



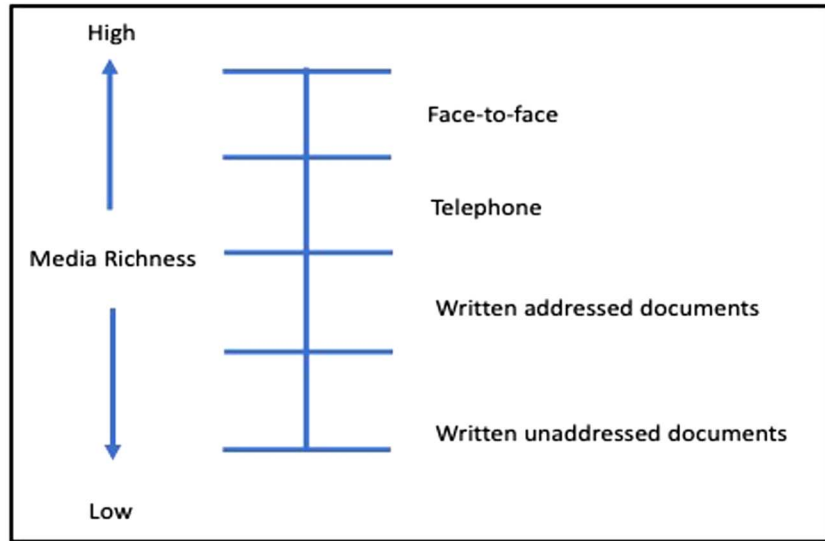
have been described as feelings of enjoyment and giving back to the profession,<sup>14,16,17</sup> staying current in practice,<sup>14</sup> and clinicians viewing students as teachers.<sup>17</sup> Common barriers reported include lack of support from clinical supervisor,<sup>14,16</sup> lack of space,<sup>16,17</sup> liability concerns,<sup>16</sup> uncommunicative or disinterested academic faculty,<sup>16</sup> stress,<sup>15,17</sup> and lack of time.<sup>17</sup> The literature suggests that receiving support from the academic institution and strong communication among stakeholders is important for a positive CEE.<sup>14,16,17</sup> Site visits have been identified as an important mechanism in maintaining communication among stakeholders and having a role in increasing CI satisfaction.<sup>16</sup>

Evidence examining stakeholder perspectives on site visits in physical therapy CEE is sparse and somewhat conflicting. Site coordinators of clinical education have described the utility of site visits in fostering needed dialogue, "to increase awareness and address challenges experienced by clinical sites, ongoing dialogue is needed between academic leaders and clinical directors to identify directors' challenges and need for supports."<sup>18(p.26)</sup> However, it has also been reported that most SCCEs prefer no contact from the school and that in-person visits were only preferred by 4% ( $n = 2$ ).<sup>5</sup> These findings are in sharp contrast to other reports of SCCE perceptions<sup>18</sup> and CI perceptions in other health care disciplines.<sup>6,8-11,16,19</sup> Pressures to maintain productivity and limited CI time for activities outside of direct patient care may be reasons for the SCCEs' preference of no contact from the school.<sup>5</sup>

Although stakeholders can identify benefits and goals of a site visit, such as identifying expectations of the clinical experience,<sup>9,10</sup> verifying student competency,<sup>6,8</sup> assessing resources at the site,<sup>6,8,9</sup> improving communication,<sup>9,10</sup> and providing support to the clinician,<sup>6,8,10,11</sup> there are also barriers to be considered when conducting these visits, particularly for those done in person.<sup>4,7,11,13,20</sup> Barriers can include time, travel costs,<sup>7,13,20</sup> disruption of patient care routines, productivity,<sup>4</sup> and scheduling difficulties.<sup>4,11</sup> Acknowledging these barriers, some researchers have explored other means of conducting site visits.<sup>11,12,20</sup> Findings indicate that using videoconferencing was perceived as time efficient,<sup>12</sup> superior to a telephone call,<sup>12</sup> and easy to use.<sup>20</sup> However, results were conflicting in terms of preferring videoconferencing over an in-person site visit. Faculties have described an interpersonal component that was missing when using videoconferencing.<sup>20</sup> This perceived interpersonal connection may be a result of the multiple visual and auditory cues as well as the immediate feedback that occurs during the in-person visit.

Various communication methods that may be used to conduct a site visit have certain

**Figure 1. Media Richness theory**



Hierarchy of Media Richness. Adapted from "Message Equivocality, Media Selection, and Manager Performance: Implications for Information Systems," by R.L. Daft, R.H. Lengel, L.K. Trevino, 1987, *MIS Quarterly*, p. 11, 358, Copyright 1987

characteristics that affect their level of richness. According to media richness theory, also known as the information richness theory<sup>21,22</sup> (Figure 1), methods of communication are considered rich when they allow for immediate feedback, personal focus, and multiple cues (such as body language, facial expressions, and eye contact).<sup>21</sup> In contrast, communication methods with delayed feedback, fewer cues, or perceived as impersonal are not considered as rich.<sup>23</sup> Communication methods with high levels of richness, such as face-to-face/in-person communication, are appropriate for difficult, ambiguous topics, although leaner methods of communication, such as written messages or telephone calls, are best used to share ideas and concepts that are clear and well understood.<sup>24</sup> The level of media richness during various methods of conducting site visits may impact how stakeholders, including PTS, experience these visits.

