP experiences and optimizing student learning outcomes. Implementing SP experiences within the OT curriculum, SP recruitment and training, case development, pre-briefing, and debriefing processes are discussed, with recommendations from current evidence and the authors' experience at an institution accredited by the Society for Simulation in Healthcare. Trained SPs can enhance simulation fidelity and provide students with realistic and compelling learning experiences, better preparing them for fieldwork and clinical practice. While further research is needed to explore the efficacy of SP encounters in OT education and the student experience, this article reinforces the need to standardize the use and training of SPs to enhance simulation fidelity and support the reliability and validity of future research efforts surrounding the use of SPs.

#### Introduction & Background

Standardized patients (SPs), often used as part of simulation-based teaching, are individuals trained to act as a patient in a standardized way for educational purposes (Giles et al., 2014). Simulation-based instruction using SPs has been described throughout the literature using various terminologies, such as high-fidelity simulation, standardized patient encounters (SPEs), and simulated experiences (Bethea et al., 2014; Herge et al., 2013; Knecht-Sabres et al., 2013; Lucas Molitor & Nissen, 2020; Ozelie et al., 2016). The various terminology surrounding simulation techniques and inconsistent use have contributed to the misunderstanding and misuse of simulation terms and indicate a need for more standardization across educational programs and literature. Standardized patients originated in 1963 with Howard S. Barrows, who used the first documented SP in medical education (Barrows, 1993). Since then, the use of SPs across medical and allied health programs has increased significantly. Standardized patients can be helpful in various simulation activities to facilitate the practice and acquisition of multiple skills necessary for healthcare professionals, such as critical thinking, decision-making, communication, patient safety, crisis management, handling techniques, and specific clinical skills. Standardized patients can also help assess singular skills, such as functional transfers, or more complex interactions, such as the evaluation and intervention processes, demonstrating multiple applications for educators and students (Giles et al., 2014).

The use of high-fidelity simulation and SPs in occupational therapy (OT) education is growing (Bradley et al., 2013; Castillo, 2011; Frasier et al., 2022; Herge et al., 2013; Lindstrom-Hazel & West-Frasier, 2004; Sakemiller & Toth-Cohen, 2020; Shea, 2015; Van Oss et al., 2013; Velde et al., 2009; Wu & Shea, 2009). However, implementing high-fidelity simulation in OT education varies broadly across programs and generally remains underutilized (Sakemiller & Toth-Cohen, 2020; Shea, 2015). Simulation describes an immersive technique for experiential learning using guided practice experiences that mimic real-life situations (Bethea et al., 2014; Lateef, 2010). Simulation in post-secondary education allows faculty to provide students with a structured environment to receive direct feedback and practice skills necessary to enter clinical practice, improving knowledge, performance skills, and confidence (Bearnson & Wiker, 2005; Springfield et al., 2018).

Simulation training aims to provide high-fidelity clinical simulations that lead to effective learning. Simulation fidelity refers to the degree to which the simulated learning activity replicates *reality* (Beaubien & Baker, 2004). While high-fidelity simulation is linked to building performance skills and more effective learning experiences (Imms et al., 2018; Mackenzie et al., 2017; Ozelie et al., 2016; Thomas et al., 2017; Walls et al., 2019), studies do not always refer to fidelity in a standardized or consistent manner, further contributing to inconsistency in the literature. Simulation fidelity is not a unidimensional concept (Beaubien & Baker, 2004), as multiple types of fidelity are considered within simulation training. For example, conceptual fidelity ensures the scenario makes sense in the respective discipline. Physical fidelity examines the degree to which the simulator duplicates the appearance and feel of the actual scenario and pertains to the physical environment used for the simulation experience (Maran & Glavin, 2003). Psychological

fidelity, sometimes referred to as emotional fidelity, is the extent to which a simulation can duplicate or capture the real task by using a simulated task and make the student feel as if it is real (Munshi et al., 2015). Sociological fidelity represents the degree to which a simulation scenario addresses the reality of interprofessional care context, including issues of power, hierarchy, and professional boundaries (Sharma et al., 2011). Occupational therapy educators should carefully consider each type of fidelity when designing simulation experiences. Using highly trained SPs is another way to improve overall simulation fidelity within OT education.

