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Abstract

Standardized patient encounters are being utilized more often in occupational therapy education as a replacement for traditional fieldwork. While there is a growing body of research to support the use of this model in developing student skillsets and confidence, there remains limited information on the topic, and no studies which look at its use with occupational therapy assistant students. Twenty-four occupational therapy assistant students participated in standardized patient encounters which served as a replacement for traditional Level I fieldwork. All students completed an anonymous supplementary course evaluation regarding their experiences. A secondary analysis of the data looked at their perceptions of a standardized patient encounter model for fieldwork and how it did or did not prepare them for future Level II clinicals. Quantitative and qualitative data exposed aspects of these experiences which students found to be most and least effective. Overall, data showed moderate support for use of standardized patient encounters to support student confidence and skills in anticipation of Level II fieldwork. The student perception of these types of experiences is influenced by environmental (e.g., structure) and personal (e.g., student personality) factors. Success requires adequate preparation of all involved parties. Use of standardized patient encounters should be researched further to determine its impact on fieldwork performance evaluation scores and future employment.

Keywords

Standardized patient encounters, simulation, occupational therapy assistant, fieldwork

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ABSTRACT

Standardized patient encounters are being utilized more often in occupational therapy education as a replacement for traditional fieldwork. While there is a growing body of research to support the use of this model in developing student skillsets and confidence, there remains limited information on the topic, and no studies which look at its use with occupational therapy assistant students. Twenty-four occupational therapy assistant students participated in standardized patient encounters which served as a replacement for traditional Level I fieldwork. All students completed an anonymous supplementary course evaluation regarding their experiences. A secondary analysis of the data looked at their perceptions of a standardized patient encounter model for fieldwork and how it did or did not prepare them for future Level II clinicals. Quantitative and qualitative data exposed aspects of these experiences which students found to be most and least effective. Overall, data showed moderate support for use of standardized patient encounters to support student confidence and skills in anticipation of Level II fieldwork. The student perception of these types of experiences is influenced by environmental (e.g., structure) and personal (e.g., student personality) factors. Success requires adequate preparation of all involved parties. Use of standardized patient encounters should be researched further to determine its impact on fieldwork performance evaluation scores and future employment.

Simulation is increasingly being utilized within healthcare education, including occupational therapy (OT) programming, to enhance students' clinical competencies, support student preparation on clinical experiences, and in some cases, to replace Level I fieldwork experiences (Bennett et al., 2017; Bethea et al., 2014; Imms et al.,

2017). Simulation in OT education can take on many forms including: use of standardized patients, mannequins, virtual reality, role-play, and case-studies (Bennett et al., 2017; Grant et al., 2021). Simulation using standardized patients, the most common form of simulation, can be further defined as the use of lay persons who are trained and coached to play the role of a real patient (Beigzahah et al., 2016). There is a limited but growing number of studies highlighting the effectiveness of, and satisfaction with, simulation with standardized patients, also known as standardized patient encounters (SPEs). That research has demonstrated that SPEs used in OT education develop student practice skills, knowledge, and confidence (Bethea et al., 2014; Espiritu et al., 2020; Herge et al., 2013; Knecht-Sabres et al., 2013; Mollo et al., 2021; Sakemiller & Toth-Cohen, 2020; Shea, 2015; Turesson & Lindh Falk, 2023; Walls et al., 2019; Zapletal et al., 2021) but leaves a gap in evidence to support the use of SPEs as a replacement for fieldwork and its impact on preparation for Level II fieldwork.

Literature Review

Standardized Patient Encounters in Occupational Therapy Curriculum and Level II Fieldwork Performance

Standardized patient encounters have been widely utilized as an adjunct to OT curriculum. However, studies which look at SPEs' impact on Level II performance are limited. Of the research that does exist, findings are generally positive. Research has shown the use of SPEs increases students' perceived Level II fieldwork readiness (Espiritu et al., 2020; Sakemiller & Toth-Cohen, 2020). Additionally, correlations between SPE performance and Level II fieldwork performance have been noted (Frasier et al., 2022; Lucas Molitor & Nissen, 2020). In fact, Frasier et al. (2022) found that performance during SPEs and student demographic data accounted for 29% of variant predictability in their students' Level II final fieldwork performance evaluation scores.