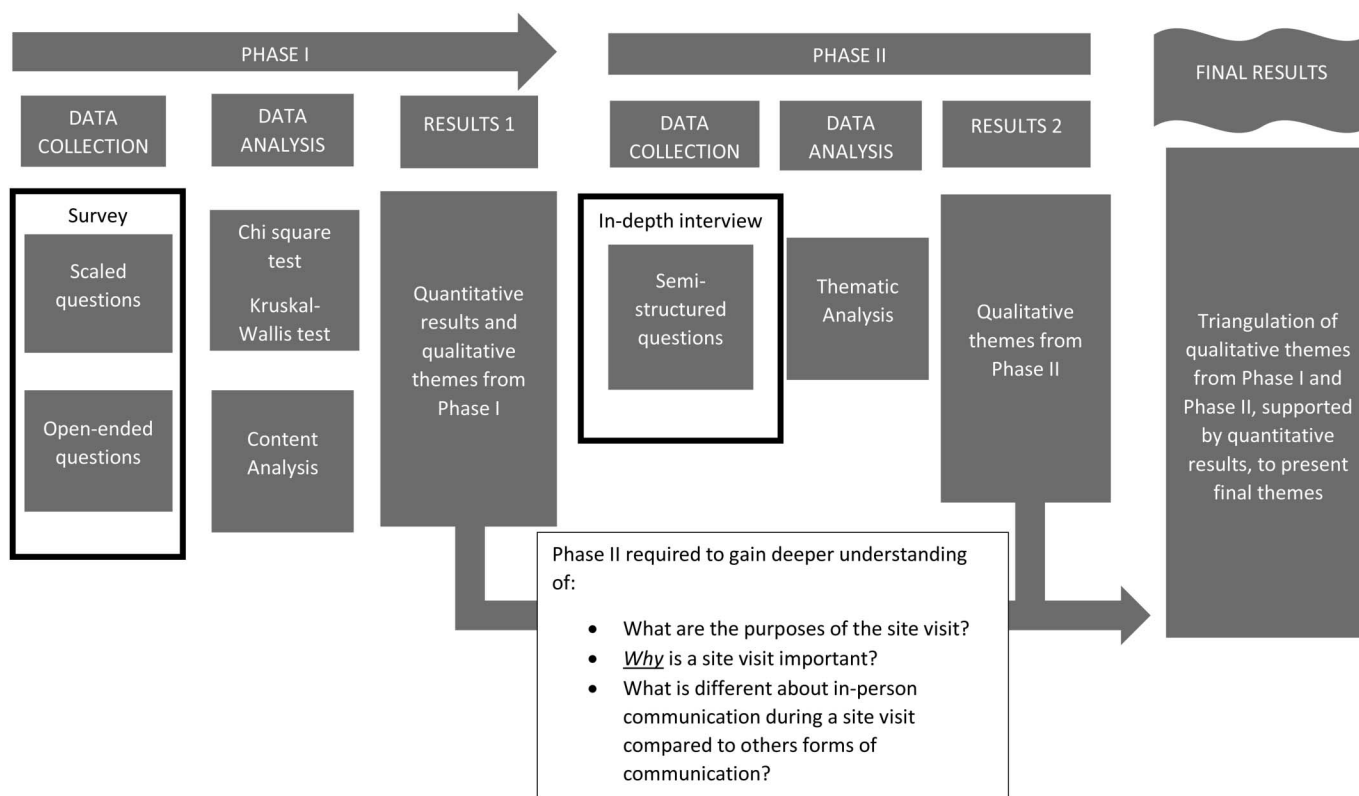
The gap in the existing literature is twofold. First, the current evidence regarding PTS perceptions about site visits is limited. As one of the stakeholders in clinical education, and a participant in the clinical site visit, it is important to determine if the PTS' perspectives are in alignment with other stakeholders. Specifically, what PTS perceive as the main purposes of the site visit, if PTS feel site visits are an important part of the CEE, and what impact, if any, a site visit has on the PTS' CEE. Second, there is no clear understanding about PTS' preferences as to what method of communication should be used for these visits and why they may have these preferences. It would be valuable to understand how the degree of media richness among the different methods of communication used during site visits may

impact the PTS' perceived value of these visits. The purpose of this study, therefore, was to gain insight into PTS' perceptions about site visits, and specifically their perceptions about site visits conducted in person versus those using other communication methods. Research questions included the following: (1) Is there a relationship among PTS' level of CEE and their preference for site visit communication method? (2) Is there a difference in PTS' perceptions of the importance of the role of the site visit among those who recently participated in an in-person, telephone, or technology-assisted site visit? (3) Is there a difference in PTS' perceptions of the importance of the role of the site visit among those who prefer in-person, telephone, or technology-assisted site visit? (4) What are PTS' perceptions about site visits conducted in person, by telephone or through other technology such as videoconferencing?

### Population and Sample

Purposeful sampling from a sample of convenience was used to recruit PTS and recent graduates (within 1 year) from accredited DPT programs in 2 clinical education consortia in the Northeastern region of the United States to complete an initial survey.<sup>25,26</sup> Inclusion criteria included completion of at least one site visit conducted using any type of communication method during a full-time CEE. All PTS who completed the survey were invited to participate in an interview. This study was granted exempt status by the Institutional Review Boards of The University of St. Augustine for Health Sciences and Stony Brook University.

**Figure 2. Study Flow Diagram**



## METHODS

A mixed-methods sequential explanatory design was used for this study. Data collection was completed in 2 phases as depicted in Figure 2. In phase I, collection of quantitative and short-answer qualitative data through an anonymous online survey (Appendix A, Supplemental Digital Content 1, <http://links.lww.com/JOPT/A92>, supplemental digital content) allowed for the exploration of PTS attitudes toward site visits and their perceived level of importance of the site visit on the CEE. The survey results informed the development of an interview guide (Appendix B, Supplemental Digital Content 2, <http://links.lww.com/JOPT/A93>, supplemental digital content) for phase II of the study, in which semistructured interviews were conducted with a subsample of survey respondents to gain a deeper understanding of PTS perspectives. At the end of the survey, all PTS were invited to participate in a one-on-one semistructured interview. If they agreed, they clicked on a link that opened a new window not linked to the survey data and provided their name and contact information. Interviews were conducted in person when possible at a place and time of convenience for the PTS. Videoconferencing was used if travel was not possible. Demographic data were collected a second time via a questionnaire for

interview participants because initial survey data were not linked to their interviews.

