

## Musculoskeletal Faculty Beliefs about the Therapeutic Relationship



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### ABSTRACT

**Introduction.** Contextual factors like the therapeutic relationship (TR) are shown influence patient outcomes, sometimes more so than specific physical therapy interventions when treating musculoskeletal (MSK) pain. However, physical therapists are often unaware or lack the skills to develop a TR. This lack of competence appears partly from inadequate entry-level education training. Considering that teacher beliefs play a substantial role in what and how content is taught, having an awareness of these beliefs may provide a deeper understanding of this problem. Fourteen MSK faculty from different physical therapy programs with varying levels of teaching and clinical experience. This basic qualitative design explored physical therapy MSK faculty's beliefs regarding TR using semi-structured interviews. Inductive thematic analysis focused codes and categories into themes. Emergent themes helped answer the study's research questions. Participants' perceptions of the TR were more detailed than others, but all fell within the confines of the conceptual framework. All believed that therapists needed to be intentional in developing a TR and should be considered a top priority when treating patients with MSK pain. All participants integrated the TR into the MSK curriculum at varying levels. Participants' understanding of pain science and the perceived importance of contextual factors like the TR led to an evolution in their curriculum. Participants reported decreasing the emphasis on specific factors while increasing the emphasis on the TR. Participants reported replacing specific factor content with teaching activities for the TR. These changes appear to be an appropriate response to what the evidence suggests about the TR's impact on MSK pain. However, it is uncertain whether these changes are mainstream or sufficient to improve physical therapists' abilities in this domain.

**KEYWORDS:** Physical therapy education, teacher beliefs, therapeutic relationship, contextual factors.

### I. INTRODUCTION

Being skilled in the affective domain of the physical therapy encounter is paramount. It is becoming more evident that managing musculoskeletal (MSK) pain is much more nuanced than once thought due to a host of contributory factors beyond the physical body. Enhanced communication and interpersonal skills allow the therapist to develop a positive therapeutic relationship (TR) with the patient, leading to larger treatment effect sizes and more significant positive outcomes.<sup>1,2</sup> Unfortunately, the literature indicates that physical therapists are not fully competent in these skills and some cases, unaware of their importance when treating the MSK pain patient population.<sup>3,4</sup> Many, if not most MSK providers, still hold a biomedical perspective to patient care, so being effective with these skills or recognizing their importance may not be appreciated.<sup>5,6</sup> Without an acute awareness of the TR's importance when treating patients with MSK pain, the physical therapist has little reason to acquire or refine these skills. A lack of competence in these affective skills or awareness of their importance could negatively impact patients' prognoses and impede physical therapy's ability to curtail the pain pandemic.

Teaching and learning these specific skills to develop an effective TR should start in entry-level education.<sup>7</sup> Physical therapists' reports of inadequate competence in the skills required to develop a TR may reflect a deficiency in entry-level education. Lack of training and knowledge physical therapists demonstrate may result from the scarcity of guidance instructors have to teach this construct.<sup>8</sup> Alternatively, since teacher beliefs and understanding of content play a significant role in planning and executing instruction, their beliefs could lead them to limit time for or omit this content from their curriculum.<sup>9</sup> Teacher beliefs may prevent teachers from introducing new concepts into the classroom when they do not align with their current viewpoints.<sup>10</sup> Even if MSK instructors believe that the contextual factors of the physical therapy encounter are essential, these instructors may have ineffective teaching strategies for this content or may need to "unlearn" or "let go" of their previous tactics or dogmas.<sup>11</sup> The lack of instructional guidance, teacher strategies, beliefs, or previous training could influence how or if these TR-building skills are taught in the curriculum. These teacher-centric influences may explain why physical therapists account for these inadequacies.

