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Abstract

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Development and Validity of the Student-Run Outpatient Physical Therapy Experience Survey: A Pilot Study

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ABSTRACT

Purpose: The preparation of professionals who are culturally sensitive and provide patient centered care is an expected outcome of physical therapist education. A review of the literature revealed that patient experience and outcome data regarding physical therapy student-led clinics are lacking. The purpose of this pilot study was to develop a valid patient experience survey that assessed patient centeredness and cultural competence in a gender-neutral manner. **Methods:** Questions for a new survey, Student-run Outpatient Physical Therapy Experience Survey (SOPTES) were generated using two validated surveys, the Questionnaire of Patient's Experiences in Post-Acute Outpatient Physical Therapy Settings (PEPAP-Q) and the Tucker-Culturally Sensitive Health Care Provider Inventory Patient Form. The SOPTES was implemented with the validated PEPAP-Q in a student-led clinic and given to 88 patients at discharge. Correlation and exploratory factor analysis were performed. **Results:** The correlations of patient scores between the two surveys, revealed a significant moderate correlation based on 2-tail analysis (ρ =.396, $p < 0.001$). Exploratory factor analysis revealed five themes for the PEPAP-Q (patient centered care, supportive environment, availability, invested interest, and adaptability) and three themes in the SOPTES (patient centered care, availability, cultural competence). **Conclusion:** These findings support the development and use of the SOPTES in a student-led physical therapy clinic to assess student cultural sensitivity and provision of patient centered care.

Keywords: patient centered care, cultural sensitivity, patient experience, student-led clinic, outcomes

INTRODUCTION

Healthcare provider education programs aim to produce professionals who deliver patient centered care inclusive of culturally competent and sensitive care.[1–3] However, there is no road map or blueprint for assessment of these skills. Healthcare education programs and practices have utilized many methods to assess these skills including development of scales to be used during objective structured clinical examinations, patient survey tools, student survey tools, and unannounced standardized patients.[4-7] During healthcare education, it is common for students to receive both formative and summative assessments of care related competencies. Once students become practicing clinicians, much of the feedback they receive comes from patients. Healthcare education programs who have healthcare clinics in which students serve as clinicians have a unique opportunity to provide formative assessment to students from patients, which can inform their practice and allow them to demonstrate competency in patient centered care.

Texas State University initiated a student-led and faculty supervised, physical therapy clinic that has been in operation since 1989. The clinic provides student-led physical therapist services to patients from the surrounding community at a reduced rate. This clinic is structured to meet the needs of patients with goals that can be accomplished in a short amount of time as well as those with goals that may require care over a longer period. The patients at the Texas State University Physical Therapy Clinic include university employees, students, and people from the community with a variety of orthopedic and neurological impairments. The clinic has been administering patient satisfaction surveys at time of discharge to patients since 1997 to inform student physical therapist practice, as a source of feedback for supervising physical therapy faculty, and to assess student outcomes. Faculty in the Department of Physical Therapy strive to facilitate patient-centered and culturally competent student practitioners, and the patient satisfaction survey was determined to be an objective tool that could be used to measure the success of students in demonstrating those qualities. Though the original survey provided useful information for the student physical therapist, the survey used at Texas State University Physical Therapy Clinic was aimed at patient satisfaction, was not validated, and did not directly assess patient centeredness or cultural competence.

The terms patient satisfaction and patient experience are generally used synonymously, but they measure different aspects of patient care.[8] Asking about experience enables the patient to provide honest feedback about their clinical encounter, whether positive or negative, whereas assessing satisfaction is biased towards the positive. The purpose of this study was to develop a validated patient experience survey, the Student-Run Outpatient Physical Therapy Experience Survey (SOPTES), that incorporates patient-centeredness, cultural competence, and gender neutrality to inform student practice and assess students' ability to provide patient centered care inclusive of cultural competence and sensitivity.