An existing survey<sup>6</sup> was adapted with permission for this study. The original survey was reviewed for content validity by 2 experts, and internal consistency was done by calculating Cronbach's coefficients for the Likert scale questions, which was 0.72.<sup>6</sup> The adapted survey instrument was further validated by 2 experts in survey and qualitative research for content validity prior to its implementation in this study.

### Data Analysis

**Phase I.** Quantitative data from the survey were downloaded from Qualtrics to SPSS (version 22.0, Armonk, NY) for analysis. Demographic data were analyzed with descriptive statistics. A chi square test of independence was used to analyze relationships between the level of experience and the method of communication preferred for future site visits. Levels of importance of the site visit were analyzed using Kruskal-Wallis tests. Open-ended survey responses were downloaded from Qualtrics to word documents and uploaded to Atlas.ti (version 8.3.1, Berlin, Germany). Conventional content analysis<sup>27</sup> was performed on these data, which included reviewing text responses word by word and highlighting frequently used words to establish and define initial broad categories.

This was followed by more focused coding and the creation of networks during which additional subcategories were discovered and defined.

**Phase II.** A total of 12 students responded to the request for participation in a semistructured interview. Interview responses were transcribed and uploaded to Atlas.ti. Thematic analysis<sup>28</sup> and the constant comparative method<sup>29</sup> were used to identify patterns in the data and to develop themes. Data saturation was reached after the eighth interview, at which point data collection ended.

Strategies to promote trustworthiness, credibility, and transferability within the qualitative data were implemented. These included triangulation of the quantitative data from the survey and using 2 sets of qualitative data, attempts to recruit maximum variation within the sample, member checks including having each interviewee read the transcript of their interview, and creation of an audit trail (detailing account of methods/decisions made during the study).<sup>30</sup>

## RESULTS

### Phase I

The demographic data of the 135 PTS who completed the survey are illustrated in Table 1.

**Table 1. Demographics of Survey Sample**

Variable	n (%)	Mean (min/max), SD
Sex		
Male	31 (23)	—
Female	104 (77)	—
Race/ethnic origin <sup>a</sup>		
White	115 (85.2)	—
Hispanic, Latino, or Spanish	9 (6.7)	—
Black or African American	3 (2.2)	—
Asian	6 (4.4)	—
American Indian or Alaskan native	1 (.7)	—
Middle Eastern or North African	3 (2.2)	—
Native Hawaiian/other Pacific Islander	0	—
Other	2 (1.5)	—
Age, y	—	25.02 (22/38), 2.297
Years of PT curriculum completed		
Less than 1	3 (2.2)	—
One	26 (19.3)	—
Two	58 (43.0)	—
Three or more	48 (35.6)	—
Number of full-time clinical experiences completed	—	2.33 (0/4), 1.15
Number of site visits participated in	—	2.52 (1/8), 1.202

Min = minimum; Max = maximum; SD = standard deviation.

<sup>a</sup>Participants were able to select all that apply.

Most PTS were female ( $n = 104$ ; 77%), identified as white ( $n = 115$ ; 85.2%), and had a mean age of 25.02 years. Table 2 illustrates additional characteristics of the sample regarding their most recent site visit. Many PTS ( $n = 75$ , 55.6%) had site visits conducted in person, and most ( $n = 100$ ; 74.1%) indicated that they did not experience difficulties during the CEE associated with this site visit.

Table 3 presents the descriptive statistics of the survey questions pertaining to PTS perceptions about the site visit, effectiveness of communication methods, and preference for future site visits. A majority of PTS reported that the site visit was important ( $n = 82$ ; 60.7%) for evaluating student performance. Of the 3 communication methods used, many PTS ( $n = 70$ ; 51.9%) rated a face-to-face site visit as “extremely effective,” whereas telephone call and other technology were rated as “extremely effective” by a smaller number of PTS ( $n = 9$ ; 6.7% and  $n = 5$ ; 3.7%, respectively). Finally, a majority of PTS indicated that they would prefer an on-site/face-to-face visit ( $n = 97$ ; 71.9%) followed by telephone ( $n = 27$ ; 20%) and use of other

technology ( $n = 5$ ; 3.7%) for future site visits. Six PTS (4.4%) responded that they would prefer no site visit. Among the 35 PTS who reported difficulties during the CEE associated with the most recent site visit, 25 (71.4%) indicated preference for an in-person visit, 8 (22.8%) preferred telephone, and the remaining 2 PTS each preferred use of other technology and no site visit.

Table 4 illustrates responses to the stem question “How important is it for the faculty member to address each of the issues below pertaining to the overall learning experience?” The PTS were given 7 different issues in which to rate this level of importance. The 2 issues identified as “extremely important” or “important” by a combined percentage of more than 90% of PTS were *verifying competency level of the student* ( $n = 124$ ; 91.9%) and *verifying resources at the site are conducive for learning* ( $n = 129$ ; 95.6%).

Table 5 indicates PTS’ rankings about the importance of the level of interaction between the faculty member and the student, given 3 different issues. A majority of PTS ( $n = 92$ ; 68.1%) indicated that it was “extremely

important” for the faculty to meet with the student privately. There was no statistically significant relationship between the level of CEE and PTS’ preferences for future site visit communication method ( $\chi^2$  (9,  $N = 135$ ) = 7.785;  $P = .556$ ; Table 6). There were no statistically significant differences between the level of importance of the site visit in the overall learning experience and the method of communication used during the most recent site visit. Additionally, there were no statistically significant differences between the level of importance of the site visit in the overall learning experience and the method of site visit preferred for future CEEs. Combined results of both of these Kruskal–Wallis tests are found in Table 7.

