Promoting Professional Behaviours in Physical Therapy Students Using Standardized Patient Feedback

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ABSTRACT

Purpose: Physical therapy (PT) students receive feedback on their professional behaviours from academic and clinical faculty. Another avenue for providing feedback to PT students is by using standardized patients (SPs). Very little research is available on the impact of SPs' specific feedback on whether, and how, PT students learn professional behaviour, and what research is available has focused on clinical competencies, communities of practice, and broad assessments of professional behaviours. The purpose of this study was to record PT students' perspectives on how combined verbal and written SP feedback affected their professional behaviours. **Method:** The sample of convenience consisted of seven students enrolled in a PT professional education programme in the northeastern United States before starting their first full-time clinical experience. The students agreed to participate in an SP experience focused on professional behaviours. This study used a phenomenological approach to understand the students' perspectives on receiving a combination of verbal and written SP feedback. **Results:** The students' perspectives on receiving SP feedback were categorized into four themes: seeing through the patient's eyes; SPs offer unique contributions to student learning; timely, verbal feedback adds a deeper understanding of professional behaviours in preparation for the clinic; and verbal feedback promotes student self-efficacy of professional behaviours. **Conclusions:** Using SPs' written and verbal feedback in the curriculum can be a valuable tool for enhancing the development of PT students' professional behaviour.

Key Words: allied health occupations; education; professionalism; simulation training.

RÉSUMÉ

Objectif : les étudiants en physiothérapie reçoivent des commentaires sur leurs comportements professionnels de leurs professeurs théoriques et cliniques. Les patients standardisés (PS) sont un autre moyen d'obtenir de tels commentaires. Très peu de recherches indiquent si les étudiants en physiothérapie acquièrent des comportements professionnels après avoir reçu des commentaires des PS et précisent la manière dont ils le font. Les études publiées portent sur les compétences cliniques, les communautés de pratique ou les évaluations générales des comportements professionnels. La présente étude visait à consigner si, de l'avis des étudiants en physiothérapie, les commentaires écrits et verbaux des PS avaient une incidence sur leurs comportements professionnels. **Méthodologie :** échantillon de commodité composé de sept étudiants inscrits à un programme de formation professionnelle en physiothérapie du nord-est des États-Unis avant leur première expérience clinique à temps plein, qui avaient accepté de participer à une expérience de PS axée sur les comportements professionnels. La présente étude favorisait une approche phénoménologique pour comprendre les points de vue des étudiants à l'égard de la réception d'une combinaison de commentaires verbaux et écrits de la part des PS. **Résultats :** les chercheurs ont classé les points de vue des étudiants sur la réception des commentaires des PS en quatre catégories : regard des patients; apport unique des PS sur l'apprentissage des étudiants; ajout d'une compréhension plus approfondie des comportements professionnels en préparation à la clinique grâce aux commentaires verbaux; promotion de l'efficacité des comportements professionnels des étudiants grâce aux commentaires verbaux. **Conclusion :** l'inclusion des commentaires écrits et verbaux des PS dans le programme d'enseignement peut être précieuse pour perfectionner le comportement professionnel des étudiants en physiothérapie.

Multiple documents have defined the domains of professional behaviour for physical therapists around the world; examples include "Professionalism in Physical Therapy: Core Values" from the American Physical Therapy Association (APTA), the Canadian Physiotherapy Association's Code of Ethics, and the Health and Care Professions Council's "Guidance on Conduct and Ethics for Students."¹⁻³ Although it is important to develop professional behaviours during physical therapy (PT) education and

training, PT curricula may lack explicit instruction in those behaviours, and educators often report that students demonstrate difficulty in the affective domain of learning.⁴⁻⁶

Clinical instructors have identified several concerns with the professional standards demonstrated by PT students, including inappropriate personal behaviour, inappropriate interactions with patients or colleagues, inappropriate responses to feedback, and failure to accept responsibility for unprofessional behaviours.⁴ In survey

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research of academics, a small percentage of respondents expressed concerns about PT student professional behaviours, such as not taking responsibility and showing non-verbal disrespect for others.⁶ Although these concerns are not widespread, all PT students are required to demonstrate appropriate professional behaviours in the entry-level PT curriculum, and providing direct feedback about professional behaviours is an effective way to facilitate such behavioural changes.

