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## Clinical Instructor and Student Reports of Affective Behavior Issues During a Clinical Experience

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## Clinical Instructor and Student Reports of Affective Behavior Issues During a Clinical Experience

### Abstract

**Purpose:** Clinical Instructors (CIs) have optimal opportunity to support non-cognitive attributes while observing and assessing student interactions with staff and patients because of the time spent with their students. There is a dearth of literature related to how items in the professional practice section of the Clinical Performance Instrument (CPI) are truly addressed during a clinical affiliation. Therefore, the purpose of this study was to record the occasions when lapses occur with respect to a student's accountability, communication, or professional behavior, as well as assessing student and CI interpretations of how these instances were addressed, and subsequently corrected within the context of the clinical education experience and the student-CI dynamic. **Methods:** The sample for this study was drawn from four Doctor of Physical Therapy (DPT) programs located in the northeast region of the United States. Participants were recruited for the study with the assistance of each program's Director of Clinical Education (DCE). After a "pre-survey," both CIs and DPT students were sent the primary survey for 10 consecutive weeks via a text message to their personal smart phone. The 10-week survey corresponded with the last 10 weeks of the clinical experience for all CI/DPT student pairs. The primary survey asked both CIs and students whether a lapse in student accountability, communication, and/or professional behavior occurred in the given week and how the issue was addressed. **Results:** There were five instances where a student indicated that their CI addressed accountability, communication, or professional behavior with them regarding their patient care. In contrast, 3 clinical instructors reported instances where one of the attributes had to be addressed. **Conclusion:** The study concluded that students in their second or third affiliations were adequately prepared regarding accountability, communication, and professional behavior. However, a secondary conclusion may indicate that CIs are reticent to address non-cognitive behaviors because they may not equate them with the student's ability to render effective care.

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### ABSTRACT

**Purpose:** Clinical Instructors (CIs) have optimal opportunity to support non-cognitive attributes while observing and assessing student interactions with staff and patients because of the time spent with their students. **Currently**, there is a dearth of literature related to how items in the professional practice section of the Clinical Performance Instrument (CPI) are truly addressed during a clinical affiliation. Therefore, the purpose of this study was to record the occasions when lapses occur with respect to a student's accountability, communication, or professional behavior, as well as assessing student and CI interpretations of how these instances were addressed and subsequently corrected within the context of the clinical education experience and the student-CI dynamic. **Methods:** The sample for this study was drawn from four Doctor of Physical Therapy (DPT) programs located in the northeast region of the United States. Participants were recruited for the study with the assistance of each program's Director of Clinical Education (DCE). After a "pre-survey," both CIs and DPT students were sent the primary survey for 10 consecutive weeks via a text message to their personal smartphone. The 10-week survey corresponded with the last 10 weeks of the clinical experience for all CI/DPT student pairs. The primary survey asked both CIs and students whether a lapse in student accountability, communication, and/or professional behavior occurred in the given week and how the issue was addressed. **Results:** There were five instances where a student indicated that their CI addressed accountability, communication, or professional behavior with them regarding their patient care. In contrast, 3 clinical instructors reported instances where one of the attributes had to be addressed. **Conclusion:** The study concluded that students in their second or third affiliations were adequately prepared regarding accountability, communication, and professional behavior. However, a secondary conclusion may indicate that CIs are reticent to address non-cognitive behaviors because they may not equate them with the student's ability to render effective care.