Content analysis from the short-answer qualitative data collected via the survey yielded 4 categories that referred specifically to phone calls and/or in-person site visits. Category 1, *observing in person*, referenced 2 main subcategories that could be seen during an in-person site visit. Subcategory 1a, *seeing the clinical environment*, reflected thoughts about an in-person site visit allowing for observation of the site. Responses suggested the importance of viewing the site in person, although elaboration was limited to “facility” or “the site.”

*“Talking on the phone doesn’t give a good idea of the environment of the clinical. If you are sending a student into the environment, there should be some first-hand experience. You can’t expect a student to explain everything to you.”*

Subcategory 1b, *stakeholder relationships*, referred to the dynamics of the different stakeholders involved the CEE. Responses suggested that stakeholder relationships included student interactions and comfort level with the CI, patients, and others at the site:

*“I have only had the experience of face-to-face site visits. I feel this is the best way to talk to both the CI and student at the same time and get an idea about the comfortability of the student at the site as well as the relationships between the student and other providers.”*

Category 2, *communication nuances*, referred to specific characteristics of communication that were grouped into 2 subcategories. Subcategory 2a, *nonverbal communication*, was associated with in-person site visits and was mentioned in the context of being of value for different reasons, including reading body language and visualization of expressions.

Subcategory 2a appears to be closely associated with Subcategory 2b, *truthful communication*. This subcategory referred to the perception of in-person site visits facilitating more honesty compared with other methods of



**Table 2. Descriptive Statistics of Participants' Most Recent Site Visit/CEE (n = 135)**

Variable	n (%)	Mean (min/max)	SD
Level of CEE			
First	35 (25.9)	N/A	N/A
Intermediate	27 (20)	N/A	N/A
Final	60 (44.4)	N/A	N/A
Other	13 (9.6)	N/A	N/A
Clinical setting			
Inpatient- acute care	16 (11.9)	N/A	N/A
Inpatient- acute rehab	7 (5.2)	N/A	N/A
Inpatient- SNF <sup>a</sup> /subacute rehab	12 (8.9)	N/A	N/A
Outpatient- orthopedics	70 (51.9)	N/A	N/A
Outpatient- other <sup>b</sup>	12 (8.9)	N/A	N/A
Pediatrics	10 (7.4)	N/A	N/A
Other <sup>c</sup>	8 (5.8)	N/A	N/A
Number of weeks of experience	N/A	9.99(1/18)	2.744
Method of communication used			
On-site/in person	75 (55.6)	N/A	N/A
Telephone call	56 (41.5)	N/A	N/A
Use of other technology <sup>d</sup>	4 (3.0)	N/A	N/A
Difficulties experienced			
Yes	35 (25.9)	N/A	N/A
No	100 (74.1)	N/A	N/A

Abbreviations: CEE = clinical education experience; Min = minimum; Max = maximum; SD = standard deviation.

<sup>a</sup>SNF = skilled nursing facility.

<sup>b</sup>Responses included outpatient neuro, pelvic floor health, sports physical therapy.

<sup>c</sup>Responses included home health, acute pediatrics, elementary school, acute care/outpatient.

<sup>d</sup>Other use of technology included videoconferencing such as Skype, FaceTime, etc.

communication. Within these subcategories, PTS indicated that there are differences in what can be communicated in a phone call and what can be “seen” in person. Students suggested that phone calls are not necessarily depicting what is reality in the clinic and that reality can be conveyed by both truthful communication, which can be facilitated via nonverbal communication. This was reflected in the following examples:

*“Usually what is said on phone calls is much different than what actually happens. When the CI tells the DCE you see 8–10 patients a day when in reality it’s 20–28, as a student you’re not willing to cross that boundary...A lot goes under the radar in a phone call.”*

*“Eye contact is important and enhances truth.”*

Some comments specifically referenced the CI–student relationship as being more transparent with the addition of nonverbal communication:

*“With in-person visits, the DCE can clearly evaluate and assess the relationship the student has with her CI, as body language conveys the most meaning.”*

Category 3, *a phone call is sufficient*, emerged in some PTS’ responses describing feelings about using a phone call as a means of communication. Although some PTS commented simply that a phone call was a sufficient means of communicating for a site visit, others hinted that they may not be sufficient under all circumstances, as evidenced by other responses:

*“A telephone call is fine if everything is going well. If something is wrong a telephone call is not going to do anything for you.”*

*“I think if the student has communicated to the faculty advisor that there are concerns or issues then an on-site visit is most appropriate, but if everything is reported to be going well then a phone call would suffice.”*

The findings in this category appeared to conflict with the quantitative results, indicating an overwhelming preference for in-person site visits.

Finally, category 4, *privacy needed*, was mentioned as a general requirement to be met during any type of site visit, regardless of communication method. Some PTS made reference to comfort levels and the ability to express themselves freely and be truthful, which complemented the *truthful communication* in category 2:

*“I had one site where my CI insisted we chat out in the open office with other people around and I wasn’t comfortable to voice my concerns. Then I had to reach out at a later date to my professor.”*

The findings of this content analysis informed the development of the interview guide. The researchers created questions that explored a deeper understanding of the conflicting findings about student preferences for in-person site visits and other means of communication, a better appreciation of those circumstances when students perceived an in-person visit might be necessary, and clearer interpretation of what “concerns or issues” may mean to the students. The interview guide also probed for further elaboration of all 4 categories that emerged from phase I.

## Phase II

Of the 135 PTS survey respondents, 12 PTS agreed to partake in an interview. All 12 were contacted via email and asked to provide days and times of their convenience. Nine PTS responded, and 1 individual did not respond to 2 follow-up emails. No further attempts were made because data saturation was reached after 8 interviews were completed. Table 8 presents demographic information about this sample. Demographic data were consistent between this phase II sample and phase I sample who completed the initial survey sample, in terms of communication methods of site visits and levels of completion of CEEs. Three of 8 indicated that they experienced difficulties during their CEE, similar to the percentage of PTS in the survey sample who reportedly experienced difficulties.