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Not only do teacher beliefs impact what they teach and how they teach it, but those beliefs can also influence their student's abilities.<sup>12</sup> Stronger instructional beliefs about content have been correlated with instructional quality, student learning, and student achievement.<sup>12</sup> The association between self-efficacy and achievement may suggest that instructors' beliefs in entry-level physical therapy (ELPT) education influence their students' perceived ability to develop a TR with patients with MSK pain. These perceptions may lead to physical therapy graduates being unprepared to create an effective TR with patients with MSK pain. This basic qualitative study explored physical therapy MSK faculty's beliefs regarding the TR and how that may influence the entry-level curriculum. Having a better understanding of teacher beliefs may provide insight into why physical therapists feel their training in TR building with patients in pain is deficient.

## II. LITERATURE REVIEW

The TR describes the interpersonal dynamic between the patient and the provider. This interpersonal dynamic is an essential contextual factor found to positively impact outcomes in many healthcare settings, including physical therapy for the treatment of MSK pain.<sup>1,13-15</sup> To date, Bordin's<sup>16</sup> conceptual framework is the most widely accepted and utilized for the TR, including in physical therapy.<sup>17</sup> However, as contextual factors such as the TR have emerged as instrumental to the successful treatment of MSK pain, several authors have questioned whether the elements proposed by Bordin<sup>16</sup> are sufficient for the physical therapy encounter.<sup>18-21</sup> In addition, physical therapy has aspects unique to the profession, such as human touch, consistent contact between physical therapist and patient, and longer and more frequent encounters.<sup>22</sup> Currently, Miciak's<sup>22</sup> conceptual framework is the most comprehensive and in-depth appraisal of the TR relevant to MSK physical therapy. This framework identifies and conceptually describes three main components to the TR: the necessary conditions of engagement, ways of establishing a connection, the elements of a bond.<sup>22</sup> Additionally, Miciak's findings recognize that the TR is a give-and-take experience influenced by professional and personal factors unique to each clinical encounter.

Evidence demonstrates that students in entry-level physical therapy education are not being provided with the tools to develop the TR, nor are they being made aware of how it could positively impact outcomes in patients with MSK pain. Physical therapy clinicians have described a broad range of deficiencies in their ability to manage the non-biomedical aspects of care for patients with MSK pain. Therapists have remarked that when they left physical therapy school, they expected to diagnose patients with MSK pain and prepare a treatment plan consistent with clinical practice guidelines (CPGs).<sup>23-25</sup> In some instances, therapists report that their education has failed them, leaving them unprepared to act outside the medical model. When faced with patient problems outside of the biological sphere, therapists appear to use experiential knowledge exclusively as their preparedness to address psychosocial factors and acknowledge lived experiences in patients with MSK pain seems to be inadequate.<sup>2,23-26</sup>

Being unable to work outside the biological boundaries impacts the therapist's ability to communicate to enhance the therapeutic relationship. Communication is of the utmost importance when creating a positive TR.<sup>27,28</sup> Without it, all other components would be difficult or impossible to achieve.<sup>21,27</sup> The most likely reason for a relationship to struggle is if the provider cannot communicate effectively.<sup>29-31</sup> Effective verbal and non-verbal communication is essential toward engaging with the patient, developing a connection and a bond, educating them, and ensuring they feel listened to.<sup>3,21,22</sup> Inappropriate language, lack of empathy, not listening or understanding are practitioner-centered communication flaws common to the physical therapist, often due to lack of training or awareness.<sup>31-35</sup>

## III. METHODS

### A. Participants

Participants in this study include MSK instructors of accredited ELPT programs in the U.S. Purposeful sampling was used to select subjects from physical therapy programs that represent a variety of geographic locations to gain multiple perspectives. Participants were recruited by emailing a description of the study to every ELPT Program Director in the U.S. using an email list from the Commission on Accreditation in Physical Therapy Education (CAPTE) website.<sup>36</sup> The Program Directors were asked to forward this introduction letter to their MSK faculty.

Potential participants were eligible for the study if: a) they taught at an accredited ELPT program, b) they had at least five years of teaching experience in the MSK curriculum, c) they were familiar with the TR (therapeutic alliance, working alliance) concept, d) they made decisions about the content taught in their courses, and e) they had at least considered integrating the TR concept into their curriculum.