Background

A review of the literature revealed that patient outcome data regarding physical therapist student-led service is lacking, and no validated surveys were found to measure patient experience in student-led PT clinics, though there are numerous studies on patient satisfaction surveys in non student-led clinics.[8–18] Unfortunately, no single patient satisfaction survey or patient experience survey includes questions aimed at gathering information about patient centeredness with intentional inclusion of cultural competence and sensitivity in a gender-neutral manner.

Patient Centered Care

Developing physical therapist practitioners who provide patient-centered care is imperative for education programs and the physical therapy profession. The American Physical Therapy Association (APTA) adopted a position statement titled Commitment to Person-centered Services, describing the importance of this facet of the profession.[19] The term "patient centeredness" however, is not consistently and clearly defined in the literature. It is variably defined as patient-focused care, person-centered care, person-centered culture, client-centered practice, or family-centered care.[12]

Several systematic reviews reveal factors that contribute to patient-centeredness, including respect for the patient, considering the patient in his or her own context, facilitating the patient to be an active member of his or her care through shared decision-making, personal characteristics of the provider (social, confidence, knowledge), individuality (getting to know the patient and individualizing the treatment), communication, education about every part of assessment and treatment, goal setting, and support.[12,18] These reviews emphasized realistic and meaningful goal setting as well as communication quality, which was found to be directly correlated to patient satisfaction.[12,15] Therefore, a patient-centered survey should include questions about the patient's involvement in goal setting and decision-making, and the clarity of information delivered from the clinician.

Cultural Competence and Sensitivity

The delivery of culturally competent and sensitive care is paramount in healthcare to best serve the diverse population and reduce health disparities.[10] Several groups of authors have developed and/or utilized assessment tools to document patient perceptions

in minority groups. Tucker et al focused on developing a culturally sensitive patient satisfaction survey and explored three main factors: Competence/Confidence, Sensitivity/Interpersonal Skill, and Respect/Communication Skill.[17] Groups of racially/ethnically diverse patients were used to develop the Tucker Culturally Sensitive Health Care Clinic Environment Inventory – Patient Form (T-CSHCCEI-PF) and it was found to be a psychometrically sound tool for assessing the perceived cultural sensitivity of providers.[17] Using a modified version of the Cultural Competence Assessment tool, Pardasani et al studied the experiences and concerns of low-income consumers receiving healthcare and social services in publicly funded facilities.[20] Their study revealed significant differences in perceived treatment of Black and Latino consumers compared to Caucasian consumers, providing a second option of an existing valid tool from which questions can be drawn to assess cultural competence.[20]

Gender Sensitivity

Related to the use of gendered language in questionnaires, Vainapel et al explored the use of either masculine-generic questions (e.g. "All *men* are created equal" or using "he") or gender-neutral questions (e.g. "All *people* are created equal" or using "he or she.").[23] This study asked college students to complete an academic motivation questionnaire in which half of the students got a masculine-generic form and half received a gender-neutral form.[23] Females with a masculine-generic form were less likely to display intrinsic goal orientation and task-value than those who filled out a gender-neutral form.[23] Males reported higher self-efficacy in the masculine-generic form, but in the gender-neutral form, both genders reported similar self-efficacy.[23] Additionally, the use of gender neutral language in healthcare settings creates greater perceptions of safety for patients.[24] These findings exemplify the importance of gender-neutrality in questionnaire development to reduce bias.

Informed by the literature review, the authors aimed to develop a patient experience tool incorporating questions about patient-centeredness and cultural competence with the use of gender neutral language. The authors hypothesized that a significant relationship would be found between the SOPTES and a published patient experience tool, the Questionnaire of Patient's Experiences in Post-Acute Outpatient Physical Therapy Settings survey, which does not include questions specific to patient centeredness and cultural competency.

METHODS

The Texas State University Institutional Review Board determined this study did not need oversight.