Simulation training can serve formative and summative purposes by assessing students on specific knowledge and skills necessary for clinical practice (Frasier et al., 2022; Merryman, 2010; Mikasa et al., 2013; Mompoint-Williams et al., 2014). When properly trained, SPs can be an additional assessment tool to examine students' clinical reasoning skills and interpersonal abilities (Vu & Barrows, 1994). Furthermore, SPs have shown value in predicting clinical skills in level II fieldwork, providing opportunities to identify students requiring additional preparation before entering fieldwork placements (Frasier et al., 2022).

A growing number of publications and presentations in OT suggest a heightened interest in developing high-fidelity simulations. Shea (2015) provided high-fidelity simulation recommendations for OT educators, including utilizing SPs, establishing learning objectives, creating case scenarios, audiovisual recording of students' performances, debriefing, and providing real-time and post-simulation feedback to students. Sakemiller and Toth-Cohen (2020) described the curriculum development process of an overall SP experience embedded within a synthesis course to prepare students for level II fieldwork. Creating high-fidelity simulations requires trained SPs and knowledge of best practices. However, a common concern among those using SPs is the lack of SP standardized training, fidelity measures, and examples in the literature. While studies do exist reporting the use and perception of SPs in OT education, little is written and shared on training SPs. Therefore, this paper aims to reinforce the need to standardize the use and training of SPs to enhance simulation fidelity and support the reliability and validity of future research efforts. This paper also provides considerations for OT educators designing and implementing SP encounters, including specific information on recruiting and training SPs and ways to increase simulation fidelity based on current literature and the authors' experience working at an institution accredited by the Society for Simulation in Healthcare.

#### **Standardized Patient Recruitment**

Standardized patients can be recruited from various sources. Within the literature, recommendations for recruitment include local professional actors' guilds, medical and nursing education programs, theatre programs, retired and current healthcare professionals, students, retirees, and word of mouth (Hillier et al., 2023; Shea, 2015). Institutions often have open job postings for the continual recruitment of SPs. The recruitment of SPs should focus heavily on locating individuals who can provide a high-quality experience for the student, whether they have a professional acting background

or not (Hillier et al., 2023). Factors contributing to a high-quality experience include performance fidelity, dynamic and diverse verbal communication skills, ability to recall and recite case-specific details, and well-timed improvisational skills (Hillier et al., 2023).

Diversity is essential in the recruitment process because a diverse SP group can better represent the demographics served by the profession (Hillier et al., 2023). Students should be provided with diverse SPs, including age, gender, educational level, professional background, ethnicity, religion, disability, sexual orientation, national origin, etc., to improve sociological fidelity and prepare them to develop therapeutic rapport with individuals of various backgrounds, especially those different from them. By recruiting through multiple methods, including job postings on and off campus, online, and referrals, OT programs can recruit SPs from diverse backgrounds.

Hillier and colleagues (2023) also recommend having bilingual SPs because patient-student interaction is crucial, and healthcare professionals often encounter non-English speaking patients. Standardized patients can then portray clients with limited English proficiency or English as a second language, including Deaf or Hard of Hearing patients, requiring modified communication strategies or interpreters to prepare students for these encounters in clinical practice. Participating in SPEs providing these unique experiences may be the only opportunity for students to encounter these important clinical scenarios and develop the skills to handle them appropriately before fieldwork or professional practice. The recruitment process, including hiring diverse candidates to serve as SPs, and continuing education and training for the SPs is critical for the sustainability and success of high-fidelity simulation-based education.