The interview questions included prompts that were designed to provide more insight into some of the survey responses, specifically about relevance, if any, of observing in person, reasons for communication preferences, and why phone calls were perceived as sufficient. In addition, some questions solicited more information about what the overall perceptions the PTS’ had about the site visit process in order to further expand upon the closed-ended responses of the survey. Themes

**Table 3. Participants' Responses to Survey Questions Pertaining to Overall Importance of the Site Visit and Effectiveness and Future Preference of Communication Methods (n = 135)**

	Importance of Site Visit in Evaluating Student Clinical Performance <sup>a</sup>	Importance of Site Visit in Evaluating Effectiveness of Clinical Instructors <sup>a</sup>	Effectiveness of Communication Method: On-site/In person <sup>a</sup>	Effectiveness of Communication Method: telephone Call <sup>a</sup>	Effectiveness of Communication Method: Other Use of Technology <sup>a, b</sup>
Extremely important	20 (14.8)	29 (21.5)			
Important	82 (60.7)	70 (51.9)			
Neither important or unimportant	14 (10.4)	22 (16.3)			
Not very important	17(12.6)	12(8.9)			
Not important at all	2(1.5)	2 (1.5)			
Very effective			70 (51.9)	9 (6.7)	5 (3.7)
Effective			46 (34.1)	78 (57.8)	70 (51.9)
Neither effective or ineffective			13 (9.6)	27 (20.0)	44 (32.6)
Somewhat ineffective			4(3.0)	18(13.3)	14(10.4)
Not effective at all			2(1.5)	3(2.2)	2(1.5)

Shaded entries signify that no data were collected.

<sup>a</sup>Data presented as frequencies (percentage).

<sup>b</sup>Other technology included videoconferencing (such as Skype, FaceTime, etc.)

emerging from these data included the following: (1) *Site visits have a purpose*, (2) *in-person visits needed for students having difficulties*, and (3) *face-to-face communication enhances truth*.

**Theme 1: Site visits Have a Purpose.** The PTS indicated several purposes of the site visit, including checking in. More broadly, the site visit affords an opportunity to make a connection with the student to make sure that

the PTS is comfortable, expectations are appropriate, goals of the CEE are being met, and the PTS is on track to pass. Some PTS mentioned specifically the words “check in” or “check on”:

**Table 4. Participants' Ratings of Importance for the Faculty Member to Address Each of the Issues Below During the Site Visit (n = 135)**

	Verify Competency Level of the Student <sup>a</sup>	Verify Resources at Site are Conducive for Learning <sup>a</sup>	Verify Patients are Suitable to Meet Course Objectives <sup>a</sup>	Observe Student/Instructor Interactions and Teaching Methods <sup>a</sup>	Observe Student Assessing a Patient <sup>a</sup>	Answer the CI's questions <sup>a</sup>	Give Support to the CI in the CI Role <sup>a</sup>
Extremely important	63 (46.7)	70 (51.9)	48 (35.6)	51 (37.8)	23 (17.0)	48 (35.6)	42 (31.1)
Important	61 (45.2)	59 (43.7)	68 (50.4)	52 (38.5)	45 (33.3)	72 (53.3)	70 (51.9)
Neither important or unimportant	6(4.4)	5 (3.7)	16 (11.9)	22 (16.3)	42 (31.1)	13 (9.6)	20 (14.8)
Not very important	4 (3.0)	1 (.7)	1 (.7)	9 (6.7)	20 (14.8)	2 (1.5)	3 (2.2)
Not important at all	1 (.7)	0	2 (1.5)	1 (.7)	5 (3.7)	0	0

Abbreviation: CI = clinical instructor.

<sup>a</sup>Data presented as frequency(percentage).

**Table 5. Participants' Rankings of Importance of the Level of Interaction Between the Clinical Faculty Member and the Student During Site Visits (n = 135)**

	Meet With Student Privately <sup>a</sup>	Exchange Information About Student Performance/Areas in Need of Improvement Privately <sup>a</sup>	Exchange Information About Student Performance/Areas in Need of Improvement With the Clinical Instructor Present <sup>a</sup>
Extremely important	92 (68.1)	70 (51.9)	50 (37.0)
Important	33 (24.4)	52 (38.5)	54 (40.0)
Neither important or unimportant	6 (4.4)	10 (7.4)	20 (14.8)
Not very important	4 (3.0)	3 (2.2)	10 (7.4)
Not at all important	0	0	1 (1.7)

<sup>a</sup>Data presented as frequency(percentage).

“So, I feel like the site visit is always necessary to check in because then sometimes maybe students who are not realizing that something is going on—that something not happening during their clinical may not be what’s best for them or patient.”—Respondent 001.

“I think the purpose of the site visit, in my opinion is to not only check on the status of the students, not just learning but how they’re doing in a real-world environment. But check on the status of clinics and what’s being done there.”—Respondent 008.

“... when a clinical is going well and the student and the CI get along and it’s going smoothly It’s still a nice little check in and then goes really quick.”—Respondent 006.

Other PTS mentioned overall goals and expectations of the clinical:

“I think just ensuring that the student and CI relationship is going well, that there are things put in place to ensure learning such as weekly goals ... keep both sides accountable to see whether or not those kinds of learning, what’s the word .... Just to make sure that there’s some learning outside of just patient care and setting personal goals for the students.”— Respondent 007.

“So, he (the DCE) took both of our concerns or suggestions of whatever we had at the time and it was nice because we both all 3 of us then sat down and talk it through. And it was nice to also know that, I’m hoping I’m on track to pass but now you are confirming that yes, I’m on track to pass. It went well.”— Respondent 004.

**Theme 2: In-person Site Visits Needed for Students Having Difficulties.**

When asked about face-to-face site visits being necessary, all but one PTS specifically indicated that the visits were needed if a student was having any issues or difficulties at the site.