### B. Data Collection

A basic qualitative design was used to assist in answering the research questions. A basic qualitative design is interested in how people interpret their experiences and what meaning they attribute to those experiences.<sup>37</sup> This design is one of the most common designs used in educational research and is the most common to explore teacher beliefs.<sup>38</sup> Understanding teacher beliefs is critically important to a better understanding of education.<sup>39</sup> Teacher beliefs influence perceptions which will likely impact what content they prepare and how they teach that content in the classroom.<sup>40</sup> Although the construct of teacher beliefs and perceptions is "messy,"<sup>40</sup> the rich descriptive nature of qualitative research is well-matched to explore it.<sup>38</sup>

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### IV. DATA ANALYSIS AND RESULTS

#### A. Data Analysis

Thematic analysis was used to analyze the data, as described by Jacobsen.<sup>42</sup> Concurrent data collection and analysis ensued in two stages: 1) audio recording transcription and accuracy check, memoing before coding, and organizing; and 2) coding, categorizing, and theming the data. Synchronizing data collection and analysis allowed for subtle changes to the interview approach that reflected emerging concepts in the analysis.<sup>31</sup> These changes helped make for a more robust discussion while maintaining the intent of the original

#### B. Results

This basic qualitative study sought to learn more about MSK faculty's perceptions of the TR and how that might influence the curriculum. Fourteen physical therapy MSK faculty from different programs around the U.S. and with varying clinical and teaching experiences participated in this study. Demographics for each participant are provided in Tables 1 and 2. Four themes surfaced following data analysis to help answer the research questions. Summaries and direct quotes from participant interviews provide evidence of the theme and relate it to the research question. Tables 3 and 4 provide the reader with an example of how an excerpt from a participant's interview was coded, placed into a category, and emerged as a theme.

#### Components of the TR

All participants' perceptions of the TR were consistent with the conceptual framework outlined by Miciak<sup>22</sup> by referring to at least one sub-component of each of the three components (Figure 1).

**Necessary Conditions of Engagement.** Participants most frequently referred to the elements necessary to engage with a patient when discussing their perception of the TR. All participants felt that being receptive to patients with MSK pain was imperative. This involved: active listening, validating their pain, allowing the patient to tell their story, and share their beliefs. Participant M stated that developing a TR "starts from a place of listening and maybe being the first person that listens to that person's story." Participant B said that developing a TR requires "... validating their experience, being a good listener, creating a safe space that's not judgmental... being able to understand the pain experience in a non-judgmental way."

Most participants suggested that "being present" was an essential element of the TR. Being present meant having one-on-one time with the patient and being free of distractions. Participant A felt that "...you need to have some individual one-on-one connection with your patients. Understanding them and them understanding what you're bringing to them as a provider." Participant J stated, "...try to be in that moment with the patient and understand their experience." Participants felt that having enough time with patients, especially those with persistent pain, was critical as it was vital that they felt they were heard. Participant E said, "...my willingness to figure out where they're at matters. So, my ability to take the time to find that relationship or find those potential barriers to success matters."

**Establishing a Connection.** When describing their perception of the TR, participants referred to the elements needed to establish a connection with the patient nearly as often as engaging with the patient. Participants used language that described the need to acknowledge the individual as an essential component of the TR. Most participants referred to the importance of acknowledging them as an individual with needs, wants beliefs, and experiences uniquely different than other individuals with similar diagnoses or pain. This was especially important for a patient with persistent pain because these "patients feel that every health care provider does not really validate their symptoms" (Participant A). "If I've built a therapeutic alliance with someone...I feel like I understand them as not only a patient, but as a human. I understand their motivations and their desires" (Participant M). Another way participants perceived that a connection could be made with the patient is through therapeutic touch. "We are a touching profession, there's no way around it. That therapeutic touch builds that relationship" (Participant F). Strong clinical skills were viewed to augment the TR. "I think sometimes to gain that confidence, [the therapist] needs to have skillful examination techniques and know what you're doing with purpose to continue to build that relationship" (Participant E).