#### **Standardized Patient Training**

While there is evidence of the efficacy of SPs in clinical simulation (Imms et al., 2018; Lewis et al., 2017; Mackenzie et al., 2017; Ozelie et al., 2016; Thomas et al., 2017) and positive student perceptions of SPs (Sabus et al., 2011; Shoemaker et al., 2011; Springfield et al., 2018; Velde et al., 2009), little is reported on SP training. Utilization of and training of SPs has been emphasized as a vital step to creating and sustaining successful simulation-based educational experiences (Bradley et al., 2013; Castillo, 2011; Herge et al., 2013; Hillier, 2023; Shea, 2015; Van Oss et al., 2013; Velde et al., 2009). Standardization promotes learner consistency and provides enhanced preparation for future healthcare providers to improve patient outcomes (Hillier et al., 2023). Moreover, having a highly trained SP affords students complicated clinical scenarios for better preparation to enter the clinical environment (Hillier et al., 2023). Guidelines and suggestions to assist educators in designing an SPE are frequently noted in OT literature and other professional journals, such as nursing (Cant & Cooper, 2010; Lindstrom-Hazel & West-Frasier, 2004; Mompoint-Williams et al., 2014; Oh et al., 2015; Shea, 2015; Zapletal et al., 2021), but limited reports exist regarding the standardization and training of SPs in OT education.

Traditionally, the term SPs indicates trained actors; although, some schools may use faculty or fellow students to serve the roles of SPs within their SPEs, often to reduce costs or because they may not be familiar with SPs. However, using faculty and

students as SPs decreases simulation fidelity, specifically psychological and sociological fidelity (Felix & Simon, 2023). van-Vuuren (2016) found that students viewed this type of simulation as less authentic and reduced simulation fidelity. Occupational therapy programs should consider the implications of simulation fidelity when designing simulation experiences without trained SPs. Evidence suggests that the training provided to SPs is a crucial component in high-fidelity simulation (Hillier et al., 2023). When faculty, fellow students, or even volunteers are utilized, they are often provided with minimal training. Trained SPs respond more authentically and flexibly to the needs of the individual learners than untrained or lesser-trained simulated patients, contributing to higher simulation fidelity (Lewis et al., 2017). The authenticity of interactive methods using standardized or simulated patients is a critical factor in the success of high-fidelity simulation (Cahill, 2015; Gibbs et al., 2017; Giles et al., 2014; Haracz et al., 2015; van-Vuuren, 2016).

The Association of Standardized Patient Educators (ASPE) is a global organization dedicated to human simulation with a mission to promote best practices and share advances in SP-based pedagogy, assessment, research, and scholarship (ASPE, n.d.). The ASPE Standards of Best Practice provide clear and practical guidelines for educators across disciplines who work with SPs. The Standards for Best Practice comprise five domains, including ensuring a safe work environment for all involved, comprehensive case development, appropriate SP training (including role portrayal, feedback, and completion of assessment instruments), proper SP program management (e.g., policies, procedures, etc.), and professional development for SPs and educators (Lewis et al., 2017). Occupational therapy educators can use the ASPE Standards of Best Practice when developing SPEs and establishing training methods for SPs. When funding for trained SPs is limited, OT educators may consider options for preparing classmates or staff members in accordance with the ASPE guidelines. However, this approach decreases psychological and sociological fidelity, and limited training of SPs compromises the safety of the participants, overall simulation fidelity, and effectiveness of the simulation session (Lewis et al., 2017).

#### **Implementing Standardized Patient Encounters**

Standardized patient experiences can be integrated into the curriculum to provide simulation-based training throughout the program and in multiple courses. Further information about SPE integration is provided in the SP Training Blueprint. In keeping with experiential learning theory principles, implementing SPEs should allow the learner to identify expected outcomes and formulate a plan of action by incorporating structured pre-briefing and debriefing procedures (Chmil, 2016).