Providing direct and immediate feedback about professional behaviours has been demonstrated to be a preferred method of student learning in the clinic.^{7–10} PT educators commonly use standardized patients (SPs) – defined as “simulated . . . or actual patients . . . who have been trained to depict a patient case in a standardized manner”¹¹(p. 443) – to teach clinical skills, but little emphasis has been placed on using SP feedback for professional behaviours in the academic setting. As of 2009, 33% of U.S. and Canadian PT programmes were using SPs in some capacity. Although 60% of those programmes reportedly provided some form of SP feedback after the simulated experiences, there is no consistency in, or model of best practice for, giving SP feedback to PT students.¹² Written rubrics are the most commonly described method.^{13–15}

A 10-year review of literature published from 1996 to 2005 identified 69 studies that focused on the use of SPs in teaching and learning in health care education.¹⁶ Of those 69 studies, 55% focused on professional communication, although it is unclear how the feedback actually addressed student communication issues. A 2016 meta-analysis examining the use of SPs in PT education yielded 14 articles describing 16 studies;¹⁷ 10 addressed professional behaviours, and 6 reported providing SP feedback to students.¹⁷ Of those 6 studies, 4 were randomized controlled studies emphasizing SP feedback on clinical competencies, 2 of which examined professional behaviours in PT students after receiving SP feedback.

Lewis and colleagues conducted survey research to examine PT students’ confidence in their interpersonal communication skills before and after an SP experience.¹⁸ After completing the SP case scenario, each student shared written feedback with a peer and with the SP. The students reported an increase in self-confidence after the experience. Whether this perceived improvement carried over into the students’ clinical experiences is unknown.¹⁸

Hayward and Blackmer sought to develop professional behaviours in PT students using APTA’s core values¹ as a framework. In this study, students were placed in groups of four or five, and one student was randomly selected to complete a PT evaluation of an SP.¹⁹ Written feedback, including feedback on professional behaviours, was provided to the student assessor by a faculty member, student peers, and the SP. The participants completed the APTA Core Values Assessment immediately after their SP

experience, and all their self-assessment scores increased over their pre-SP experience scores.²⁰

SP experiences are grounded in the ability to provide experiential practice of professional behaviours using patient scenarios to improve the self-efficacy of the clinical application.^{11,21} As defined by Bandura, self-efficacy is the belief in one’s ability to influence events that affect one’s life.²² Kolb’s experiential learning theory, the basis for using SP experiences, describes the ability of learners to develop in four learning modes: concrete experience, reflective observation, abstract conceptualization, and active experimentation.²³ Although PT students are able to move fluidly between these modes, they tend to prefer active experimentation, which can be provided during an SP experience.²⁴

PT students must develop self-efficacy as they perform and apply professional skills in clinical practice.^{22,25–27} According to Bandura’s theory of social change, individuals may be aware of a need to change their behaviour but lack self-efficacy, which influences their ability to do so.²⁵ Individuals with higher self-efficacy have been shown to exert greater effort, be more motivated, persevere in their actions, and exhibit a strong drive to face challenges.²² SP feedback experiences are enactive, allowing students to practice professional behaviours, and are thus more likely to foster change.²⁸ Enactive experiences, in which individuals experience an activity themselves, are the most powerful means of improving self-efficacy; this is consistent with Bandura’s theory.²⁸ By participating in SP experiences that challenge their professional behaviours, PT students can develop self-efficacy in those behaviours.

Very little literature in the area of PT describes students’ perspective on using SP feedback to develop their professional behaviour. By applying the experiential nature of SP experiences and the impact of feedback on self-efficacy, this study aimed to answer the question “How does providing verbal and written SP feedback influence students’ clinical professional behaviour, from the perspective of the students?” Phenomenology was used to understand the lived experiences of PT students who had received verbal and written SP feedback after their SP experiences.²⁹ The purpose of this qualitative study, therefore, was to record the students’ perspectives on how combined verbal and written SP feedback affected their professional behaviours.