Development of the SOPTES

Measures

Questionnaire of Patient's Experiences in Post-Acute Outpatient Physical Therapy Settings

The most related valid patient experience survey identified was the Questionnaire of Patient's Experiences in Post-Acute Outpatient Physical Therapy Settings (PEPAP-Q), published by Medina-Mirapeix et al in 2015.[8] The PEPAP-Q includes 23 questions, written in gender-neutral language, (see Appendix A) scored using a 5-point Likert scale from never (1) to always (5), designed for outpatient physical therapy settings.[8] The PEPAP-Q has been found to have test-retest reliability, adequate internal consistency, and convergent and discriminant validity.[8] Despite being a validated survey, the survey was not developed specifically to measure patient centeredness and it does not include any questions related to cultural competency or sensitivity. The authors considered adding questions to this already validated survey, however it would have increased the length of the survey. Therefore, the PEPAP-Q was utilized for thematic question generation.

The PEPAP-Q validation study included a factor analysis with seven dimensions, including five questions in emotional support, four questions in providing information and education, three questions in duration of attendance, three questions in interruptions during delivery of care, three questions in waiting times in the sequence of treatment, three questions in sensitivity to patient's changes, and two questions in patient safety.[8] Ten questions for the SOPTES were derived from questions in the PEPAP-Q. Two questions from emotional support, one from providing information and education, one from duration of attendance, two from interruptions during delivery of care, one from waiting times in the sequence of treatment, two from sensitivity to patients changes, and one from patient safety. The authors aimed to adequately cover all dimensions represented in the PEPAP-Q while limiting the length of the survey. Additionally, the PEPAP-Q was used to statistically validate the SOPTES.

The Tucker-Culturally Sensitive Health Care Clinic Environment Inventory - Patient Form

The Tucker-Culturally Sensitive Health Care Clinic Environment Inventory - Patient Form (T-CSHCCEI-PF) is a patient-perceived cultural competence survey.[17] This survey includes questions that were defined as important by patients, rather than experts, related to cultural sensitivity.[17] The survey was generated from a pilot study factor analysis of 72 items, which was reduced down to the 27 items with the highest factor loadings.[17] All 27 items are rated on a 4-point Likert scale from strongly disagree (1) to strongly agree (4).[17] The three subscales of the inventory, competence/confidence, sensitivity/interpersonal skill, and respect/communication have excellent internal consistency reliability and high validity.[17] In the present study, the T-CSHCCEI-PF

was utilized for question generation specific to patient experience with their therapist related to cultural competence/sensitivity. Since the T-CSHCCEI-PF was not written in gender-neutral language, the questions used from this survey were altered to reflect gender-neutrality by removing "he/she" and replacing them with "my therapist."[17,21] Four questions from the T-CSHCCEI-PF were added to the SOPTES, two related to sensitivity/interpersonal skill and two related to respect/communication. Secondary to the length of the T-CSHCCEI-PF survey (27 questions) and to avoid survey fatigue in clinic patients, the T-CSHCCEI-PF was not used for statistical comparison and validation.