#### **Pre-briefing**

Pre-briefing is an integral part of SPEs and is necessary to ensure consistent implementation and facilitate effective debriefing. Standardized patients should be provided with case studies in advance for adequate preparation. Before each SPE, faculty can meet with the SPs to introduce the session format and classroom layout, explain expectations and feedback procedures, and answer additional questions about their assigned cases. Students should also be pre-briefed to prepare for the SPE (see

Appendix A). Students should be oriented to the simulation environment, the roles of the SPs, introduced to the case study, the expected outcomes or objectives used to evaluate the SPE, and applicable academic integrity principles (Chmil, 2016). Pre-briefing should include key skills and knowledge that will be assessed or applied during the SPE.

#### Debriefing

Debriefing is another critical aspect of SPE implementation, and the general process should be consistent across SPEs. The debriefing process is one of eleven clinical simulation standards identified by the International Nursing Association for Clinical Simulation and Learning (INACSL) as an element of healthcare simulation standards of best practice (INACSL, 2021a). The PEARL method is a commonly used framework for debriefing (Dube et al., 2019; Eppich & Cheng, 2015). Dube and colleagues (2019) provided a structured framework with facilitator scripts, adaptable for all types of SPEs, to identify systems issues and maximize improvements in patient safety and the quality of student performance. Overall, the debriefing process should incorporate theoretical frameworks and evidence-based concepts and include feedback activities, debriefing, and/or guided reflection to enrich learning and contribute to the consistency of simulation-based experiences (INACSL, 2021a). Debriefing should occur following an experiential learning activity, such as an SPE, in which the student and the team (e.g., SP, observer, faculty member, etc.) reflect, review, and discuss the activity to improve individual and team clinical skills and judgment (INACSL, 2021b).

Debriefing can assist students in identifying their strengths and areas of improvement through a deeper reflection necessary for performance improvement (Eppich & Cheng, 2015; Frasier et al., 2022). Ultimately, the process should assist students in improving their performance, developing new insights, and transferring knowledge from the classroom to clinical practice. Zapletal and colleagues (2021) provided tips for students and instructors before, during, and after the simulation. Debriefing can also help decrease student anxiety after the encounter, validate their successes and progress, and highlight growth opportunities (Evain et al., 2017; Fanning & Gaba, 2007). SPEs can also be recorded to facilitate additional opportunities for self-reflection through assignments requiring students to watch the video recording and reflect on their performance and interactions with the SPs (Giles et al., 2014; Zhang et al., 2019). Educators can dictate what type of feedback the SPs will provide students, from interpersonal skills, communication in lay language, feeling supported during transfers, and so on. However, SPs, faculty, and students must receive guidance in the debriefing process, including SP feedback, to ensure this practice is consistent and provides the most effective learning opportunity (Frasier et al., 2022).

Effective debriefing should be planned and incorporated into the simulation-based experience to meet course and program objectives. The debriefing process should be constructed, designed, and/or facilitated by persons competent in providing feedback, debriefing, and/or guided reflection and promote self, team, and systems analysis (INACSL, 2021b). To improve debriefing competence, OT educators can seek continuing education through organizations like the Society for Simulation in Healthcare

and the Association of SP Educators (https://www.ssih.org). The debriefing process should encourage reflection, knowledge and course content exploration, and identification of performance or system deficits while maintaining psychological safety and student confidentiality (INACSL, 2021b). The debriefing process should be consistent across courses, allowing for systemic evaluations. See Appendix A for examples of pre-briefing preparation, including SP preparation and potential debriefing questions. Further information on incorporating SPs into the OT curriculum can be found in published literature (Bennett et al., 2017; Herge et al., 2013; Zapletal et al., 2021). Occupational therapy educators should scaffold simulation encounters to allow students to practice new and increasingly complex skills and gain exposure to different populations and diagnoses (Zapletal et al., 2021).

#### **Standardized Patient Training Blueprint**

The following information is based on the authors' experience working at an institution accredited by the Society for Simulation in Healthcare and provided as an example for OT educators to supplement the current literature discussed in this paper. A copy of the Standardized Patient Training and Reference Guide (Michael Tang Regional Center for Clinical Simulation, 2023) developed at the authors' institution is available upon request from the authors.