METHODS

In January 2015, students enrolled in the second year of a professional doctor of PT programme in the north-eastern United States were recruited to participate in this study. Inclusion criteria required participants to be PT students who had no previous experience with SPs and had not yet completed a full-time clinical education experience. Participants had participated in part-time

clinical experiences emphasizing basic skills and patient communication. Of the 44 students in the class, 7 volunteered and provided written informed consent to participate. The participants did not receive an incentive to participate in the study, and participation had no impact on their status in the programme, such as on grades or clinical placements. Institutional review board approval was obtained before initiating the study.

The primary researcher (MAR) developed two standardized case scenarios with the assistance of both a PT content expert in the area of clinical simulation and an experienced SP educator. The cases were developed to portray individuals with musculoskeletal disorders presenting to an outpatient clinical setting; the SPs' responses were designed to challenge the student participants' professional behaviours (see Appendices 1 and 2 online). An experienced SP educator recruited and provided training for four SPs 1 week before the students' sessions with them.

In their training session, the SPs learned how to accurately portray a case; give students unbiased, verbal feedback on professional behaviours; and use a written scoring rubric on professional behaviours. The written scoring rubric, the Modified Standardized Patient Satisfaction Questionnaire (MSPSQ), guided the SPs in giving the students verbal feedback on their professional behaviours (see Appendix 3 online). The MSPSQ is a version of an SP satisfaction rubric that was developed for use with medical students and then adapted by content experts in simulation and PT education.³⁰ It has demonstrated good internal consistency and agreement in previous research conducted with SPs.³¹

The student participants were informed that they would obtain a medical history of an SP with an orthopedic diagnosis, but they were unaware that they would receive feedback on their professional behaviours. The interviews were conducted in private treatment rooms in a PT clinic. Each student was given 10 minutes to review the case and 20 minutes to complete a medical history interview of the SP. Immediately afterward, each student received individual verbal and written rubric feedback on their professional behaviours from the SP; the feedback session lasted 10 minutes. Each student completed the process twice, with two different scenarios and SPs in the same day, with a 10-minute break between sessions.

The costs associated with the simulated experiences were reasonable because the only monetary requirement was to pay the professional SPs; the total expenditure for 8 hours of simulated experiences and 2 hours of SP training was US\$968. Using professional SPs is not mandatory, however, and using volunteer SPs would eliminate even this expense.¹⁷ We did not use a formal simulation lab, which also kept the cost down; this may be important at some institutions.

All participants completed guided journal reflections immediately after their two SP experiences and again at the end of the first week of their clinical education experience (see Appendix 4 online). Journal reflections during the first week were intended to explore how the SP feedback may have affected their initial self-efficacy going into the clinical environment. Clinical placements occurred during the next academic semester, 6–12 weeks after the SP experience.

A focus group was conducted 4 days after the SP experience. It was facilitated by an experienced qualitative researcher, who was neither associated with the study nor familiar to the students, using guided open-ended questions (see Appendix 5 online). The focus group was audio taped with the permission of the students and later transcribed by a research assistant using Sound Organizer, version 1.6.01.05240 (Sony Corporation of America, New York, NY). Students were not identified by name during the focus group to ensure anonymity in the transcription. The focus group interview was concluded when the participants' responses provided no new information, indicating that data saturation was reached.

The primary researcher used an inductive process to initially analyze the narrative data derived from the focus group transcript and the individual journals.³² Initial codes were developed from each data source and then further analyzed and grouped into categories by individually evaluating each coded source using Microsoft Excel 2016 (Microsoft Corporation, Redmond, WA). These categories were examined for meanings and themes by comparing similarities and differences, first in the raw data and then between the data sources, using a constant comparative method to develop common themes.³³ A second experienced qualitative researcher (BL) independently verified the trustworthiness of the categories by reviewing the transcripts and the themes generated from the coded data.³²

The qualitative methodological rigor and congruence of findings were examined further using additional means. The constant comparative approach was used to find compatibility between the journal reflections and the focus group data, thus confirming the credibility of the themes. Using multiple data sources (focus group transcripts and journal reflections) provided triangulation of the data used to generate those themes. The focus group facilitator (who was not associated with the study) examined the themes and concurred with the findings on the basis of her focus group interactions, thus enhancing the dependability and confirmability of the findings. Rich, thick narratives served to support the themes as relayed from multiple participants and multiple data sources. The primary researcher also used reflective journaling to minimize potential bias from prior personal experiences with students that may have been introduced into the qualitative analysis.³²

RESULTS

Four primary themes, which were threaded throughout the data sources, emerged from the data. There was general agreement in the participants' narratives, with no apparent outliers.