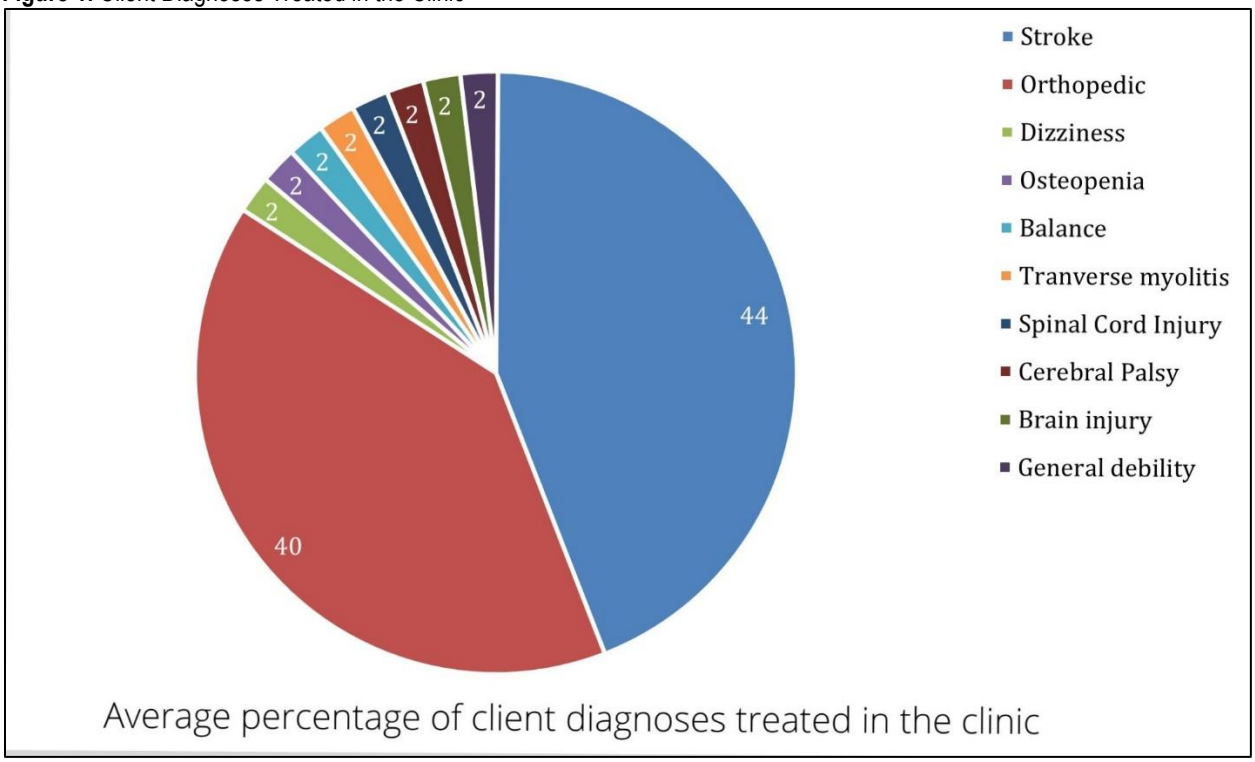
The structure of the SOPTES mirrors that of the PEPAP-Q so that patients taking the combined questionnaire during the validation process would not know the difference between the 2 questionnaires. Questions were written both negatively and positively to require respondents to read questions carefully and consider the answer before responding or marking one response for all questions. Questions referring to the patient's therapist were written to specify "student PT", for clarity, transparency, and to avoid misrepresentation of the clinician in the survey. The SOPTES includes 14 questions (see Appendix A) answered with a 5-point Likert scale from (5) always to (1) never. A comments section is included in the SOPTES to capture patients' experiences or situations more comprehensively.

After the initial development of the SOPTES, a convenience sample of physical therapists in central Texas reviewed the survey for face validity and clarity of the wording of the items. The convenience sample included four university faculty teaching in the DPT program and two clinicians who served as clinical faculty for the program. The four faculty who reviewed the survey routinely supervise students in the student-led clinic and the two clinicians who reviewed the survey routinely accept students for clinical experiences in their clinics. Feedback from the sample of physical therapists indicated the item content was appropriate for assessment of patient centeredness and cultural competency/sensitivity. Two reviewers offered wording revisions for clarity. After the review, all items were retained and minor revisions to the wording were made based on the feedback. The SOPTES and PEPAP-Q were collated into one survey for implementation in the Texas State University Student-led Physical Therapy Clinic.

Subjects

Patients in the student-led clinic were from the surrounding geographic area. The student-led clinic treated an average of 52 patients in the fall and spring of 2019-2020 and 2020-2021 (46% male, 54% female), ranging from 22-78 years old. Table 1 details client demographics and Figure 1 displays client diagnoses.

Figure 1. Client Diagnoses Treated in the Clinic



Student Physical Therapists

The average number of students in each session from 2019-2021 was 39 including male (n=16) and female (n= 24) students. Students represented a variety of ethnic backgrounds (Table 1).