In addition to following the SP recruitment recommendations highlighted previously, our program divides recruitment efforts between those with a medical, education, acting, or theater background and those without experience in these areas, recognizing that additional training may be necessary. This approach supports a more diverse pool of SPs, including bilingual SPs and those with a variety of medical diagnoses and lived experiences. Standardized patients recruited at our institution cannot be current students, faculty, or community members who have professional or personal contact with the current students to prevent any loss of psychological or sociological fidelity.

The SPs utilized at the authors' institution undergo extensive training to ensure consistency and best practice following the ASPE Standards of Best Practice (Lewis et al., 2017). Our institution has developed a center for clinical simulation with dedicated space, equipment, and personnel to support simulation-based training. Standardized training of SPs and evidence-based SPEs has led to evidence demonstrating a predictive value of SPEs early in the curriculum regarding future fieldwork performance (Frasier et al., 2022). All SPs are evaluated for competency during a live interaction. Based on these live interactions, the facilitators for the SP program create teams and provide peer coaching for each SP based on the results from their live interaction.

The SP training utilizes a five-part training process to ensure the SPs can follow and act out principles of the script while simultaneously taking mental notes to provide accurate grading for each student encounter and to give appropriate feedback to students. Part 1 consists of 40 – 60 hours of training, including shadowing trained SPs, acting, and didactic work focused on learning key concepts in anatomy, physiology, medications, medical procedures, medical terminology, different medical maneuvers and their purposes, simulation learning, and the process of providing student feedback and

debriefing using a modified PEARLS (Promoting Excellence and Reflective Learning in Simulation) approach (Dube et al., 2019). Part 2 consists of 30 – 40 hours of partnering with an experienced SP and taking turns observing and acting. The SP in training takes notes and grades the student when observing the veteran SP, and then grading and feedback are compared. Part 3 consists of 30 – 40 hours of solo acting with a veteran SP who is live viewing and providing constructive feedback to improve SP performance. In Part 4, the SP meets with the entire training cohort to review key principles, debrief, review training materials, and identify any areas for improvement before moving on. Lastly, Part 5 includes live auditing and continued education. While the hour requirements listed above are flexible in practice, we have found that these numbers are generally required for competency across interprofessional SPEs.

The simulation department staff and experienced SPs continually and randomly perform live audits. Faculty regularly meet with the simulation department and provide additional feedback on SP performance regarding the accuracy of case study portrayals and the ability to provide appropriate student feedback. Each year, at least two training courses are required for all SPs to review updated policies and procedures, examine current evidence in simulation education, review novel content for case studies or scenarios, and maintain competency and fidelity. Occupational therapy programs can use this blueprint information as an example when developing their SP training procedures (e.g., preparing budgets for future SP initiatives, considering the need for additional personnel, creating standard operating procedures, identifying timelines, etc.) with ASPE Standards of Best Practice guidance.

Standardized patient experiences are integrated throughout the curriculum, emphasizing lab courses during the pediatric, adult, and older adult semesters and mental health and fieldwork preparation courses. Faculty design case studies based on the semester's content (see Frasier et al., 2022, for examples of a curriculum map with SPEs, case study, and rubric). Faculty can also create rubrics to assess students across performance areas aligned with the AOTA Fieldwork Performance Evaluation (FWPE; 2020), including professional behaviors, ethics, assessment and intervention skills, communication, and safety. Standardized patients also adhere to rubrics developed by faculty to provide student feedback on interpersonal skills, communication, and handling techniques. Standardized patient feedback content can be determined by the objectives of the SPE and the students' progression within the curriculum. Occupational therapy faculty meet with the SPs before each SPE to provide general expectations, answer any questions regarding the case study, and review rubrics for student feedback. Occupational therapy faculty also pre-brief with the students to prepare them for the SPE by orienting them to the environment and reviewing objectives, course material, available equipment, and the rubric (see Appendix A).