Standardized Patient Encounters as a Replacement for Level I and II Fieldwork Performance

The use of simulation within OT fieldwork education is becoming more widely accepted. This can be evidenced by the 2018 Accreditation Council for Occupational Therapy Education (ACOTE) standards expanding Level I fieldwork opportunities to include use of simulated environments and standardized patients (ACOTE, 2018). Given the ongoing fieldwork placement shortage due to a myriad of reasons (e.g., high workload stress, lack of fieldwork educator training, fear of having a student who struggles, etc.), a simulation model may be particularly attractive for OT programs to adopt (Baldry Currens & Bithell, 2000; Fairbrother et al., 2016; Hanson, 2011; Imms et al., 2017; Roberts & Simon, 2012; Varland et al., 2017).

There is very limited research on the use of simulation as a fieldwork replacement. In one study by Imms et al. (2018), they compared student learning outcomes from a 40-hour simulated clinical placement versus a 40-hour traditional clinical placement. They found both experiences yielded equivalent results on measures including written examination, unit grade, and placement performance. They also found similar results for most, but not all, scoring areas of student confidence. Moreover, students and

educators indicated that the simulated clinical placement experience afforded more opportunities to demonstrate specific behaviors such as affording students the chance to explain their clinical reasoning, likely because of the instructors' abilities to control these experiences more reliably. In a different study by Bergstresser-Simpson et al. (2023), they looked at OT students' perceptions of how traditional, nontraditional (which included simulation), or both types of Level I fieldwork experiences prepared them for Level II fieldwork. Their qualitative findings suggested that students felt having a mix of fieldwork experiences, both traditional and nontraditional, best prepared them for Level II fieldwork. These results ultimately lend some support to ACOTE's decision to adopt the use of simulation as part of fieldwork curriculum.

Simulation is most often embedded in intervention courses in OT curricula (Bethea et al., 2014), so research on their use as a fieldwork replacement remains limited (Bennett et al., 2017; Bergstresser-Simpson et al., 2023; Imms et al., 2018). Many outcome studies using SPEs have been positioned early in curriculum with a heavy focus on communication skills (Imms et al., 2018; Walls et al., 2019). Ultimately, more research is needed to understand the effectiveness and satisfaction with this approach as a fieldwork replacement, particularly as it relates to supporting students' clinical skills in preparation for Level II fieldwork. Studies assessing the impact of SPEs have been conducted exclusively within OT programs to date, with occupational therapy assistant (OTA) program experiences lacking in evidence. Therefore, the aims of this study were to: (a) examine OTA students' perceptions of a SPE model as a replacement for traditional fieldwork; and (b) study how using a SPE model for fieldwork impacted their perceived preparedness for clinical practice.

Methodology

Research Design

A mixed methods approach was utilized to investigate OTA students' perceptions of a SPE Level I fieldwork model and how it prepared them for their future clinical fieldwork. Descriptive quantitative statistics and thematic analysis (Nowell et al., 2017) were used to determine if and how SPEs were perceived compared to traditional fieldwork.

Researcher Description

The research team consisted of five individuals:

- the primary instructor for this fieldwork course who was also the OTA program academic fieldwork coordinator,
- the secondary instructor for this fieldwork course who was also the OTA program director,
- a standardized patient for this fieldwork course who was also an OT program director,
- a standardized patient for this fieldwork course who was also an OT program academic fieldwork coordinator, and
- a research assistant who was unfamiliar with this study prior to helping with the qualitative analysis.

All individuals engaged in thematic analysis, and all but one, in final analyses and manuscript development. While the course instructors had a vested interest in successful programming and the education of the students, steps were taken to mitigate bias including obtaining Institutional Review Board (IRB) approval from the university for the study (Protocol 2021001346).

Participants

A convenience sample of 24 OTA students was utilized, representing all students enrolled in an adult physical dysfunction Level I fieldwork course in spring 2021. While demographic data was not asked as part of the study, historical school data was analyzed for the purposes of this paper. Student average age was 30. Student body was 67% (n=16) female and 33% (n=8) male.

Participant Recruitment

All students enrolled in the fieldwork course, which utilized a SPE model exclusively, were asked by the course instructors to complete a supplementary course evaluation via Qualtrics as part of their typical course evaluation process. To minimize bias, the supplementary course evaluation was completed anonymously and at the conclusion of the course. All students completed the supplementary course evaluation.