Seeing through the patient's eyes

Following their SP feedback experiences, the student participants observed the importance of building relationships with patients, understanding their perspective, and making personal connections with them. Students expressed in journal reflections that they had gained insight into their patient's emotions, enabling them to see things from the patient's perspective and respond more effectively. As expressed by Participant 3,

[The SP was] able to elaborate in areas that I was lacking. It helped me to realize how I may come off to certain patients and how important a first interaction can be. . . . I learned how to approach different types of patients. Some patients look to [be] very comforted in their interaction, and I learned approaches to bring me there.

Participant 2 gained insight into her patient's affect from the feedback she received, explaining that she had learned to "better deal with patients' emotions, such as the anxiety or nervousness of being in a physical therapy office." Participant 6 noted that the feedback from the SP had "made me feel good to know that [the SP] felt at ease by my evaluation. It is a great feeling when the patient is truly comfortable and knows that you care about them."

In their journal reflections during their clinical experiences, students reported that their emotional and psychological connections with patients were a significant component of the therapeutic relationship, something they recognized from the SP experiences. Participant 2 stated that the SP experience had "made me realize the importance of not only gathering the information but the importance of building a relationship with the patient."

Standardized patients offer unique contributions to student learning

The student participants observed the unique contribution of SP feedback in relation to other learning techniques such as part-time clinical experiences and practical examinations. As Participant 4 described in a pre-clinical journal reflection, "It was actually nicer to work with someone who you have never met before as it gives a sense of real professionalism and allows for no previous bias to occur."

Students also reported that the feedback that they had received from the SPs differed from feedback received from faculty or patients. As Participant 1 commented during the focus group,

I'd say we actually got to hear from the [standardized] patient about our performance. Whereas . . . at our pro

bono clinic we don't get that, and I'm sure [real] patients don't want to really tell us their true feelings because they have to see us again or . . . they don't want to jeopardize the treatment. . . . We don't get to know how the patient felt.

Participant 6 also noted, in a pre-clinical journal reflection, the unique benefit of receiving feedback from the SPs:

Both of my SPs gave me constructive criticism that I have never heard before from my classmates or from faculty. They were very honest in their evaluations of my performance and gave me reasons as to why they scored me the way they did. . . . I have never heard how a patient that I have been treating has been feeling objectively, so this was very interesting. I learned so much about how I interact with patients and display my professionalism.

The SP experiences incorporated formative verbal and written feedback in what the students perceived as a non-threatening environment, seen by them as a vital component of the learning process. Participant 6 further explained during the focus group, "It's always a little stressful hearing about your own performance, but I agreed with everything my SPs said, and it made me feel good to know that they felt at ease by my evaluation."

Some students reported in the focus group having received faculty feedback on the clinical aspects of their performance during practical examinations, but no specific information about their professional behaviour. The SP feedback experience served to close this gap, as expressed by Participant 1, who noted in a clinical journal reflection,

The standardized patient experience primed me for interacting with real patients. I was more concerned with the patients' response to treatment and [the] quality of care they were receiving. I was concerned with doing the best that I can because I sincerely want them to find relief or get them back to performing the activities they miss doing. The standardized patient experience was a good reminder that we will be interacting with people with real impairments, rather than the staged patient cases acted out by our PT professors in class.

Timely verbal feedback adds a deeper understanding of professional behaviour in preparation for the clinic

Students appreciated participating in the SP experiences and thought that the verbal feedback was a valuable addition to the written rubric they had received because the rubric relies on numerical ranking rather than on open-ended narrative comments. Participant 4 observed in a pre-clinical journal reflection,

The SP provided incredibly productive feedback, which included much information that can be taken not only from session to session but as well in future endeavors.