**Affective Bond.** To develop a TR, participants described an attachment between the therapist and the patient built chiefly on trust and rapport. Trust was the second most cited sub-component of the TR. Patients with persistent pain often have psychological or social contributors to their pain. "You have to get [trust] in order to get vulnerability from a patient, so they share stuff that's important" (Participant M). If the patient does not trust the therapist, they are unlikely to share this information which could impede the therapist's ability to help the patient. Without trust, "you're [the therapist] not going to have the information... and you're going to miss crucial things, potentially about their diagnosis... or some comorbidities... or some risk factor..." (Participant L). The treatment strategies often involved with patients with persistent pain also take trust. The therapist may be asking the patient to do things they are scared to do for fear of making the problem worse. The therapist may also attempt to change the patient's beliefs about pain. "Addressing fear-avoidance beliefs or negative thoughts and negative beliefs about pain, are predicated upon a trusting relationship between therapists and the provider" (Participant K).

#### Developing a TR is Intentional

Participants believed it was important for the therapist to understand that a relationship was not something that just happened with most patients with persistent MSK pain. "I think it's intentional; it just happens with the easy ones. The ones where it really needs to be intentional are ones that you don't necessarily immediately connect [with]" (Participant I). There are a lot of

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factors that the therapist has control over that can influence the relationship. The therapist needs to recognize what factors they control so they can be leveraged to positively affect a relationship. According to the participants, leveraging these factors requires effective communication skills. For the patient with persistent pain, the therapist must be able to break down barriers or mold patient expectations with effective communication. Before they realize those barriers or expectations, they need to ask good questions and listen. Some of those barriers are "prior experiences with health care or physical therapy. I think everyone comes in with different perceptions or expectations of what's going to happen, and so sometimes that has to be broken down and rebuilt" (Participant O).

Participants realized that some therapists appear to be more natural at building TRs with patients. These skills are not hard-wired. Participant H stated, "it's something that you have to work on...just like I would work on manual skills or just like I'd work on clinical reasoning, I'd have to work on TRs." Just like other skills, the therapist may have to fail at relationship building several times and reflect on those experiences to learn from them. "You got to have negative ones [relationships] to build your positive ones, so you know where to fix those points that didn't work with your patient" (Participant F).

### **Developing a TR Should be a Top Priority for the Physical Therapist**

Participants think developing a TR with a patient with MSK pain should be a top priority. Aside from screening out red flags that may require an urgent or emergent referral, all participants believed that developing a TR with a patient with MSK pain was paramount. Barring any red flags, Participant I stated this about the TR: "My perception is that it's probably your number one job that first visit. It may be you listen to them for 40 minutes, but you connect with them, you show them empathy. That's your job, day one." Many justify this priority based on how the TR can influence outcomes with patients with MSK pain. Several participants discussed that gaining a TR with an MSK pain patient helps the therapist have "difficult conversations about pain...and the...modulating factors to pain" (Participant J). They felt that having these conversations was necessary to improve outcomes.

Gathering information about the patient was not isolated to asking questions. Participants felt that having a TR gave the therapist a better chance to collect more relevant and accurate information during the physical exam. Participants were also asked to compare the importance of the TR to different treatment techniques. Participants always stated that having a TR was at least important, if not more important, than specific treatment techniques. The relationship is "non-negotiable. It has to be developed on some level in order to gain anything, to get them to do any of the interventions, or even just believe in the education that you're telling them" (Participant E).

### **The Evolution of the MSK Curriculum**

Many participants reported that they did not view the specific factors of orthopedic physical therapy as crucial as they used to. Several mentioned they had previously recognized that the contextual factors and the TR were important from their clinical experiences. Still, the research made them realize that the specific factors were less important. Participant J stated, "the more that I read and the more that I treat, and the more opportunities I've had to interact with people, [the TR] has become the central value of how I treat my patients." Participants also commented that the more they learned about the science of pain and the modulators of persistent pain, the more they perceived the contextual factors to be more important than once thought. Participant I discussed how they began to recognize the TR's value: "I think largely [it was] probably the pain epidemic. It forced us to understand just the complexity of what was happening, and so I think that really drove [the change]."