Data Collection

A supplementary course evaluation was developed by the course instructors for the primary purposes of: (a) understanding students' perceptions of the SPE model as a replacement for fieldwork; and (b) investigating how using a SPE model for fieldwork impacted their perceived preparedness for clinical practice. Perceptions were operationally defined as students' thoughts regarding how well course objectives were met, how effective different components of the course were, and their overall impressions; students' perceived preparedness related to their feelings of how well the SPEs prepared them and built their confidence to treat clients on future fieldwork. The supplementary course evaluation included a total of 22 questions measured on a 5-point Likert or 10-point sliding scale and three open-ended responses.

While the original intent in developing the supplementary course evaluation was not research based, given the novelty of this approach for Level I and OTA fieldwork education, it was felt that information gleaned could add to the body of literature on simulation in OT curriculum. Therefore, IRB approval was received for secondary analysis of the data.

Data Analysis

Student responses to quantitative questions were analyzed within Qualtrics software, Version XM, Copyright © 2023 Qualtrics. The Qualtrics software report provided the following descriptive statistics: minimum, maximum, mean, standard deviation, and variance. Items not directly related to the SPEs (namely, three quantitative items which represented course objectives only directly tied to homework assignments) were removed from analysis for the purposes of this paper.

Student open-ended responses were analyzed using thematic analysis (Nowell et al., 2017) and NVivo software (Edition 1.5.2). Student responses to open-ended questions were uploaded from Qualtrics into NVivo which was then used to look for themes. Credibility was supported through prolonged engagement of the coding team with the data, as well as methods and analyst triangulation.

Coding team members preliminarily developed codes in two teams of two – the one research assistant was paired with each standardized patient and looked at either one or two of the open-ended questions. These specific teams were chosen to minimize bias by not including course instructors in the initial code development. Team members initially coded individually and then met together to achieve consensus on codes and definitions thus improving dependability of the analysis. The course instructors each led one of the two original teams where they looked at the established codes for larger patterns. Team members again reviewed data individually and thereafter together to achieve agreement and further refine results into categories. Next, all coding team members analyzed all categories separately looking for overarching themes. Ultimately, members met and achieved consensus to finalize themes. All researchers met after theme development was finalized to review data, reflexivity notes, and discuss overall findings. Exemplar quotes were chosen by consensus to support transferability of these findings. Given the number of participants and similarity in responses, the team felt that data saturation was achieved (Hennink & Kaiser, 2022).

Fieldwork Program and SPE Design

The spring Level I fieldwork course was the second of three Level I fieldwork experiences. It was a one credit course which focused on adult physical dysfunction. Traditionally, each student was assigned to a unique facility which followed the medical model (e.g., rehabilitation, acute care, etc.) and served adults/older adults for eight sessions over the course of the semester. This term, due to COVID restrictions, the typical fieldwork course was adapted from a traditional model to a simulation model using standardized patients. The program used Accreditation Council for Occupational Therapy Education (ACOTE) standards as educational objectives; the course objectives of this fieldwork course remained unchanged from previous years (Table 1). Important to note is that also due to COVID restrictions, only one other OTA program course was held in person this term with a bi-weekly schedule. Logistically, this meant that hands-on skills that were learned in person early in the week were incorporated into the fieldwork simulations later that same week.

Table 1

Educational Objectives/ACOTE Standards

ACOTE Standard Number	ACOTE Standard
B.3.3	Explain to consumers, potential employers, colleagues, third-party payers, regulatory boards, policy makers, and the general public the distinct nature of occupation and the evidence that occupation supports performance, participation, health, and well-being.
B.3.6	Demonstrate activity analysis in areas of occupation, performance skills, performance patterns, context(s) and environments, and client factors to implement the intervention plan.
B.3.7	Demonstrate sound judgement in regard to safety of self and others and adhere to safety regulations throughout the occupational therapy process as appropriate to the setting and scope of practice.
B.4.3	Utilize clinical reasoning to facilitate occupation-based interventions that address client factors.
B.4.4	Contribute to the evaluation process of client(s)' occupational performance, including an occupational profile, by administering standardized and non-standardized screening and assessment tools and collaborating in the development of occupation-based intervention plans and strategies.
B.4.10	Provide direct interventions and procedures to persons, groups, and populations to enhance safety, health and wellness, and performance in occupations.
B.4.13	Provide training in techniques to enhance functional mobility, including physical transfers, wheelchair management, and mobility devices.
B.4.21	Demonstrate the principles of the teaching-learning process using educational methods and health literacy education approaches to instruct and train the client, caregiver, family, significant others, and communities at the level of the audience.
B.4.29	Documentation must effectively communicate the need and rationale for occupational therapy services.