The information was easy to read via [the rubric], and more in-depth discussions were helpful in targeting where the problems were.

As explained by Participant 1 in a pre-clinical journal reflection, "It was a good test of my professionalism as well since the patients challenged me on certain things. It was nice knowing I handled the situation well. I feel even more prepared to treat 'real' patients in the future." Participant 5 also commented in a pre-clinical journal reflection, "I received a lot of useful feedback from both of the SP actors with both cases that I will utilize while working with real patients in the future, and now at our pro bono clinic."

Students also noted that their improvement between the first and second SP case scenarios was enhanced by their ability to immediately apply the feedback from the first SP interaction. Participant 1 commented during the focus group,

I thought that [it was] positive that you get . . . the rubric at the end, and then you're allowed to look at it, and it . . . gives you a visual of, These are the things that I did well, these are the things that I need to improve on, and then actually getting to talk with the person . . . and ask, "Okay, you marked me this on this . . . what did you mean by [that]?" . . . And then you could do the follow-up questions, which I thought was very helpful.

Verbal feedback promotes student self-efficacy in professional behaviours

The participants described how the SP experiences increased their self-efficacy in that they had improved their ability to display professional behaviours and validated them as professional PT students. This was evident in both the focus group and the journal reflections. Participant 4 stated in a journal reflection, "It was the first time being actually alone in a room with a patient, feeling like it's on us, like we have the power because there's always someone with us [teachers or clinical instructors]." This expressed sense of self-efficacy was important to this student as she prepared for her clinical experiences.

Increased self-efficacy was also shown by the students' newfound insight into their strengths and limitations; they noted increased confidence in interviewing the SPs, interacting with patients in general, and finding that their prior coursework had, indeed, prepared them for patient care in the clinical setting. Participant 3 expressed in a journal reflection having gained a better perspective on how she appeared to the patient:

I learned that I do have strengths and skills that make me a good interviewer, and this helped to increase my confidence. . . . It made me more confident in my interactions. It also made me feel a little bad that sometimes I can come off to patients in negative ways, but I will improve.

Students also expressed an increase in self-efficacy as they interacted with patients during their clinical experiences. As Participant 5 shared in a clinical journal reflection,

I think that I have done a good job of making a relationship with most of my patients so far and done a good job of addressing their goals as well as the therapeutic goals that I have set for them. I feel confident talking with patients and explaining their pathologies to them. After the [SP] experience, I felt comfortable in many aspects of my interview process but also less confident in other areas. I feel like I have tried to use their feedback in the best way I can. In many ways, it made me feel more confidence [*sic*] of my skills.

DISCUSSION

In this study, PT students believed that receiving verbal SP feedback along with a written rubric assessment about professional behaviours was beneficial. This benefit is consistent with previous findings in the literature about PT students' experiences with SPs.^{34,35} Students thought that the combination of verbal and written feedback had enhanced their professional self-efficacy, which carried over into their clinical experiences. After receiving the SP feedback, students reported an improved ability to interact with patients, specifically gaining an appreciation for the patient-therapist relationship and the patient's perspective.

The SP feedback also reinforced prior learning and enabled the students to focus on areas that needed improvement. Branch and Paranjape recognized this by arguing that the use of feedback as a teaching tool allows concepts and values from pre-existing knowledge to be integrated into medical training.³⁶ Branch and Paranjape's argument can be extrapolated to the training of PT students. Our study showed that the heightened self-efficacy gained from prior learning had been internalized and carried over into clinical practice, as evidenced in the students' reports during their clinical experiences. As mentioned earlier, very little previous research has explored students' perspectives of their self-efficacy in clinical placements after SP experiences.¹⁹

As noted by Frye and colleagues, two-way communication and learner-centered feedback is beneficial for student learning.³⁷ In our study, students reported that combined verbal and written feedback had provided a learner-centered approach that enhanced their experience, because the verbal feedback complemented and expanded on the written feedback. Students also commented that having an opportunity to apply feedback to a second case scenario improved their communication, interview skills, and other professional behaviours.

Students thought that having two experiential case scenarios challenging their professional behaviours affected their ability to positively interact with patients.