**Keywords:** affective behavior, accountability, clinical experience, communication, professional behavior

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## INTRODUCTION

Within a physical therapy curriculum, the main charge of the CI is to guide the student toward entry-level practice by supervising and mentoring in the clinical environment. The clinical education experience is an important aspect of the maturation process because it adds to the evolving professional identity of the student.<sup>3</sup> The Clinical Performance Instrument (CPI) focuses on critical clinical skills that lead to overall clinical competency and consists of 18 performance dimensions. Each of these performance dimensions includes a set of illustrative “sample behaviors” that demonstrate essential, or core performance behaviors that define mastery of the dimension, and are expected of a well-prepared, professional clinician.<sup>3</sup>

The eighteen performance dimensions on the CPI are divided into those capturing non-cognitive, affective behaviors (Professional Practice section) and those relating to cognitive and psychomotor clinical skills (Patient Management section). Included in the performance criteria are five red flag performance items that represent “foundational elements in clinical practice”.<sup>3</sup> According to the American Physical Therapy Association (APTA), any red flag item that is identified as deficient by the CI indicates significant concern for the student and may result in a failed clinical experience.<sup>3,4</sup> The red flag items identified in the CPI are safety, professional behavior, accountability, communication, and clinical reasoning. Utilizing the APTA’s core values and generic abilities statement from the *Normative Model of Physical Therapist Education*, the three red flag items from the CPI that were assessed in this investigation are accountability, communication, and professional behavior.<sup>4,5</sup>

The three performance dimensions of accountability, communication, and professional behavior are clearly defined in the core values document, *Professional Behaviors for the 21<sup>st</sup> Century*, and the CPI.<sup>3,6</sup> Since the CPI is the primary form of assessment for students in a clinical affiliation, it was decided by the current investigators that these three attributes would be utilized as the assessment tool of this investigation regarding how affective behavior issues are addressed by CIs. The primary question that will be answered is “How are affective behavior issues addressed during a DPT student’s clinical education experience with respect to a student’s accountability, communication, and professional behavior?” These behaviors have been presented in alphabetical order without any intention of preference or ranking as defined by the CPI.

### Accountability

Accountability is a representative value under the construct of professionalism. Physical therapists and other health care providers are accountable to many different parties: patients, health care organizations, other professionals, the government, and “third-party” payers. Professional accountability is one of the primary accepted behaviors upon which professionalism is based in the physical therapy profession as well as other professions.<sup>7</sup> Some of the behaviors from the CPI describing accountability include placing the patient’s needs above self-interests, abiding by policies and procedures of the clinical setting, and striving to provide patient services that go beyond the standard of practice.<sup>3</sup>

### Communication

Communication has been defined as the most important aspect of practice that health professionals must master, and an essential requirement underpinning any successful practitioner-patient encounter.<sup>8</sup> It is important to consider not only what is being said, but also the way it is conveyed, as communication traditionally incorporates verbal and nonverbal behaviors. The profession of physical therapy utilizes verbal communication for the transference of information or instruction as well as for conveying empathy, an essential skill to establish the relationship between clinician and patient.<sup>8</sup> Some of the sample behaviors from the CPI describing optimal communication include selecting the most appropriate person(s) with whom to communicate, listening actively and attentively to others, and adjusting style of communication depending on audience.<sup>3</sup>

### Professional Behavior

Professional behaviors are identified as a process by which students acquire and develop requisite knowledge, skill, aptitude, and attitude necessary for a successful transition into their selected profession.<sup>7</sup> It requires a foundation of clinical competence, paramount communication skills, and a strong understanding of ethics and law.<sup>9,10</sup> Some of the sample behaviors from the CPI describing professional behavior include demonstrating initiative, demonstrating behaviors that contribute to a positive work environment, and valuing the dignity of patients as individuals.<sup>3</sup>

The scholarly literature has revealed several articles that are related to the integration of non-cognitive behaviors into the academic portion of a DPT curriculum, as well as varying viewpoints regarding the facilitation of these same behaviors during clinical experiences. A student who lacks understanding and refinement with their affective behaviors is a problem that CIs identify as being difficult to retrain and overcome, more so than any other deficit that is related to a student’s patient management skills.<sup>11</sup>

## REVIEW OF LITERATURE

Within any clinical environment, CIs are tasked with supervising DPT students through the cognitive, psychomotor, and affective domains of learning. Cognitive and psychomotor skills relate to patient management, while affective behaviors more specifically relate to professional practice. However, because of the primary emphasis that is placed on patient management, values related to the affective domain of learning and professional practice are sometimes devalued.<sup>1,2</sup>