These beliefs seemed to translate to curricular changes, primarily made in the last five years. Nearly all participants stated that their MSK curricular emphasis on specific factors was less than it used to be. Some said that they just downplayed specific factors' significance toward outcomes or softened their rhetoric on what is occurring biomechanically. Participants typically supplemented those messages by explaining the significance of the TR and other contextual factors. Participant E stated, "I just spend more time talking about it, talking about the importance of developing [the relationship]." Participant F said this about integrating the TR into their MSK curriculum: "The emphasis on making that a very conscious effort in my teaching has just grown exponentially."

Several participants decreased the amount of specific factor content. Instead, they layered in contextual factors activities, most often to enhance patient communication and interaction. According to Participant A, moving away from a pathoanatomical model in their MSK course "has helped reduce what felt like a huge amount of volume of material" and allowed for the integration of more contextual factor content and learning activities.

Participants who decreased the specific factor content stated they did so after re-evaluating what techniques they considered entry-level skills. "I'd say we've focused more on the interpersonal skills and leave some of that more advanced orthopedic skill for later on. You can always learn new and different techniques to manipulate a spine down the road, but you need to have those interpersonal skills at entry-level." (Participant O) "Our emphasis [on manual therapy techniques] is less. And so, we're trying to slowly take things away, and then be able to create space for conversations about TRs" (Participant D).

Overall, there was a perception amongst the participants more changes were needed. Some felt that about their own curriculum, while others felt that about ELPT education in general. Multiple participants shared Participant J's perspective about MSK curricula in physical therapy education. "I think there's a lot of stuff in PT school that has the wrong emphasis, and I think there's a lot more we should be teaching. And conversing [with a patient] is one of them." Although it was the participants' view that curricula need to continue to evolve, there was a sentiment that it is headed in the right direction. "Back to when I was in PT



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school, the emphasis was placed on biomechanics, especially to manual interventions; we've really come a long way in understanding just how much more there is to our interventions" (Participant H).

### VII. DISCUSSION

Previous studies that have commented on the lack of contextual factor instruction in ELPT education have done so by gathering information from physical therapists about their abilities or their education experience.<sup>23-26,35,43-45</sup> However, this is only one side of the coin. To the author's knowledge, this is the first study examining musculoskeletal faculty's perceptions of the therapeutic relationship and how that might influence the curriculum. Participants' perceptions of the TR were consistent with the conceptual framework proposed by Miciak.<sup>22</sup> When describing their perceptions of the TR, most participants utilized language that characterized subcomponents of the three main elements of the conceptual framework. It is worth noting that only two participants expressed their perception of the TR in the depth that the conceptual framework demonstrates. Additionally, none of the participants mentioned Miciak's framework when describing their perception of the relationship. Nor did they refer to Bordin's<sup>16</sup> Working Alliance framework that is often cited in the physical therapy literature.

All participants indicated that developing a relationship with a patient is an intentional act. Since it is an intentional act, therapists must be aware of factors that can help build a relationship so they can attempt to manipulate them.<sup>46</sup> They must also practice these skills as they would any other physical therapy skill. However, practice and experience are not enough. To comprehend these relationship skills, therapists must reflect on their relationship with each patient encounter so they can learn from them and improve.<sup>24,47,48</sup> Therapists who do not reflect on their relationship with a patient may be unaware of its importance or not recognize that part of it is under their control.<sup>49</sup>