Table 1. Student and Client Demographics*

		Student	Client
Gender	Male	39.7	46
	Female	60.3	54
Race	Hispanic	13	8
	Asian	5.3	4
	Black	2.7	52
	White	69.3	73
	Mixed	7.5	0
	American Indian or Alaska Native	0	2
	Hawaiian	0	2
Total		39	52

*Average percentage of student and client demographics from 2019-2021 cohorts.

Data Analysis

A total of 88 complete surveys were collected. Data were analyzed using IBM SPSS Statistics version 27. Descriptive statistics were used to characterize patient demographics. The responses from both surveys were coded with a numerical value from always (5) to never (1). For questions that were negatively phrased, the scores were reversed to ensure that all items were consistent in terms of agreement/disagreement. Spearman correlation coefficient was performed to determine the concurrent validity of the SOPTES with a *P* value of less than .05 considered statistically significant. An exploratory factor analysis, informed by eigenvalues and scree plots, was completed to identify true measurement of patient centeredness and cultural competence from a patient experience perspective. A factor loading cutoff of 0.30 was used to determine those items to retain in a factor.[25] Finally, Cronbach's alpha was used to determine internal consistency for each factor.

RESULTS

Descriptive statistics indicate that across both the PEPAP-Q and SOPTES the mean average tended to favor the "always" or "never" rating (see Appendix B). A Spearman rho analysis (excluding cases pairwise) yielded statistically significant positive correlation between patient scores on the SOPTES and the already validated PEPAP-Q.[8] The correlation of patient scores between the two surveys revealed a significant moderate correlation based on 2-tail analysis (ρ =.396, $p < 0.001$).

Initially, the favorability of the 22 PEPAP-Q items and the 14 SOPTES items were examined. A principal access factor analysis was conducted with an oblique rotation (direct oblimin). The Kayser-Meyer-Olkin (KMO) measure of sampling was 0.723, exceeding the minimum value of 0.5, and Bartlett's test of Sphericity was significant (<0.05). These results support the exploratory factor analysis. An initial analysis was run to obtain eigenvalues for each factor in the data. All five factors in the PEPAP-Q had eigenvalues above Kaiser's criterion of 1 and in combination explained 78.6% of the variance. The eigenvalues for the three factors in the SOPTES exceeded Kaiser's criterion of 1, and in combination explained 72.8% of the variance. Of the 22 PEPAP-Q items, all correlated at least 0.60 with at least one other item, suggesting favorability (Table 2).

Table 2. Results of Exploratory Factor Analysis for Post-Acute Outpatient Physical Therapy Settings Survey (PEPAP-Q)

Structured Matrix					
	Component				
	1	2	3	4	5
MM1 PROGNOSIS		0.84			
MM2 USEFULNESS_THERAPY		0.85			
MM3 PREVENT_COMPLICATIONS		0.85			

MM4 ANSWERS_QUESTIONS		0.86			
MM5 ENCOURAGEMENT_ADDRESS_WORRIES		0.66			
MM6 INTEREST_RECOVERY				-0.93	
MM7 AWARE_WORRIES		0.68			
MM8 SUPERVISE_EXERCISE	-0.93				
MM9 TALK_WORRIES					0.73
MM10 ADAPT_PAIN	-0.60				
MM11 ADAPT_MOOD					0.59
MM12 ADAPT _FUNCTIONAL_STATUS					0.80
MM13 DURATION_ATTENTION	0.97				
MM14 LIMITED_TIME_OBSERVING	0.97				
MM15 NOTWITHME_PREVENT_RISKS	0.97				
MM16 TREATMENT_INTERRUPTED_PATIENTS	0.96				
MM17 TREATMENT_INTERRUPTED_PROFESSIONALS	0.91				
MM18 TREATMENT_INTERRUPTED_ADMINISTRATIVE	0.96				
MM19 WAIT_TX_DEVICE_OCCUPIED	0.89				
MM20 WAIT_TX_TABLE_OCCUPIED	0.74				
MM21 WAIT_TX_EQUIPMENT_OCCUPIED	0.80				
MM22 ASK_PATIENT_PREVENTRISK			-0.97		
MM23 DANGEROUS_SITUATIONS			-0.96		

The 14 items in the SOPTES all correlated with at least one other item except the item “My student PT treats me differently because of my race.” (Table 3).