Students participated in a total of seven SPEs throughout the semester, which progressively challenged varying clinical skills. The SPE premises were presented to the students two weeks prior to aid in their preparation. Each SPE had a clearly defined time limit lasting anywhere from 15-30 minutes. All SPEs were one-on-one or one-on-two interactions (one student to one or two standardized patient[s]) and no SPE ran concurrently due to COVID restrictions. While students were tested on similar skillsets within a given week, scenarios varied due to the assignment of either a differing goal, measurement, assessment, intervention, or client being portrayed. For example, two students may have been assigned to the same standardized patient, but one would

need to demonstrate a tub transfer while another may have demonstrated a bed mobility skill. Similarly, two students may have demonstrated lower body dressing skills, but one may have been assigned to a standardized patient who survived a stroke, and the other, a standardized patient status post a total hip arthroplasty.

Standardized patients were either based on International Clinical Educators (ICE) Learning Center videos (ICE, 2021), on real clients, or on clients previously profiled/treated by students for this course. Two faculty from the school's Occupational Therapy Doctorate program served as standardized patients and were unknown to the students prior to this experience. To support consistency and accuracy in their performance, standardized patients were provided with the client's medical records which included an OT evaluation, access to view the client on ICE Learning Center (as applicable), and preparation from the course instructor prior to each simulation. No formal script was provided to allow for spontaneous interactions. Students completed all SPEs in the OTA program's lab which was outfitted with a functional kitchen, living room, bathroom, and bedroom.

Students were evaluated by the course instructor using a skills checklist rubric for each SPE as a means of providing feedback. In addition to this written feedback, the course instructor and standardized patients debriefed with all students at the end of each class session regarding SPEs. Also, while SPEs were in progress, the simulations were simultaneously live streamed to a nearby classroom for those students not partaking in that experience and discussed/reviewed with another faculty member. Students in this nearby classroom were tasked with group work which focused on documentation and assessment of skills observed. The course instructor served in the role of fieldwork educator for the experience, and students were expected to demonstrate professional behaviors while in lab for their experiences (including timeliness, professional dress, professional communication, respect of others and equipment, etc.). The SPEs were graded up in complexity as the term progressed to meet entry-level clinical standards. Primary skills tested were chosen based upon skills learned in the students' concurrent courses the previous two weeks. Any student who did not receive a passing score in safety on the skills checklist rubric was required to repeat the simulation at a later point in time after additional review of the relevant course materials. A general overview of each session and the corresponding skills assessed are provided (see Table 2).

Table 2

Overview of Standardized Patient Encounters

SPE #	Primary Skills Tested
1	OTA students were tasked to: 1) follow appropriate hand-hygiene and transmission-based procedures, 2) gather details relevant to the client's occupational profile, 3) take the client's blood pressure, 4) take a ROM or MMT measurement of the upper extremity as assigned, 5) document "S" and "O" of SOAP note
2	OTA students were tasked to: 1) carry out an occupation-based intervention based upon goals provided ahead of time, 2) grade/adapt intervention as needed to support the "just right challenge", 3) document SOAP note
3	OTA students were tasked to: 1) set up room to maximize safety, 2) carry out transfer assigned using proper body mechanics, guarding, and incorporating safety precautions per chart (i.e. WB status, use of DME), 3) document SOAP note
4	OTA students were tasked to: 1) carry out an intervention to support occupation, 2) complete an assessment as assigned, 3) compare assessment result to norms available, 4) document SOAP note
5	OTA students were tasked to: 1) carry out an intervention to support occupation, 2) complete an occupation-based intervention based upon goals not previously provided, 3) document SOAP note point-of-service
6	OTA students were tasked to: 1) carry out a concurrent treatment session with one client previously known to them and the other new to them, 2) document SOAP notes
7	OTA students were tasked to: 1) carry out a concurrent treatment session with two clients not previously known to them, 2) document SOAP notes point-of-service