An adapted PEARL method is used for debriefing with questions pertinent to each SPE's course content and objectives. Debriefing questions are semi-structured and modified as needed for each SPE (see Appendix A for an example). Dedicated time and spaces are used for debriefing after each SPE. Students have an opportunity to debrief

with the SP they worked with and faculty members, and they are provided with both SP and faculty feedback at the end of each SPE. Adjunct faculty and community practitioners are often utilized to assist during SPEs to provide additional observations and contribute to the grading and debriefing process.

#### **Implications for Occupational Therapy Education**

When implementing SPEs in OT curricula, OT educators should consider simulation efficacy and fidelity to meet desired learning outcomes. Standardized training for SPs is necessary to ensure simulation fidelity, particularly psychological and sociological fidelity. In addition to SP training, OT educators must consider how their SPEs address each type of fidelity. For example, conceptual fidelity can be improved through consultation with subject matter experts and individuals with lived experiences. Subject matter experts, including faculty members, fieldwork educators, individuals with lived experience, etc., should be used to review SPE scenarios to maximize conceptual fidelity (Dieckmann et al., 2007; Rudolph et al., 2007). Psychosocial and sociological fidelity can be addressed through relevant and appropriate case studies for SPEs. In addition, pre-briefing with the SPs before the SPE to review the assigned case study. discuss expectations for performance, and answer questions will ensure the SPs are prepared and competent with the case information and able to portray psychosocial nuances addressed by OT practitioners. Adequate SP preparation is also necessary to promote a realistic clinical environment (Bradley et al., 2013). Physical fidelity can be maximized by utilizing settings that closely match clinical spaces, such as hospital rooms, rehabilitation gyms, outpatient clinics, community spaces, and home environments, rather than standard classrooms. Classrooms can be modified to mimic clinical settings, or SPEs can occur in actual clinical settings through partnerships with local fieldwork sites. Virtual SPEs can also simulate telehealth experiences and have been implemented successfully at the authors' institution. The natural complexities of the physical space, such as auditory and visual distractions, are also necessary to optimize physical fidelity during SPEs. Moreover, providing opportunities for students to practice clinical skills and debrief promotes increased simulation fidelity (Hung et al., 2021).

Pre-briefing students that SPs will be a part of the SPE fosters greater student preparation and promotes psychological fidelity (Cowperthwait, 2020). The cognitive fidelity, or the ability of the SPs to make realistic decisions and judgments during the simulation, also contributes to the emotional reactions evoked during the simulation, increasing psychological fidelity. Students should dress in professional attire most closely aligned to the simulated setting, as this improves professional awareness and contributes to physical and psychological fidelity (Bradley et al., 2013). Furthermore, students should not see or interact with the SP before the SPE begins to maintain as much realism of the simulated experience as possible to promote greater cognitive and psychological fidelity (Cowperthwait, 2020). Cowperthwait (2020) suggested a set arrival time for the SPs before the students arrive to avoid this interaction before the SPE. If possible, assign the students and SPs to separate entrances and waiting areas to prevent interaction before the SPE.

Adding elements to the SPE that allow students to perform their professional role as it applies to the patient scenario promotes sociological fidelity (Lavoie et al., 2020). This includes having the student work within their full scope of practice and deliver care appropriate to their discipline and scenario. Sociological fidelity can also be elevated by incorporating students from other healthcare programs during the SPE to simulate interprofessional interactions and collaborative evaluation and treatment aligned with real-world interprofessional care models. Standardized patients can also serve additional roles and portray support staff, stakeholders, or other healthcare professionals, and be present with the SP playing the patient role during the simulation to increase conceptual, psychological, and sociological fidelity. Utilizing SPs as caregivers and family members contributes to further sociological fidelity and allows for a richer encounter with multiple patients or stakeholders (Lavoie et al., 2020). Students can gain valuable experience with clinical issues, such as conflict management, caregiver and family dynamics, and therapeutic rapport, only possible through SPEs.