Their narratives revealed that the SP feedback was constructive and authentic, and it prepared them for the clinical environment through the focus on active experimentation. The SP essentially acts as a coach and as an educator who works one-on-one with a learner, provides feedback in context, and collaborates with the learner.³⁸ Successful learning through coaching draws on a combination of concrete experience (feeling) and active experimentation (doing).³⁸ Research with medical students using coaching found that students requested more specific feedback, compared with more general ratings, during their clinical rotations.³⁹ The medical students' preferences align with the results of this study, indicating that the PT students preferred the specific, constructive feedback provided by the SPs.³⁹

Moreover, students positively contrasted receiving the SPs' feedback with their previous experiences in practical examinations with faculty and during part-time clinical education settings, specifically noting the benefit of the SPs' verbal feedback. Simulated experiences create a different context from the traditional relationship between students and faculty, enabling feedback to be given effectively and developing a learning culture. Learning culture, as described by Watling and colleagues, is a means of creating conditions that influence providing feedback to learners.⁴⁰ Students reported that not being graded on the SP case scenarios was beneficial and non-threatening compared with testing situations, such as practical examinations, thus affecting how they perceived the feedback.

Students thought that using SPs was an effective means of receiving feedback about their professional behaviours in a safe learning environment. Their professional behaviours were purposely challenged through the SP case scenarios to enhance development in those behaviours and to re-create the conditions of the clinical environment. The authenticity of the SP encounters promoted learning and transfer of professional behavioural skills to similar or new situations.⁴¹

This study had several limitations. First, there are potential inconsistencies in the SP feedback and in the standardization of the SP case scenarios. However, using detailed case scenarios and having a single SP educator train the SPs minimized these limitations. Another limitation is the lack of consistency in the timing of the students' clinical experiences; some students had a longer period of time between the SP and the clinical experiences, possibly affecting learning. A longer or shorter time period could influence students' ability to fully maximize learning from the SP feedback. This variability in timing may also have influenced the students' perspectives on their level of preparation for the clinic. Finally, a small sample size with convenience sampling may have resulted in bias, because the students who volunteered to participate may have been more inclined to seek unique learning opportunities than those who did not volunteer to participate. This sam-

pling may limit the findings' transferability to other PT professional education programmes.

Further research may be beneficial to examine the use of combined verbal and rubric assessments in varied contexts. Research exploring the impact of verbal SP feedback on professional behaviours at the culmination of an initial clinical experience is recommended to assess the efficacy of this teaching strategy.

CONCLUSIONS

Our study designed the SP experiences, including the verbal and written feedback, to encourage the PT students to develop or enhance their professional behaviours with the expectation that this experiential learning would build on previously learned behaviours. The SPs' verbal feedback supplemented the written rubric assessment. Students perceived an increased self-efficacy in their professional behaviours and improved therapeutic interactions with patients, which carried over into their clinical experiences. Because PT students encounter many challenges to their professional behaviours when they enter the complex clinical environment, it is imperative that academic programmes prepare them to successfully meet those challenges. Using the combined verbal and written feedback from the SPs, which focuses on professional behaviours in the professional PT curriculum, is a valuable teaching strategy because it enhances the development of professional behaviour from the point of view of the students themselves.

KEY MESSAGES

What is already known on this topic

Research on the impact of standardized patients' (SPs') feedback to physical therapy (PT) students on their professional behaviour is limited.^{18,19} PT students prefer to receive direct, constructive feedback on their performance.²⁴ Feedback from SPs is most commonly delivered through written rubrics, but there is no standard method for providing it.¹⁷ Research on the impact of SPs' feedback on professional behaviour has only been measured using SPs' experiences, without investigating its influence on PT students' professional behaviours during clinical experiences.¹⁷

What this study adds

This study adds to the current body of knowledge by providing evidence of the impact of combined verbal and written SP feedback on PT students' professional behaviours during clinical experiences. PT students encounter many challenges to their professional behaviours when they enter the complex clinical environment, so it is imperative that academic programmes prepare students to successfully meet those challenges. This research supports the use of combined verbal and written SP feedback

to encourage PT students to learn or enhance their professional behaviour.

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