Note: ROM=Range of Motion; MMT=Manual Muscle Test; SOAP=Subjective, Objective, Assessment, Plan; WB=Weight-bearing; DME=Durable Medical Equipment

Considerations from literary findings contributed to the design of this experience. Rodger et al. (2010) recommended the use of standardized patients for these experiences as they most closely approximate clinical requirements. Chu et al. (2019) outlined a conceptual framework for simulated fieldwork replacement experiences which should include: 1) realistic case scenarios, 2) the use of simulated patients and key stakeholders, 3) an authentic simulated environment, 4) a measure of student performance, 5) opportunities for structured debriefing and reflection, and 6) a facilitator serving in the role of clinical supervisor. Previous research has also highlighted the importance of instructor feedback, professional dress, and group debriefings as part of the simulation experience (Walls et al., 2019).

Results

Quantitative Findings

Course objectives directly related to communication and intervention planning skills. Results demonstrated that students were able to meet all course objectives. Table 3 displays summary data regarding how well students believed each course objective was met with 1=not well at all and 5=extremely well. Students additionally commented on how effective they felt various components of the fieldwork experience were (Table 4). Students found being able to review charts/document using an electronic medical record (M = 7.4, SD 2.3), completing their SPEs (M = 7.2, SD = 2.0), and being able to watch their peers complete their simulations (M = 7.1, SD = 2.6), to be the most helpful parts of this experience.

Table 3

How Well Do You Feel You Were Able to Meet the Following Course Objectives? (Consider Preparatory Work, Simulation Experiences, And Homework Assignments)

Objective	Mean	Standard Deviation
Explain to consumers, potential employers, colleagues, third-party payers, regulatory boards, policy makers, and the general public the distinct nature of occupation and the evidence that occupation supports performance, participation, health, and well-being.	4.0	0.8
Demonstrate activity analysis in areas of occupation, performance skills, performance patterns, context(s) and environments, and client factors to implement the intervention plan.	3.7	0.9
Demonstrate sound judgement in regard to safety of self and others and adhere to safety regulations throughout the occupational therapy process as appropriate to the setting and scope of practice.	4.1	0.8
Utilize clinical reasoning to facilitate occupation-based interventions that address client factors.	3.8	0.9
Contribute to the evaluation process of client(s)' occupational performance, including an occupational profile, by administering standardized and non-standardized screening and assessment tools and collaborating in the development of occupation-based intervention plans and strategies.	3.5	1.0
Provide direct interventions and procedures to persons, groups, and populations to enhance safety, health and wellness, and performance in occupations.	3.6	1.0
Provide training in techniques to enhance functional mobility, including physical transfers, wheelchair management, and mobility devices.	3.6	1.0
Demonstrate the principles of the teaching-learning process using educational methods and health literacy education approaches to instruct and train the client, caregiver, family, significant others, and communities at the level of the audience.	3.8	0.9
Documentation must effectively communicate the need and rationale for occupational therapy services.	3.6	1.0

Table 4

On a Scale from 0-10 with 0 Being "Not Effective" and 10 Being "Extremely Effective", How Effective Did You Find Each of These Components of the Simulation Model for Level I Fieldwork?

Component	Mean	Standard Deviation
Use of ICE video library	6.7	2.5
Completing my simulations	7.2	2.0
Watching my peers complete their simulations	7.1	2.6
Reviewing charts/Documenting using an electronic medical record	7.4	2.3
Group work – writing SOAP notes, scoring peers	5.8	2.5
Intervention planning assignment using the OT Process Worksheet	6.8	2.1
In class discussions (debrief, guided topic discussion)	6.4	3.2
Rewatching Zoom recordings of my own and other's simulations	6.8	3.6

On a 0-10 scale with 0 being "not at all" and 10 being "exceptionally well/exceptionally confident", students expressed a moderate level of preparation (M = 6.5, SD = 2.1) and confidence incorporating strategies learned (M = 6.5, SD = 2.0) to future in person clinical fieldwork based upon their SPE experience.