Table 3. Results of Exploratory Factor Analysis for Student-Run Outpatient Physical Therapy Experience Survey (SOPTES)

Structured Matrix			
	Component		
	1	2	3
S1 CULTURAL_BACKGROUND			0.86
S2 RACE			
S3 ENCOURAGEMENT_CONCERNS	0.73		
S4 TREATMENT_PLAN	0.72		
S5 LISTENS	0.74		
S6 RESPECT	0.93		
S7 ATTENTION	0.93		
S8 UNAVAILABLE		-0.93	
S9 DISTRACTED_PW_COMPUTER	0.93		
S10 EQUIPMENT_UNAVAILABLE	0.45		
S11 DISTRESPECTFUL	0.93		
S12 UNSAFE	0.91		
S13 ADAPTS_TREATMENT		0.99	
S14 INCLUSION_GOALS			0.61

This item did not load above 0.30 on any factor in the SOPTES. Exploratory factor analysis revealed five themes for the PEPAP-Q, four of which ranged from high to good reliability and internal consistency using Cronbach's alpha (patient centered care (α= 0.81), supportive environment (α = 0.85), availability (α = 0.99), and adaptability (α = 0.51)). Invested interest included only one question and has no measure of reliability (Table 4). The three themes in the SOPTES demonstrated lower levels of reliability (patient centered care (α = 0.28), availability (α = 0.43), and cultural competence (α = 0.25)) with the factor of race not loading into any of the three themes (Table 4).

Table 4. Cronbach Alpha and Spearman Rho Correlation range for PEPAP-Q and SOPTES Themes

Themes	Items PEPAP-Q	Cronbach Alpha	Correlation Range	Items SOPTES	Cronbach Alpha	Correlation Range
Patient Centered Care	11	0.81	(0.47-0.95)	9	0.28	(0.71-0.75)
Availability	2	0.99	(0.98)	2	0.43	(0.70)
Cultural Competence				2	0.25	(0.41)
Race				1		
Supportive environment	6	0.85	(0.36-0.78)			
Adaptability	3	0.51	(0.19-0.30)			
Invested interest	1	0.81	(0.47-0.95)			

The two topics that were addressed in both surveys included patient centered care and availability. The items that loaded onto Factor 1 for both surveys included items that all relate to the patients' experience, from adapting treatment, to the student PT listening, and treating the patient with respect. This factor was labeled "Patient centered care." The second topic addressed in both surveys, Factor 2, had two items in each survey that related to the area "PT availability." The PEPAP-Q had three additional factors that included supportive environment, adaptability, and invested interest, while the SOPTES loaded one more factor "Cultural Competence," with items that related to showing respect for one's cultural background and goals.

DISCUSSION

Physical therapist education programs must demonstrate the achievement of goals and outcomes for a variety of reasons. Common goals of a physical therapist education program include developing patient centeredness and cultural competency in graduates; however, lack of standardized tools makes it challenging to assess these constructs. The SOPTES was developed to fill this void in the assessment literature. Initial pilot psychometric testing revealed that the SOPTES demonstrates moderate correlation (ρ =.396, $p < 0.001$), and concurrent validity with a published valid patient experience survey (PEPAP-Q). The lower levels of reliability found for the SOPTES suggest the need for a larger sample size. Further research should be conducted with a greater number of participants to verify the psychometric properties of the SOPTES.