Any weaknesses associated with patient management are often identified and remediated quickly and efficiently. However, when non-cognitive attributes such as accountability, communication, or professional behavior need to be addressed, there appears to be a degree of reticence on the part of the instructor.<sup>1,2</sup> A survey of physical therapist employers highlighted the importance of professional behaviors.<sup>12</sup> It was revealed that employers more highly value clinicians who understand the importance of those behaviors over those with superior clinical skills.<sup>12</sup> The authors concluded that employers place more value on respectful employees who can communicate effectively with all stakeholders, and place less value on individuals with inadequate social skills possessing excellent patient management capability.<sup>12</sup>

The professional maturation of a DPT student is very much dependent on his or her participation in activities that promote and facilitate their affective behaviors. Within the context of the clinical education experience, the CI plays an important role in cultivating those behaviors. A CI nurtures and develops a student's skills and behaviors related to patient care, as well as those behaviors related to professional practice.<sup>6</sup> However, in some instances, CIs have reported that the expected behaviors related to professional practice are not necessarily being displayed during the clinical education experience.<sup>12</sup>

In a past study conducted by Hayward et al, a comparative survey that was administered to CIs and DPT students exposed divided opinions regarding professional behaviors.<sup>13</sup> The results revealed that DPT students do not share the same structured expectations as do CIs with regard to professional behaviors, and the presence of this divide is most notably seen in today's generation of students.<sup>13</sup> In addition, there are differences that also exist amongst CIs regarding the instruction and assessment of the Clinical Performance Instrument (CPI) performance dimensions that relate to "*professional practice*" (Safety, Professional Behavior, Accountability, Communication, Cultural Competence, Professional Development) because CIs tend to rely on their own personal expectations when it comes to affective qualities and traits that are imprecise and vague.<sup>2,13</sup> One of the reasons ascribed to this inconsistency is that attributes in the affective domain of learning are relational in nature, and **these** non-cognitive traits make them very difficult to teach and assess.<sup>2,13</sup>

The review of literature related to health care education reveals that it is appropriate for either a qualitative or quantitative approach when assessing attributes that exist in the affective domain.<sup>14</sup> This descriptive cross-sectional survey utilized a qualitative approach employing the benefits of phenomenological research to provide thoughtful representations of the different lived experiences from each of the participants.

There is a lack of literature related to how items in the professional practice section of the CPI are truly addressed during a clinical affiliation. Therefore, the purpose of this study was to record the occasions when lapses occur with respect to a student's accountability, communication, or professional behavior, as well as assessing student and CI interpretations of how these instances were addressed and subsequently corrected within the context of the clinical education experience and the student-CI dynamic.

## METHODS

### Participants

A purposeful sampling strategy was employed for this study. The sample for this study was drawn from four DPT programs located in the northeast region of the United States. Participants were recruited for the study with the assistance of each program's Director of Clinical Education (DCE) or a respective faculty member. The program DCE or other faculty members presented the opportunity to participate in the study by email. Students indicated their willingness with an email reply. Once a student demonstrated interest in participating in the study, their CI was contacted to see if they would be interested as well.

The primary inclusion criteria for each institution were that they were fully accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), and they must employ an Integrated Clinical Experience (ICE) model. The ICE model requires students to participate in scheduled part-time clinical experiences in various clinical environments (outpatient, acute, subacute, etc.) during the didactic phase of the curriculum, providing foundational experience and preparation for full-time clinical experiences that occur later in the curriculum.

Fourteen DPT student-CI pairs (28 participants in total) were recruited for participation in this study. Secondary to attrition, 13 Students and 12 CIs progressed to the main, 10-week survey that assessed how accountability, communication, or professional behavior was addressed and then corrected during those 10 weeks. Students and CIs filled out their surveys independently.