“I think it should be done in person if in previous communication, that student has expressed a displeasure or worry, something that is not going smoothly or well at their clinical and I don’t mean necessarily petty things but I guess kind of a conclusion that’s kind of difficult to tease out [to] be like, the students just being cranky or something’s actually wrong.”—Respondent 003.

When further probed about what difficulties/issues meant, some comments referenced the CI–PTS relationship, whereas others mentioned unethical behaviors occurring in the clinic:

“The only ones I can think of are the really, really extreme cases where a student is possibly going to fail the clinical or if the clinical instructor has really, you know, stepped over a line that’s not appropriate.”—Respondent 006.

“If there’s problems going on .... If there’s poor communication from the CI to a student or ethical issues that are coming up ... And granted, I think a lot of that needs to be communicated by the students ... But I do think if there are issues, it should become an [in person] site visit at some point.”— Respondent 008

“I would say the only case that this would happen would be some very unethical situation. Where either there’s some unethical billing going on, or whatnot.”— Respondent 007.

This theme builds upon the *being sufficient* category in the open-ended survey questions. Although a phone call was considered sufficient in some situations, PTS indicated that an in-person site visit was necessary under specific circumstances they further identified. It is important to note that when asked how decisions about communication methods for site visits were made, 7 of 8 PTS acknowledged that distance from campus/travel was a factor.

**Table 6. Results of Chi Square Test of Independence for Level of Clinical Experience and Preference for Future Site Visits**

Level of Clinical Experience	Type of Site Visit Preferred <sup>a</sup>			
	On-site/In person	Phone Call	Use of Technology	No Site visit
First	27 (20.0)	6 (4.4)	1 (.7)	1 (.7)
Intermediate	17 (12.6)	8 (6.0)	0	2 (1.5)
Final	45 (33.3)	9 (6.7)	4 (2.9)	2 (1.5)
Other	8 (6.0)	4 (3.0)	0	1 (.7)

<sup>a</sup>Data presented as frequencies (percentage).  
Chi square (9, N = 135) = 7.785, P = .556.

**Table 7. Kruskal–Wallis Test: Level of Importance of the Role of the Site Visit With the Grouping Variables During and Future Site Visits (n = 135)**

	H, During Site Visit	Aymp. Sig.	df	H, Future Site Visit	Aymp. Sig.	df
Verify student competence	1.541	0.463	3	3.347	0.341	2
Verify resources at the site conducive to learning	1.517	0.468		0.378	0.945	
Verify patients are suitable for meeting course objectives	2.656	0.265		2.686	0.443	
Observe student/CI interactions	0.805	0.669		4.638	0.2	
Observe student assessing a patient	0.006	0.997		5.293	0.152	
Answer CI questions	0.008	0.996		6.891	0.075	
Give support to the CI in their role	0.912	0.634		6.597	0.086	

Abbreviation: Asymp = asymptotic; CI = clinical instructor; df = degrees of freedom; Sig. = significance.  $P < .05$ .

**Theme 3: Face-To-Face Site Visits Enhance Truthful Communication.** When asked about why face-to-face site visits were preferred or necessary, PTS commented about enhanced truthful communication through the use of nonverbal communication and/or the physical presence of the DCE seeing things that could be overlooked.

*“Just easier to have like face-to-face interactions because even a phone call, you can only kind of assume the inflection, is that the word? In someone’s speech what their—just a matter of saying it whereas if you see a face that’s harder to hide emotions or expressions or whatever.”— Respondent 005.*

The PTS commented about the faculty member seeing and observing the clinical environment and interactions between the PTS and CI, suggesting that these things might be hidden without in-person interaction:

*“I think it’s very easy to even on the phone just sometimes get disconnected or who can hear whom with things like that. I think having the ability to put a face to a voice or face to a name sometimes goes a long way in how you interact with people and what you might be willing to say or things like that”—Respondent 008.*

*“The only thing that I can think of is that ... on the clinical where I did not have a great experience and have some challenges is that-- this is making kind of a leap--that my professor may have been able to see my expression that I was very uncomfortable or give some other sort of nonverbal cue that I couldn’t stay out loud.”— Respondent 006.*

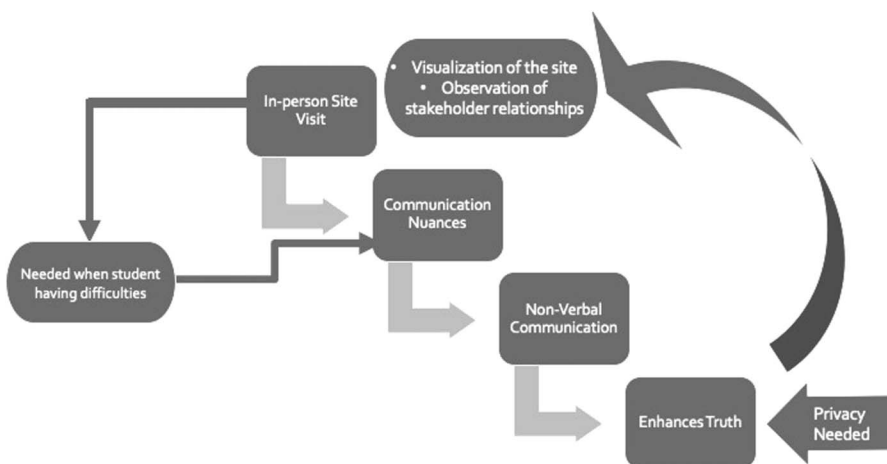
According to the PTS, the DCE’s physical presence enhanced truthful communication about the clinical environment and interpersonal interactions, as indicated in the interview excerpts below:

*“If they’ve never sent the students there before, I do think they should go and just assess the situation. They might have context, they may not, like you’ve never been there until you see it. You don’t know necessarily ... you’re relying on students be honest and truthful and have the courage to speak up that something’s not going correct. I think in person site visit would be beneficial.”— Respondent 002.*

*“If my relationship with my CI wasn’t well or we had completely different expectations or we were not able to communicate effectively, those are things again you can’t get out of a phone call. You get that out of watching the 2 interact”—Respondent 003.*

The overarching findings of both the open-ended survey questions and the semistructured interviews were the effect of nonverbal communication and how this has the potential to impact the site visit (Figure 3). Specifically, the facilitation of truthful communication, which is possible through nonverbal communication that occurs with face-to-face communication, is not available with other means of communication. The PTS further acknowledged that an in-person visit allows the DCE to observe things that would not be seen without this physical presence, such as logistics of the site as well as dynamics of the stakeholder relationships within the clinical setting.