Patient-centeredness has been deemed important in healthcare, and part of patient-centeredness is meeting patients where they are.[28] The SOPTES aligns with the Institute of Medicine's 2001, Crossing the Quality Chasm report, which first identified the need for a greater focus on patient-centered care.[27] This need relates to the quality gap among certain patient populations and closing the "quality gap between what we know to be good health care and the health care that people actually receive."[27]

There are numerous published surveys related to patient satisfaction, which differs from patient experience and includes the degree of contentment a patient feels about their treatment and outcomes.[8,10–18] Prior to the creation of the SOPTES, there was only one published tool that addressed patient experience in outpatient physical therapy clinics,[8] a construct the authors believe provides more meaningful feedback than patient satisfaction.

In the development of the SOPTES, investigators decided to retain aspects of the PEPAP-Q that were most related to patient-centeredness with the goal of creating a more concise survey that also included aspects of cultural competence. Comparing the themes identified in the study by Medina-Mirapeix et al with the themes identified in the present study, items from the PEPAP-Q factors duration of attendance, interruptions during delivery of care, and waiting times in the sequence of care loaded in the patient-centered care factor from this study.[8] These 3 PEPAP-Q factors logically contribute to patient-centeredness, so this finding was not surprising, and collapsing these factors into a patient-centered care factor reduced the number of items from 11 to 9, effectively shortening the survey. The 10 PEPAP-Q items and their associated factors that were not included in the SOPTES were redundant

(multiple questions assessing the same idea) or they were related to concepts the investigators felt were too finite and less important.

Finally, patient experience is related to overall quality of healthcare experience, and it may also be associated with better clinical processes and outcomes. The information learned from a patient experience survey provides feedback that, when addressed, improves the patient's experience of being treated, leading to better adherence to treatment plans as well as clinical outcomes.[28] The usefulness of gathering patient experience feedback cannot be underestimated as a valuable indicator of healthcare quality as well as a way to decrease the quality gap in patient care.

Limitations

There are several limitations related to this study. First, the sample size for a survey validation study was small, thus the authors identified this as a pilot study. Despite collecting data over multiple years, the student-led clinic does not treat a large volume of patients, making it difficult to obtain a large sample size. To address the low reliability scores, further research in other student-led PT clinics or student-led rehabilitation clinics is needed to increase sample size,confirm validity, and assess reliability of the SOPTES tool. A second major limitation of this study is lack of survey matched demographics related to patients and student physical therapists. Future research should aim to ensure a diverse population of patients and students are recruited and matched to ensure the tool is valid for diverse populations. Lastly, we pilot tested the SOPTES with physical therapists only and did not obtain patient input on wording, item clarity, and completeness of survey items. Patients did not ask questions about the survey or demonstrate confusion about the survey when they completed it, providing anecdotal evidence that the survey items were clear and understood.

CONCLUSION

In this study, the authors demonstrated that the SOPTES is a valid tool to capture patient experience in a student-led outpatient physical therapy clinic. These findings are consistent with the study purpose to validate the SOPTES based on the hypothesis that there would be a significant relationship with the already validated PEPAP-Q. The perceptions patients have of their health care experience can provide insight about patient centeredness and cultural competency. The SOPTES was developed to assess understanding of and compassion for people and to gain insight and feedback about true patient experiences. Use of the SOPTES can inform students and clinicians about their ability to deliver patient centered and culturally competent care.