In Week 10 of the study, additional questions were posed to the 13 students that asked whether they felt the CI was effective overall in addressing affective behavior lapses during the rotation. Eleven of 13 included students responded to these additional questions.

Students were included if they were in “good academic standing”, had completed at least two clinical education experiences, and were familiar with the Sample Behaviors from the CPI. Good academic standing was defined by having successfully completed (according to standards set forth by the DPT program and university) all previous didactic and clinical experience courses. Students were excluded from the study if they were not in good academic standing in their respective programs. The initial request to participate, via the Pre-Survey, was sent to 14 students; but one student failed to respond and was excluded from the study. Of the 13 students included, 10 were APTA members.

Inclusion criteria for CIs required each participant to have a current and valid PT License in the state in which they practiced and have familiarity with the Sample Behaviors of the CPI. The CIs were employed at several health care facilities in the region surrounding the involved DPT programs.

### Procedures

Prior to the primary survey designed to address affective behaviors, a pre-survey was sent to clinical instructors collecting data on items such as APTA membership, highest degree maintained, number of years as a clinical instructor, number of students supervised on full-time clinical experiences, and whether the CI was an APTA Credentialed CI or had an APTA Specialist certification (OCS, SCS, etc.) (Table 1). Surveys were sent to participants' personal smartphones via text message after receiving consent.

**Table 1:** Clinical Instructor Characteristics

Clinical Instructors	
APTA Members (n = 12)	5/12
Credentialed Clinical Instructors (n = 12)	6/12
Specialty Certification (n=12)	1/12, OCS = 1
Highest Degree (n = 12)	6 DPT, 3 Bachelor's, 3 Master's
Number of Years as Clinical Instructor (n = 8)	Range = 1-38 years, Median = 5 years
Number of Students Supervised on Full-Time Experience (n = 6)	Range = 2-20 students, Median = 5

A pre-survey was also sent to students to assess APTA membership, and the number of full-time clinical experiences already completed. This was also sent via text message to participants smartphones after receiving initial consent.

The CI sample included 12 PTs with varying years of experience with professional practice and student supervision (Table 1). The initial request to participate via the Pre-Survey was sent to 14 CIs but one CI failed to respond, while another declined Consent. Of the 12 CI's who participated, 3 CI's gave incomplete data on the Pre-Survey pertaining to their experience as a CI. Namely, the 3 CIs did not report on their number of years serving as a CI, or the total number of students supervised to date for full-time clinical experiences. This discrepancy is taken into consideration in Table 1.

In addition, 2 CIs supplied vague answers when reporting the number of full-time clinical experience students supervised, with one answering “at least 30” and another responding, “can't count”. Finally, 1 CI gave vague answers for both their number of years as a clinical instructor and the number of students supervised. None of the vague answers were counted in the final tally of those respective categories in Table 1.

A weekly electronic survey questionnaire served as the primary data collection tool for this investigation. The survey questionnaire, for both CIs and students, was piloted along with the processing steps that comprised the nature of the survey. The feedback that

was generated by this piloting resulted in some minor changes in some of the questions as well as in the mechanics of how the survey should progress. Three red flag items from the professional practice section of the Clinical Performance Instrument (CPI) (accountability, communication, and professional behavior), were utilized to create the conceptual framework around which the survey questionnaire was constructed. The primary survey asked both CI and student whether a lapse in student accountability, communication, and/or professional behavior had occurred in the given week and how the issue was addressed. Once the informed consent was signed, the survey link was sent via text message directly to the CI and student participants' personal mobile phones at approximately mid-day each Friday during 10 consecutive weeks of the clinical experiences.

**Figure 1.** Primary Survey Questions for CIs and DPT Student

<b>10-Week Primary Survey: Clinical Instructor (CI) Questions</b>	
1.	Did you have to address an issue with your student today regarding accountability, communication, or professional behavior?
2.	(If CI responded "Yes", continued to additional questions below)
3.	Which attribute did you have to address?
4.	How did you evaluate your student's behavior that led you to believe it needed improvement?
5.	What did you do to instruct the student in order to improve his or her behavior?
<b>10-Week Primary Survey: Student Questions</b>	
6.	Did your clinical instructor have to address an issue with you today regarding accountability, communication, or professional behavior?
7.	(If CI responded "Yes", continued to additional questions below)
8.	Which attribute was addressed?
9.	How did your clinical instructor evaluate your behavior that led them to believe it needed improvement?