**Figure 3. Summary of Qualitative Results**



**DISCUSSION**

This study provided a deep understanding of PTS perspectives on site visits and methods of communication used during those visits. Given the many barriers of conducting site visits, the PTS perspective offers an opportunity to consider how to efficiently use time and



**Table 8. Demographics of Semistructured Interview Participants (n = 8)**

Participant number	Number of CEEs completed	Description of site visit experiences	Progress in program	CEE settings	Reported having difficulties during a CEE
001	2	2 by phone	Completed intermediate CEE	OP orthopedics, IP SNF/SAR	Yes
002	3	“Several” in-person and by phone	Currently completing terminal CEE	OP orthopedics, AC	No
003	3	3: 2 in-person and 1 by phone	Completed terminal CEE	IP SNF/SAR, OP orthopedics	No
004	3: one was divided into 2 separate CEEs	3: in-person and by phone	Currently completing terminal CEE	IP rehab, AC, OP orthopedics, pediatrics	No
005	1	1 by phone	Completed first CEE	OP orthopedics	Yes
006	4	4 by phone	Completed terminal CEE	IP AR, IP SNF/SAR, OP orthopedics	Yes
007	2	2 in-person	Currently completing terminal CEE	AC, OP orthopedics	No
008	1	1 in-person	Completed first CEE	OP orthopedics	No

AC = acute care; AR = acute rehab; IP = inpatient; OP = outpatient; SNF/SAR = skilled nursing facility/subacute rehab.

resources to conduct productive and effective visits. This study offers the PTS perspective about the purposes of a site visit, their preferences for methods of communication and why they have these preferences, the importance of privacy, and PTS clear understanding about the impact of nonverbal communication on the site visit. Some of the findings in this study align with what is already known about other stakeholder perspectives in health science education regarding the importance of site visits.

Analysis of open-ended questions within the phase I survey revealed recurrent concepts related to the effectiveness of and preferences for in-person site visits that facilitate stakeholder relationships built upon communication nuances. Deeper qualitative analysis through thick, rich descriptions of the phase II interviews further explored, described, and supported these findings. The themes that emerged from the interviews complemented and expanded upon findings from the initial survey.

Triangulation of data from the survey, phase I content analysis, and phase II qualitative analysis supported the final themes. For example, the theme *face-to-face communication enhances truth* complemented and confirmed what was discovered in the open-ended survey questions regarding *communication nuances*, particularly nonverbal communication, and helps to explain why a majority of PTS prefer in-person site visits. Nonverbal communication delivers multiple messages, including excitement, concern, and comfort, that are important to PTS during site visits and only occur when *seeing the clinical*

*site* in person. During interviews, PTS described *site visits having a purpose*, specifically to check-in and to make sure that goals are being met. This nicely expanded upon the some of the survey findings, including the importance of privacy when speaking with the PTS, which would be a critical element for a faculty person who is checking in on a student. The PTS identified that one of the purposes of a site visit is to make sure that goals are being met. Failing to meet goals can be a significant difficulty experienced during a CEE. Therefore, an in-person site visit could have a substantial impact on a PTS who is struggling to meet their goals. Finally, triangulation revealed that PTS perceive site visits as important in general and that a site visit using any type of communication is preferable to no site visit.

**Alignment with Media Richness Theory**

From the PTS perspective, the additional cues afforded by nonverbal communication during an in-person site visit facilitate truthful communication in a way that is not possible with other means of communication. This finding is consistent with the media richness theory,<sup>22,23</sup> which suggests that face-to-face communication is the richest method of communication largely due to the nonverbal cues it offers as an additional means to convey meaning and emotion. Furthermore, PTS acknowledged that an in-person visit allows the observation of things that would not be seen without physical presence, including the logistics of the site, as well as dynamics of the

stakeholder relationships within the clinical setting. Despite these findings, a phone call was reported by some to be sufficient as a means of communication for site visits.

The qualitative results clearly support that PTS perceive in-person site visits as necessary for PTS experiencing difficulties, such as ethical dilemmas, communication problems with the CI, and the possible failure of the CEE. This finding aligns with the media richness theory, in which nonverbal communication is considered a form of high variety language with multiple cues (including nonverbal communication) and immediate feedback, and therefore appropriate for delivering difficult or ambiguous messages.<sup>24</sup> Site visits can be complex and difficult for all stakeholders involved when there are difficulties occurring in the clinic, and as such, warrant richer communication methods. The PTS in this study also expressed that site visits conducted by phone are sufficient during CEE when there are no concerns. This too aligns well with the media richness theory, as a site visit for a PTS who is performing well, without concerns, may be more routine and less ambiguous and therefore may not require the richness of nonverbal communication to convey these messages.