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Appendix A

PEPAP-Q and SOPTES questionnaires

	PEPAP-Q		SOPTES
1	I get information about the prognosis	1	My student PT shows understanding and respect for my cultural background
2	I get information about the usefulness of the therapies	2	My student PT treats me differently because of my race
3	I am told how to prevent complications during tx	3	I get encouragement to address my concerns
4	My therapist gives complete answers to my questions	4	I understand information about my treatment plan
5	I get encouragement to address worries	5	My student PT listens to me carefully when I speak
6	My therapist shows personal interest in my recovery	6	My student PT treats me with respect
7	My therapist is aware of my worries	7	My student PT gives me less attention than I expect
8	My therapist supervises my exercise practice	8	My student PT is unavailable during parts of my treatment
9	I have opportunities to talk about worries/doubts	9	My student PT seems distracted during my session by paperwork or computer work
10	My therapist adapts tx to pain	10	Equipment is unavailable when I need it
11	My therapist adapts tx to changes of mood	11	My student PT is disrespectful of my time
12	My therapist adapts tx to changes in functional status	12	I feel unsafe in the clinic
13	The duration of attention by the PT is shorter than I expected	13	My student PT adapts tx based on my needs
14	The therapist seems to have a very limited time for observing my exercise practice	14	I feel included in making or changing my PT goals
15	My therapist does not stay with me to prevent risks during moving or therapies		
16	My tx is interrupted because my therapist has to help other patients		
17	My tx is interrupted because my therapist has to attend to other professionals		
18	My tx is interrupted because my therapist has phone calls/administrative demands		
19	I have to wait during tx because boxes or devices are occupied		
20	I have to wait during tx because tables are occupied		

21	I have to wait during tx because other equipment is occupied
22	I have to ask other pts for help to prevent risks (eg. Falls)

Appendix B

SOPTES Descriptive Statistics

SOPTES Items	Min	Max	Mean	Std. Deviation
My student PT shows understanding and respect for my cultural background	1	5	4.99	0.12
My student PT treats me differently because of my race	1	5	1.14	0.68
I get encouragement to address my concerns	1	5	4.85	0.44
I understand information about my treatment plan	1	5	4.88	0.42
My student PT listens to me carefully when I speak	1	5	4.92	0.31
My student PT treats me with respect	1	5	4.99	0.11
My student PT gives me less attention than I expect	1	5	1.03	0.24
My student PT is unavailable during parts of my treatment	1	5	1.09	0.54
My student PT seems distracted during my session by paperwork or computer work	1	5	1.02	0.21
Equipment is unavailable when I need it	1	5	1.31	0.94
My student PT is disrespectful of my time	1	5	1.02	0.21
I feel unsafe in the clinic	1	5	1.07	0.46
My student PT adapts treatment based on my needs	1	5	4.84	0.67
I feel included in making or changing my PT goals	1	5	4.85	0.65

PEPAP-Q Descriptive Statistics

PEPAP-Q Items	Min	Max	Mean	Std. Deviation
I get information about the prognosis	1	5	4.67	0.68
I get information about the usefulness of the therapies	1	5	4.81	0.43
I am told how to prevent complications during tx	1	5	4.67	0.64
My therapist gives complete answers to my questions	1	5	4.88	0.35
I get encouragement to address worries	1	5	4.79	0.55
My therapist shows personal interest in my recovery	1	5	4.97	0.15
My therapist is aware of my worries	1	5	4.76	0.55
My therapist supervises my exercise practice	1	5	4.94	0.35
I have opportunities to talk about worries/doubts	1	5	4.81	0.47
My therapist adapts tx to pain	1	5	4.89	0.41
My therapist adapts tx to changes of mood	1	5	4.66	0.77
My therapist adapts tx to changes in functional status	1	5	4.84	0.43
The duration of attention by the PT is shorter than I expected	1	5	1.07	0.48
The therapist seems to have a very limited time for observing my exercise practice	1	5	1.04	0.3
My therapist does not stay with me to prevent risks during moving or therapies	1	5	1.02	0.22
My tx is interrupted because my therapist has to help other patients	1	5	1.05	0.34
My tx is interrupted because my therapist has to attend to other professionals	1	5	1.05	0.26
My tx is interrupted because my therpist has phone calls/administrative demands	1	5	1.05	0.34

I have to wait during tx because boxes or devices are occupied	1	5	1.08	0.34
I have to wait during tx because tables are occupied	1	5	1.08	0.35
I have to wait during tx because other equipment is occupied	1	5	1.14	0.47
I have to ask other pts for help to prevent risks (eg. Falls)	1	5	1.07	0.48
I experience dangerous situations because of the lack of help from professionals	1	5	1.08	0.54