Included in Week 10 of the primary survey were additional summary questions posed only to students to assess whether they believed, in general, their CI utilized the CPI sample behaviors in addressing affective behaviors, and if they believed their CI was generally effective in addressing affective behaviors (even if a specific lapse was not observed by either party). See Figure 2 for the Week 10 additional questions.

**Figure 2.** Week 10 Additional Survey Questions for Students

<b>Week 10 Additional Questions for Students</b>	
1.	For the entirety of this affiliation, did your CI utilize the model behaviors from the CPI in evaluating your accountability, communication, and professional behavior? If not, please explain why.
2.	For the entirety of this affiliation, do you feel your clinical instructor effectively evaluated and instructed you on the red flag items of accountability, communication, and professional behavior?
3.	Please elaborate on why you answered Yes or No in the previous question.

Since some open-ended questions were included in the primary survey and additional Week 10 survey distributed to students only, some qualitative analysis of the responses was required. The analysis was completed according to Creswell.<sup>15</sup> All open-ended survey responses were given an initial review to get a general impression of participants' thoughts. The next step incorporated re-reading the answers and sorting the data with individual notations and comments, eventually leading to the grouping of comments into individual categories.

## RESULTS

The CI sample included 12 PTs with varying years of experience with professional practice and student supervision (Table 1). The initial request to participate via the Pre-Survey was sent to 14 CIs but one CI failed to respond, while another declined Consent. Of the 12 CI's who participated, 3 CI's gave incomplete data on the Pre-Survey pertaining to their experience as a CI. Namely, the 3 CIs did not report on their number of years serving as a CI, or the total number of students supervised to date for full-time clinical experiences. This discrepancy is taken into consideration in Table 1.

During the affiliation, there were eight instances overall where a student or a clinical instructor reported that accountability, communication, or professional behavior needed to be addressed. Student participants accounted for five of these instances, while CIs reported 3 instances. Three of the five student responses identified communication as the attribute that required further instruction. while there was one instance of a lapse in both professional behavior and accountability respectively. The five student-

reported responses are in Table 2 and labeled as Student A-E. Table 2 data includes the affective item addressed (accountability, communication, professional behaviors) and the specific behavior **demonstrated**.

**Table 2.** Student Reports of Affective Behavior Lapses

Student Participant	Affective Behavior Item	Specific Behavior
Student A	Communication	Responding appropriately to a “rude” patient asking for services not consistent with evidence-based practice and/or scope of practice
Student B	Communication	Insufficient subjective questioning to begin a session to assess patient current status
Student C	Communication	Tailoring communication to patient “personality”
Student D	Professional behavior	Insufficient “customer service” when dealing with a patient
Student E	Accountability	Insufficiency in note writing by failing to include changes in objective measure improvement

Regarding student reports of communication deficiency, Student A commented that instruction from their clinical instructor had to do with communicating effectively with all stakeholders when the patient’s expectations for PT were not in line with the scope of practice:

*“We discussed how to approach a difficult conversation for a patient who wants a “once a month massage” and became rude about needing an evaluation. We discussed communication tactics with the patient, how to speak to a supervisor and how to address this case with an insurance company.”*

Student B reported a situation where a lack communication at the beginning of a session was addressed by their CI:

*“My CI instructed me to ask more questions when a patient first arrives to a session after seeing me not ask enough.”*

The lone report of a professional behavior deficiency reported by a student was described vaguely as what the CI deemed to be “unacceptable customer service”. The one report of an accountability lapse reported by a student related to the student documenting insufficiently. The student reported that this had to do with using objective measures appropriately to show skill and patient progress:

*“He instructed me to be more objective in my assessments. EX: Write “shoulder ROM improved by x amount without pain” vs “painfree ROM improved with [intervention]”*

Data from clinical instructor-reported student affective behavior lapses included three instances all categorized under communication. CI reported responses (Clinical Instructor A-C) **included** affective item addressed (accountability, communication, professional behaviors), the assessment method used to identify the deficiency, and the method employed to correct the deficiency are summarized in Table 3.