All participants felt that developing a TR with patients with MSK pain needs to be a priority. Ultimately this was linked to patient outcomes. Participants cited several different ways they felt the relationship helped improve outcomes. While some just noted what the current evidence is revealing, others alluded to specific ways the relationship improves outcomes. Participants believed that the clinician's ability to gather patient information and address pain beliefs is enhanced with a TR. Patients with persistent pain often have psychological or social modulators that can be helpful to identify when designing a treatment plan.<sup>5,50-52</sup> Participants felt that without a relationship, patients are unlikely to divulge those modulators as they may be too intimate or seen by the patient as irrelevant. Lastly, participants felt the TR was very important to overcome expected turbulence in the trajectory of the patient's progress. Participants often described the patient as more likely to roll with this resistance and avoid a rupture if there was a strong relationship. To overcome this unrest and achieve a good outcome, the therapist must continuously monitor the relationship for ruptures and have strategies to repair it.<sup>15,53</sup>

Based on participant accounts, their MSK curricula have evolved over the last five years. Several discussed incorporating CPGs, which have helped them consolidate the evidence to present to the students. However, most reported an evolution that led to a content-focus shift. Most decreased the emphasis on specific factors' importance in the MSK curriculum. Some participants also reduced the number of specific factors taught. Participants evaluated their curriculum and felt they could part with an excess number of techniques, many of which they deemed advanced or post-professional. Others also moved or are moving away from a pathoanatomical framework from which to teach their evaluation and treatment techniques. These are significant changes considering the participants were instructed in this model and had been using it to teach for many years. All of this has led to several different curricular changes: 1) increased emphasis on contextual factor importance like the TR, 2) increased time devoted toward teaching contextual factors implicitly or explicitly, and 3) increased time devoted to teaching pain science and the management of persistent pain.

Participants' perceptions of what comprised a TR were mostly aligned with the conceptual framework. They believed that developing a relationship was an intentional act by the therapist, and it was important to maximize outcomes for patients with MSK pain. These beliefs seem to translate to them teaching the TR in some capacity in their curriculum. This is not surprising as teacher beliefs have been found to strongly influence what and how content is taught in the classroom.<sup>40,54,55</sup> Even those who described a low self-efficacy for teaching these skills still reformed their curriculum. This is surprising since low self-efficacy for instructional strategy has been shown to impede curricular reform.<sup>56</sup> However, success through a better understanding or practice can influence the teacher's self-efficacy.<sup>48</sup> This is an example of knowledge and practice shaping beliefs. Support for this theory is demonstrated in evidence showing that post-professional education and field experiences have mediated beliefs.<sup>57</sup>

In most cases, participants' self-efficacy appeared to be bolstered by their knowledge of contextual and specific factors and less by their success in the classroom. Their knowledge was a direct result of the evidence that has emerged about specific treatments' influence on outcomes being equivocal for MSK pain.<sup>1,51,58,59</sup> They were also a result of the evidence about the science of pain, which directly challenges the pathoanatomical model.<sup>5,50</sup> This exemplified how a teacher's knowledge of the content can become a belief if there is objective evidence supporting its efficacy.<sup>60</sup> Participants' clinical experience creating relationships with patients appeared to also influence their beliefs. Participants' prior experience illustrates how that can influence teachers' beliefs about what content belongs in the classroom.<sup>55</sup>

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### VIII. CONCLUSIONS

The biggest limitation was the homogeneity of the participants who volunteered for the study. Although there was variety in gender, age, institution type, and experience, there was limited variety in the dimension of interest in the TR. All participants shared similar perspectives on the importance of the relationship and whether it should be integrated into the curriculum. It is unlikely that all MSK faculty share the same perspective of the TR and its place in the curriculum. Those who volunteered for this study may have felt strongly about this topic and wanted to share their perspectives.

Despite the evidence showing that physical therapists lack the skills needed to develop TRs with patients in pain, these changes participants reported respond to a call made in the literature.<sup>7,27,28,61,62</sup> It's possible that enough time has not passed to see whether there is a sea change happening in therapists' abilities and in the way they approach patient care. Perhaps there is a problem with continuity of instruction from the classroom to the clinic where students hear or see different messages. Maybe the instructional strategies used in ELPT to teach about the TR and how to develop it are ineffective. It's also conceivable that instructors' perceived competency to teach these skills is misguided.

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