The ability of the faculty member to observe the relationship between the stakeholders that the PTS described also aligns with the media richness theory. According to this theory, the nonverbal communication that occurs with face-to-face communication can convey dominance, emotions, understanding, and uncertainty.<sup>22,31</sup> It is logical that PTS feel that an

in-person site visit would allow a deeper understanding of the PTS/CI relationship compared with leaner methods of communication, such as a telephone call or email correspondence. Gaining understanding of the PTS–CI relationship during a site visit occurs during conversations in which they are separated and when they are interacting together. In both situations, communication would be enriched by the nonverbal cues of a face-to-face conversation and would offer more truthful communication, as suggested by the PTS in this study. Furthermore, building a relationship between all stakeholders for the purposes of fostering a strong partnership is necessary and important when considering best practice in clinical education and excellence in physical therapy education.<sup>2,3</sup> Conducting a site visit in person allows for rich, transparent, and truthful communication to occur, delivering an element of trust. This sets a firm foundation upon which a strong partnership can prosper.

### Relevance for Future Practice

Most PTS reported that the site visit was important for verifying competency and ensuring that resources at the site are conducive for learning. These findings align with those of clinical education stakeholders in other health science disciplines who concur that clinical site visits are important and have value and purpose.<sup>6,8-11,19</sup> These are important reasons to justify using resources in order to conduct site visits during CEEs.

In-person site visits facilitate more truthful communication, largely due to the multiple nonverbal cues it affords. In addition, a majority of PTS indicated a preference for in-person communication for future site visits. This finding is consistent with the literature investigating college student preferences for communication methods.<sup>32</sup> The PTS indicated that in-person visits should be used particularly when students are experiencing difficulties in the clinical setting. Two interviewees who experienced difficulties during their CEE and did not have an in-person visit said that they wished they had but also acknowledged barriers that prevented this from happening (ie, distance, only one faculty member available to visit many students). These PTS indicated that had the visit been done in person, they would have had the ability to convey more to their DCE and that the DCE could have picked up on the CI's nonverbal communication to better interpret the situation. These findings further support that it may be more important to conduct a site visit in person when a PTS is experiencing difficulties in the clinic.

Prior research identified barriers to conducting site visits, especially those done in

person.<sup>4,7,11,13,20</sup> The results of this study indicate that PTS are aware of some of these barriers because 7 of 8 PTS acknowledged during interviews that distance from campus/travel was a factor in selecting a mode of communication. These findings may help support decision making on the most efficient means of communicating in those instances in which an in-person site visit may not be feasible. Because PTS perceive telephone calls an effective means of communication, find them adequate for conducting visits, and are aware of some of the barriers to on-site visits, using a telephone call for a site visit when barriers exist may be a satisfactory way to communicate for routine, predictable circumstances. These could include when PTS are meeting their goals and have not been identified as having any difficulties during the CEE.

There may be instances in which PTS are reluctant to self-identify problems, problems may be first revealed to the DCE during the site visit, or problems may be hidden by communicating by phone or in an environment that is not private. Similar to previous findings,<sup>8</sup> the PTS in this study reported that meeting privately with their DCE was important. In instances where a site visit is conducted by phone, it is important to ask the PTS if they are able to speak freely and honestly. If not, they should be offered another time to speak privately with the DCE to ensure truthful and transparent communication.

### Possible Use of Videoconferencing for Site Visits

Although not specifically identified by the PTS in this study, a site visit conducted with the use of videoconferencing with privacy may be a better option for site visits when an in-person visit is not possible. Although videoconferencing would offer limited views of the environment, this method of communication would provide rich, face-to-face communication due to the nonverbal and immediate communication it affords.<sup>21</sup> Many nonverbal behaviors can be communicated through videoconferencing, certainly more so than by telephone, and feedback would be immediate and in the moment. In addition, in accordance with the social presence theory,<sup>33</sup> videoconferencing would offer a sense of “realness” of a person as visualization would be possible, which is something not available through a telephone conversation. This perceived realness is dependent upon the degree of intimacy between the 2 communicators and is influenced by both physical distance and nonverbal communication.<sup>34</sup> Each of these factors can affect the way a person acts when engaged in communication. In-person visits

provide the least distance between the stakeholders and the most nonverbal communication compared with other methods of communication and therefore may better capture the dynamics of the stakeholder relationship, something identified as important in this study. This may also be accomplished to an extent if videoconferencing were utilized for the site visit because technology adds a degree of perceived realness in the absence of in-person physical presence. Using videoconferencing could be an efficient alternative to using a telephone for a site visit and especially when an in-person visit is not possible. Videoconferencing can be an effective means of conducting site visits and may be currently underutilized. This may be an area for further investigation.

### Limitations

This study included a small sample of PTS from one geographical region and limited representation of men and persons of color. According to national statistics, 62% of students enrolled in DPT programs are women and 25.4% identify as minority.<sup>35</sup> It is unknown how many DCEs distributed the survey link and subsequent reminders to their PTS and therefore could have limited sample size. Future research could investigate larger geographical regions, which would potentially recruit a more diverse sample. Those who volunteered to partake in the interviews may have been biased toward preferring face-to-face communication, or conversely, those who did not prefer face-to-face communication may have been reluctant to participate in an interview. It is possible that statistical results were affected by the small number of PTS who chose “other technology” and “no site visit” and the large number who chose face-to-face as a preference for future visits. It is also possible that because many PTS who took the survey experienced a telephone call or in-person site visit, their preferences for future visits may have been biased and/or that nonverbal communication afforded by an in-person visit was valued regardless of their prior experiences.

### CONCLUSIONS

This study examined PTS' perceived value of an in-person site visit. The PTS valued nonverbal, truthful, genuine communication during an in-person site visit. Although PTS acknowledged that phone calls are sufficient if there are no difficulties during the CEE, they expressed that in-person site visits are necessary for PTS who are struggling and that they prefer future site visits to be conducted in person. Truthful, transparent communication is a necessary element of successful partnerships, and as such, a site visit can serve as a

strategy to promote partnerships in physical therapy clinical education. Findings of this study should be compared with other stakeholders involved in this partnership. This study offers evidence that may be helpful in establishing recommendations for site visit communication methods for physical therapy education and for other health science professions that have a clinical education component.

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