**Table 3.** Clinical Instructor Reports of Affective Behavior Lapses

Clinical Instructor Participant	Affective Behavior Item	Assessment Method	Deficiency Addressed	Correction Method
Clinical Instructor A	Communication	Observation while student was educating patient	Insufficient confidence when communicating and providing appropriate patient education	Role playing after patient hours
Clinical Instructor B	Communication	Observation of interaction and communication with patients	Suboptimal “phrasing and wording” to provide “carry over” with patients	Provided examples apart from patients
Clinical Instructor C	Communication	Observation during an initial evaluation	Insufficient communication with family regarding recommendations	“Modeling” for proper methods, role playing at end of next initial evaluation

Clinical Instructor A remarked that the lapse in communication with their student involved a lack of confidence when providing education to their patients, and that this was addressed with immediate constructive feedback following patient care time:

*“We had a conversation regarding ways to improve confidence and provide appropriate education for patients. We practiced once patients were no longer in the clinic through role playing.”*

In contrast, the communication issues identified by Clinical Instructor B, had more to do with words chosen to promote patient understanding when they remarked that they intervened with the student’s “phrasing and wording to [promote] carry over with patients”. The CI reported that their method to intervene was “privately provided examples” away from patient areas.

Finally, Clinical Instructor C addressed an issue with the student’s education of family members. Like Clinical Instructor A, this CI practiced this with the student through role-playing:

*“Provided feedback and modeling on proper communication with families regarding recommendations, then had her practice on me and at the next evaluation.”*

Included in Week 10 of the primary survey were additional summary questions only to students to assess whether they believed, in general, their CI utilized the CPI sample behaviors in addressing affective behaviors, and if they believed their CI was generally effective in addressing affective behaviors (even if a specific lapse was not observed by either party) (Figure 2). Eleven of the 13 students included in the primary survey responded to these questions and all indicated that their CI was effective in addressing their affective behaviors.

One strategy that was utilized by CIs to address and correct affective behaviors identified by the students came in the form of setting expectations and formal goals and then following up on these during the review of the CPI. This is evidenced by the following illustrative quotes:

*“Through weekly goal sessions we discussed areas of strength and improvements. This was confirmed with midterm and final CPI checks.”*

*“We reviewed the CPI areas and what my CI considers good communication, accountability, etc. at the beginning, middle and end of the affiliation during the CPI review.”*

Another method that was identified by the students was the simple demonstration of desired behaviors by their CI which led to easier modeling on the part of the student as evidenced by the following quotations:

*“She demonstrated it herself and emphasized how important each behavior is in clinical practice and how it affects patient outcomes.”*

*“My CI not only took the time to discuss my professional behavior with me, but he modeled these behaviors all the time.”*

Other quotations from students indicated that discussing appropriate affective behaviors more frequently was helpful in maintaining overall professionalism:

*“We had daily conversations about patients and the caseload. We talked regularly about professionalism, communication styles and accountability.”*  
*She gave me any advice/pointers she thought I needed through my time here and it was always helpful.*

## DISCUSSION

The development of non-cognitive attributes such as accountability, communication, and professional behavior, is directly related to a student's immersion within a clinical environment during the clinical education experience.<sup>16</sup> A CI who exhibits a superlative skillset related to communication, accountability, and professional behavior has a much better opportunity of facilitating those attributes in a student as opposed to a CI who is not as fluent in those same traits.<sup>16</sup> This was evident in the additional questions posed to students in Week 10 of the study. Even though all students said their CI was effective in addressing affective behaviors, several specifically mentioned that their experience seemed to be related to the CIs personal expectation regarding professionalism and other non-cognitive attributes. When asked to elaborate on why students thought their CI was effective overall in addressing affective behaviors, students provided comments such as “She is always professional...”, “She demonstrated it herself...”, and “...he modeled these behaviors all the time”.