Qualitative Findings

Three open-ended questions were asked and answered by students after the final SPE: 1) Explain how you believe using a simulation model for Level I FW has prepared you for when you go on clinical FW; 2) Explain how you believe using a simulation model for Level I FW has left you unprepared for when you go on clinical FW; and 3) Please provide any specific suggestions for improvement for using a simulation model for Level I FW.

From the initial codes, the study yielded nine categories: 1) *adaptation to challenges* - learning from new opportunities, 2) *professionalism* - preparation for professional responsibilities in OTA field, 3) *high pressure* - struggle to manage demands of scenarios, 4) *ability to learn* - opportunity to learn and make mistakes, 5) *wide range of clients* - diversity of experiences to perform interventions on variety of clients, 6) *not authentic* - unrealistic environment and clientele, 7) *supervision, feedback, and collaboration* - constructive dialogue between instructor and student, 8) *practice opportunities* - unstructured time to practice techniques, and 9) *standardizing patients* - consistency in patient performance during simulations.

These categories yielded two overarching themes: 1) *personal factors* – aspects of the student themselves (e.g., temperament, coping styles) which impacted the SPE experience and 2) *environmental factors* – the physical and social constructs which impacted the SPE experience (see Table 5).

Table 5

Themes, Categories, and Exemplary Quotes

THEME	CATEGORY	EXEMPLARY QUOTE
PERSONAL FACTORS	Adaptation to challenges	Coming up with tasks on the spot, knowing things don't always go planned. (OTAS 24)
	Professionalism	I believe it has helped me with proper professionalism and interacting with clients in the clinical setting. I also feel as though it has helped me how to take proper precautions for my own and patient safety. It has also helped me prepare to implement interventions with different clients. (OTAS 19)
	High Pressure	I feel as though it has left me unprepare[d] because 15 minutes with patient contact while being graded was not enough to really distinguish what was being done wrong and how to fix it and perform it correctly. The simulation experience provided increased pressure than I feel would have been experienced during a level 1 clinical experience. (OTAS 19)
ENVIRONMENTAL FACTORS	Ability to learn	Regardless of whether it was a simulated patient or a real patient, the hands-on practice was still very practical, useful, and valuable. (OTAS 1)
	Wide range of clients	The advantage of having a simulation model allowed all students to have a wider range of experience. We were able to be exposed to situations that we may not have experienced at a location. The simulation patients also brought their knowledge and were able to grade up/grade down their interaction with the students as well. (OTAS 13)
	Not authentic	Individual work never really felt like I was going into an actual session w/ a client, they felt more like physical presentations of material. (OTAS 3) The limitations of the OTA lab (physical environment) may not be able to fully replicate what we might encounter at a real

		facility. (OTAS 1)
	Supervision, Feedback, and Collaboration	During that time it did not feel like it was time to relax and learn, instead it was stressful and felt like a test. Students were not able to ask questions to the OT, which is unrealistic, because someone will always be available to ask questions. (OTAS 15) Often times I feel as though mistakes were made due to the pressure during the simulation not demonstrating the actual knowledge that was obtained prior to the simulation. Students should be allowed a chance to be in a simulated situation and ask professors questions and have them answered. When initially learning the content it is easy for students to believe that they understand how to perform what was learned but may experience confusion when having to apply what is learned in different situations. (OTAS 19)
	Practice Opportunities	If there was a way to structure so that additional time during the FW process would support being able to practice, ask more questions and reinforce the learning of the movements and equipment. Perhaps an additional lab time for FW that could incorporate more hands on. (OTAS 13) Learning from other students is helpful to know what not to do, but it is not helpful because we only know what not to do. Observing OT's work with patients would be helpful if it were sprinkled throughout the FW dates. (OTAS 15)
	Standardizing Patients	The main suggestion I would give is to have better prepared SP. No offense to anyone who participated and I am grateful for this experience but each week it seemed as if the SPs did not know their roles and its confusing and not fair to us. (OTAS 17)