Additional research is needed to examine the efficacy of SPEs and various educational tools utilized in simulation, such as video recordings, feedback sessions, debriefing, case studies, rubrics, virtual SPEs, and the dynamic interactions between students and SPs within OT education. Future research should consider the student experience of SPEs and their perception of each type of fidelity with various simulation factors, including virtual SPEs. Future studies should also consider modifications of SPEs throughout the continuum of entry-level OT education to identify appropriate scaffolding. Topics related to simulation-based learning, SP training, and elevating SPEs can be explored as doctoral capstone projects and through faculty scholarship of teaching and learning projects. Moreover, future research should utilize participatory action approaches to prioritize the value of student and SP perspectives and experiences to identify ways to improve simulation fidelity. Because SP terminology is often used inconsistently, and SP training details are often minimal, future research should clarify the type of SPs utilized and the training provided to enhance simulation fidelity, replicability, reliability, and validity of efficacy studies surrounding SPEs.

#### Conclusion

Standardized patient experiences provide unique and realistic opportunities for OT students to practice entry-level OT skills before fieldwork experiences and can help identify students who may need additional clinical preparation. Occupational therapy educators can take multiple steps to enhance high-fidelity simulation in OT education. Standardized patient experiences should be incorporated throughout OT curricula and utilize highly trained SPs outside the faculty and student cohort. Standardized patients should receive ongoing training and evaluation, and institutions should employ an extensive and diverse recruitment process. Lastly, OT educators should develop consistent training, pre-briefing, and debriefing procedures in accordance with the best available evidence for SPEs.

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#### Appendix A

#### Pre-briefing: Student preparation before the SPE

- 1. Orient the students to the environment.
- 2. Outline key action items the students are expected to perform with the SP.
- 3. Review course materials applicable to the SPE (e.g., learning objectives, conditions, assessments, interventions, precautions, etc.).
- 4. Review any equipment that may be necessary for utilization during the SPE.
- 5. Review the rubric and assignment description.
- 6. Support student confidence in SP preparation.

#### Pre-briefing: SP preparation before the SPE

- 1. SPs receive assigned case studies at least two weeks in advance.
- 2. To allow for an improved understanding of the role of the SP during the SPE, the faculty member meets with SPs one hour before the beginning of the SPE to:
  - a. Answer questions.
  - b. Explain conditions in further detail if unfamiliar.
  - c. Demonstrate levels of assistance (e.g., cognitive, ADLs/IADLs, transfers).
  - d. Provide additional examples.
  - e. Ensure they understand the role of the OT in this context and why the student may ask them to perform specific activities.
  - f. Explain what precautions are and what they mean (i.e., what the SP should do or not do).
  - g. Describe what to expect from the student during the SPE for assessment or intervention.
  - h. Introduce the documentation forms (e.g., evaluation, progress note) to better understand what the student is attempting to achieve.
  - i. Instruct the SPs on how to give feedback after the SPE and provide specific examples of the type of feedback that would be most helpful for the student's growth and learning (e.g., interpersonal skills, communication styles, use of lay terms, safety, handling techniques, etc.).

#### Potential debriefing questions

- 1. What went as planned? What didn't go as planned?
- 2. What would you do differently next time?
- 3. What surprises did you encounter? How did you handle them?
- 4. What did you learn about yourself during this experience?
- 5. What was the hardest part of the SPE? What was the easiest part?
- 6. What are you most proud of about this SPE?
- 7. What were your strengths during this experience? What areas do you feel you need to grow or improve? How can you work on those areas?

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- 8. What made you feel uncomfortable? How did you handle those feelings?
- 9. How did you determine what changes/adaptations/modifications were necessary during the experience?
- 10. How did you prioritize the assessments (or interventions) during the experience?
- 11. How did you respond to the client's questions, comments, or concerns?
- 12. How did you ensure safety when working with the client?
- 13. How did you keep your session client-centered?
- 14. What evidence did you utilize during your time with the client?
- 15. What other professionals would you like to collaborate with in future encounters? How would you collaborate with them?
- 16. Discuss any concerns or questions about the overall SPE.