Evaluating unprofessional behaviors can be very challenging for a CI. In many health professions, there is a “failure to fail students” mentality in which the CI either feels unprepared or unwilling to fail a student who demonstrates an unsatisfactory performance.<sup>17</sup> Some of the barriers that exist with reference to the evaluation of an unsatisfactory performance include the instructor's consideration of professional implications such as workload, fear of litigation, or personal considerations such as guilt, consideration of the student's feelings and impact, or simply lacking the confidence or experience in evaluating a student's performance.<sup>17</sup>

In agreement with recent research concerning the teaching of Generation Z students, our student survey responses confirmed that setting goals and expectations related to affective behaviors may be of benefit by setting an early foundation for professionalism expectations.<sup>18</sup> First, setting expectations provides students with a “target” level of professionalism that they can attempt to emulate.<sup>18</sup> Secondly, setting expectations early, especially if done formally in writing or by other means, may alleviate CI “guilt” and justify a decision to fail a student since all parties agreed on what constitutes adequate affective behaviors that support passing the experience from the beginning.<sup>18</sup> In this study, students commented that their comfort with affective behavior targets was increased when discussed as expectations early in the experience, during creation of weekly goals, and during the midterm CPI.

Lastly, it is postulated that CIs may be finding it increasingly difficult to effectively interact with today's students—Generation Z. This generation of students experiences social interactions quite differently than previous generations.<sup>18,19</sup> Due to the increased access and exposure to technology in their lifetime, Generation Z has been shown to have different affective behaviors as opposed to previous generations.<sup>18</sup> One such quality that is commonly mentioned is their underdeveloped personal face-to-face interactional skills. A behavioral deficit such as this can negatively impact the student-CI relationship, as well as ultimately impacting patient care.<sup>18, 20</sup>

The novel attribute that is unique to Generation Z is that they truly rely on immediate gratification.<sup>21</sup> This is secondary to these students having immediate information and answers in the form of smartphones, Google, Wikipedia, and YouTube for the entirety of their lives.<sup>18, 21</sup> With this knowledge and understanding, it makes sense for a CI to utilize immediate constructive feedback as their primary instructional tool during the clinical educational experience.<sup>22</sup> Additionally, the concept of role modeling has always been considered an important part of the clinical education experience because most behaviors, regardless of the learning domain, are learned by imitating others.<sup>22</sup> Based on the character traits that are inherent in the Gen Z student, it seems like positive role modeling remains an outstanding technique for the transference of professional values and attitudes. As discussed in the section that addressed CI reported communication lapses, modeling and role playing seemed to be a common strategy used by all of the CIs.

As discussed earlier, it appeared that student participants in this study benefited from setting early expectations and goals related to their affective behaviors. This corresponds with recent research by Lerchenfeldt et al that explored effective teaching strategies

with Generation Z.<sup>18</sup> The study suggested that secondary to a lack of self-directed learning in these students, goals should be “scaffolded” to provide small steps to larger learning objectives.<sup>19</sup> Based on these learning beliefs, students on clinical experiences should not only be made aware of larger affective behavior goals expected by the experience’s end, but collaboratively (with help from the CI), create short-term steps toward these through a weekly goal creation process.

It appears that the intrinsic personality traits of the Gen Z student create communication deficits with the CI, thus producing barriers to broaching deficiencies in affective behaviors, giving pause to the CI as the student may consider any level of criticism a form of shaming.<sup>17</sup> Based on the findings from this study it is advisable to further investigate how the CPI addresses accountability, communication, and professionalism as affective skills, and it is recommended that the Sample Behaviors of these CPI categories be revisited and reviewed. To conclude, the initiation of further research on effective Generation Z communication strategies in any health discipline setting may provide additional guidance and instruction on how and when to address these types of deficiencies.