Discussion

In this study we used SPEs for a Level I FW experience to foster skills and promote authentic clinical learning within a classroom. Other studies have indicated that early introduction of practice training (i.e., Objective Structured Teaching Exercise or Objective Structured Clinical Examination) can improve communication skills and reduce nervousness about what to expect in an occupational therapy and therapeutic clinical settings (Roduta Roberts et al., 2019). Our experience supports that these practical experiences are valuable to students. However, this value needs to be balanced against the time, effort, and cost of providing these more intensive experiences to OTA students (Bethea et al., 2014; Giles et al., 2014; Imms et al. 2017). The time required is not trivial; time needs to be dedicated to in-depth case study development or use of sites which have these case studies well developed (i.e., ICE Learning Center). More time is required to schedule standardized patients, develop a student schedule to rotate through the experiences, carry out the structured evaluations, score, debrief and provide students with their grades. In addition, financially a program must either pay for a pre-developed case study or pay faculty for the time required to develop a thoughtful in-depth case study. Standardized patients are typically paid for their time and may require a minimum payment for any participation (i.e., $25.00/hour, minimum of four hours). Students who are not successful may be offered an opportunity to remediate their performance. Cost for faculty should also be considered as it may require additional adjunct faculty or the time of core faculty that is in addition to their usual course duties. A recent study found funding to be the most commonly listed "support, challenge, and barrier" to using standardized patients in OT curriculum (Mack et al., 2022, p.1).

Standardized patient encounters are typically perceived to be fair and can yield results that are difficult to achieve with standard exams. They are also perceived as a space to practice skills in a safe environment for students (Roduta Roberts et al., 2019). The students who participated suggested that our findings were congruent with others' results. For example, our students stated that they believed that the hands-on practice was very practical, useful, and valuable. They also agreed that issues that arise during the moment and the introduction of some ambiguity served them well, as it prepared them for a clinical setting.

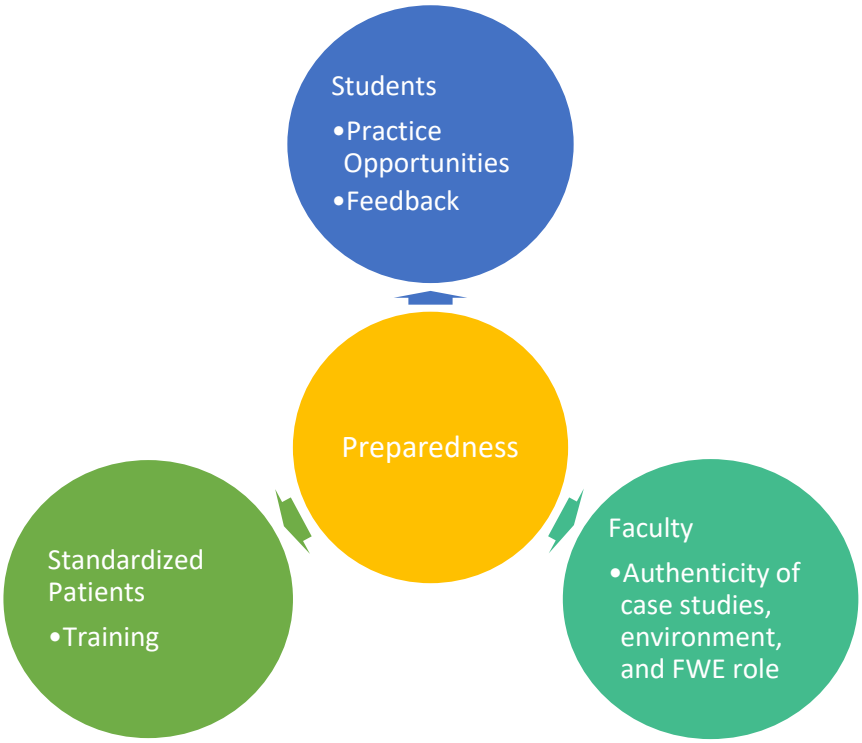
This experience did not come without some duress for the OTA students. As with previous studies, SPEs were found to induce anxiety with our OTA students (Giles et al., 2014; Walls et al., 2019). Giles et al. (2014) encouraged faculty to incorporate ways to lower student test anxiety which may include offering opportunities for remediation. Ultimately, this study demonstrated the structure of the SPEs and the students' own nature most greatly influenced their perceptions of this fieldwork experience.

Central to the success (and failures) of these SPEs was this idea of preparedness (see Figure 1). Students desired more hands-on opportunities to practice skills and better feedback to prepare them for their SPEs. Their preparation for the SPEs helped them to be flexible during the encounters. Standardized patients require adequate preparation to

consistently role play a variety of parts. Instructors were responsible to prepare realistic case studies within a realistic environment where they could adequately support student learning in the role of fieldwork educator.