### **Limitations**

Limitations of the study included issues that dealt with methodology and survey design. The first limitation involved the method by which student/CI pair responses were tracked. Due to the anonymous nature of the survey, and the fact that student/CI pairs completed the weekly survey individually, there was no way to match a given student report of a lapse in accountability, communication, or professional behavior with that of a CI. In other words, we could not determine whether any given incident reported individually by a student, or a CI was the same incident being reported by both parties.

The second limitation involves the self-reporting nature of the study. Even though self-reporting is a relatively simple way to collect data at low cost, there are also some disadvantages. Self-reported answers may be exaggerated by the participant, or the participant may be too embarrassed to acknowledge the actuality of the event. In the case of this study, students may have been reticent to acknowledge a deficiency during their clinical education experience. The next limitation deals with the small sample size of the study. Small sample sizes can lead to a lack of generalizability, meaning the findings may not be representative of a larger population. The final limitation involves the development of the surveys used in the study. Only the primary survey was pilot tested, and this was completed with just one student and CI. Because the surveys were unique to our study, their reliability and validity come into question.

### **CONCLUSION**

This study concluded that students in their second or third affiliations were adequately prepared with respect to the attributes of accountability, communication, and professional behavior as evidenced by the low response rate of both CIs (3 instances) and students (5 instances). However, a secondary conclusion, as previously reported by Hayes<sup>2</sup>, indicates that CIs are reluctant to address assessable non-cognitive attributes because they do not equate them with a student’s ability to render effective care or that they may have reservations about confronting a student with respect to their communication skills or their professional behaviors. These skills reside in the affective domain of learning and are typically difficult to quantify.<sup>12,23</sup>

Also evident from the student and CI responses is that close proximity observation is the best method of evaluation for these behaviors, particularly communication, and that immediate constructive feedback provided privately and away from the patient proved to be the most effective means of instruction. In agreement with a previous study exploring affective behaviors in DPT students,<sup>22</sup> role modeling was a common and seemingly effective method of instruction to improve DPT student affective behaviors.

According to the literature, communication is the most important non-cognitive trait for a physical therapist, and the most difficult attribute for a student to master.<sup>22</sup> This is especially noteworthy for Gen Z students who prioritize one-on-one communication and have a need for immediacy when it comes to receiving feedback. Immediate constructive feedback aids the Gen Z student with their face-to-face interactional skills, as well as providing them with an in-the-moment response, which is something they desperately need.

### **RECOMMENDATIONS**

As discussed previously, it appears that the student participants in this study were aided by setting early expectations and goals related to their affective behaviors. This finding corresponds with recent research by Lerchenfeldt et al that explored effective teaching strategies for Gen Z students.<sup>18</sup> The study suggested that due to a lack of self-directed learning, a student’s goals should be “scaffolded”, with gradual progression to larger learning objectives.<sup>18</sup> Based on these learning principles, students on clinical experiences should not only be made aware of larger affective behavior goals expected by the experience’s end, but collaboratively (with help from the CI), create short-term steps that advance toward these through a weekly goal creation process.

Secondly, it appears that the intrinsic personality traits of the Gen Z student create communication deficits with their CI, thus producing barriers to broaching deficiencies in affective behaviors. Along with previously documented reasons why CIs may not give affective behavior feedback to students<sup>2</sup>, the unique aspects of how Gen Z interprets communication may give additional pause to CIs secondary to fear of their feedback being interpreted as “shaming”.<sup>17</sup> Based on the findings from the study it is advisable to further investigate how the CPI addresses accountability, communication, and professionalism as affective skills, and it is recommended that the Sample Behaviors of these categories be revisited and reviewed. To conclude, further research on effective Gen Z communication strategies in all health disciplines may provide additional guidance and instruction on how and when to address these types of deficiencies.

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