Figure 1

Preparation of Faculty, Students, and Standardized Patients Impact on Standardized Patient Encounters



Research which focuses on understanding when (i.e., at what point in the academic program and in which course(s)), how frequently, and how to introduce SPEs within an educational program would prove valuable to supporting future student clinical success. Accordingly, research should look to establish best practices for integration and structure of SPEs in OT education. Additionally, future research should continue to explore differences in student performance on Level II fieldwork based upon this level of preparation and how this ultimately impacts future employment preferences, opportunities, and performance. Encouragingly, recent research found no differences in Level II fieldwork performance scores between students who completed a traditional Level I fieldwork versus those who used a virtual simulation-based platform for Level I fieldwork (Ozelie et al., 2023). At the same time, research has also historically shown that fieldwork has the greatest impact on future practice preferences (Christie et al., 1985; Ezersky et al., 1989; Mulholland & Derdall, 2005). What does it mean if SPEs are the only exposure a student has to a certain population? There is considerable benefit to further examining SPEs and other types of simulation and their impact on student fieldwork and future success.

Limitations

Several limitations to this study exist. To start, information was drawn from a convenience sample of students at one public university in the northeastern United States which may not be representative of all OTA students. This may limit the generalizability of study findings. The tool to collect the data, the supplementary course evaluation, was not a validated instrument which limits the ability to know that perceptions and preparedness were authentically recorded. This was the program's first implementation of this fieldwork model which comes with its own limitations and imperfections. Considering COVID restrictions, OTA faculty served in the role of fieldwork educator. Student grading may have been harsher since faculty knew the information students learned in the curriculum whereas a traditional fieldwork educator may not. Student stress was additionally compounded by limited time to practice during the semester, OT faculty serving in the role of standardized patients, and the impact of the COVID-19 pandemic itself. All of these points have the potential to negatively influence students' feelings about the course. There were no baseline measures taken and so a comparison could not be drawn between how students perceived their occupational therapy skills prior to the start of this course versus after. It is possible their level of perceived preparedness and confidence was unchanged. Additionally, no comparison measure was utilized which could have looked at differences between this cohort and previous cohorts who partook in traditional Level I fieldwork; anecdotally, students often feel some level of unpreparedness prior to starting Level II fieldwork. More context would be helpful. Lastly, there was no follow-up data obtained from these students or their fieldwork educators following Level II fieldwork to ultimately determine impact on performance.

Implications for Occupational Therapy Education

This study supports the use of SPEs in an OTA fieldwork curriculum. This model provided a safe environment for students to practice targeted skills needed to be successful on future fieldwork. The SPEs afforded faculty the valuable opportunity to create standardized scenarios which assessed a uniform skill set not often achievable when sending students to multiple traditional fieldwork placements. Consequently, this OTA program has elected to adopt SPEs in lieu of traditional fieldwork for their adult rehabilitation Level I fieldwork rotation. Annual feedback continues to be elicited anonymously from students and incorporated into future SPE coursework to maximize learning potential. This feedback has included: institution of mandatory open labs, SPE demonstrations by faculty, inclusion of ungraded SPEs, and more coaching by the fieldwork educator during SPEs. The SPEs should be considered by faculty as more than just a viable alternative to traditional Level I fieldwork, but perhaps the "go to" method, particularly for schools who burnout fieldwork partners with Level I and Level II requests, those who work with sites which cannot equally support their learning objectives, or those that will not accept OTA fieldwork students. Given a renewed focus on competency-based education, this model can be particularly helpful for easily integrating technical and soft (e.g., interpersonal, problem solving, adaptability) skills. With adequate preparation, SPEs may prove to be a valuable tool to OTA fieldwork education curriculum to combat the ongoing fieldwork crisis.

Conclusion

This study contributes to the growing number of articles looking at alternative Level I fieldwork models. SPEs as a replacement for traditional Level I fieldwork were shown to be effective in supporting students' competence and confidence. Perceptions of SPEs are largely influenced by the design of the experience and the students themselves with success supported by the adequate preparation of all involved parties. In looking at the future of OT education across degree levels, SPEs can be helpful in managing the fieldwork shortage while also shifting academia towards more competency-based curriculum.

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