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# **Emotional Intelligence and Patient Interviewing Skills in DPT Students**

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# Emotional Intelligence and Patient Interviewing Skills in DPT Students

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Purpose/Hypothesis: Success during a patient interview is often measured via patient feedback. The ability of the interviewer to consider the feelings and needs of a patient leads to improved patient experience. The purpose of this study was to examine if emotional intelligence in Doctorate of Physical Therapy (DPT) students correlates with patient interview satisfaction. Participants: A convenience sample of 68 first-year DPT students (35 female, 33 male) with age range 23 to 33 from Franklin Pierce University (Arizona) participated in the current study. Methods: Participants completed the Assessing Emotions tool to assess emotional intelligence. Volunteer patients completed the Consultation and Relational Empathy (CARE) assessment tool after they were interviewed by DPT students as part of a practical examination. Results: Spearman Correlation analysis was conducted with a significant positive correlation between emotional intelligence and patient interview scores (rs = .640, p=.000). Discussion: In the current sample, a positive relationship between emotional intelligence and patient interview scores was found. Clinician interactions with patients play an important role in patient satisfaction. There is research showing relationships between EI and patient interview skills in dental and medical students, with no similar research with DPT students. Faculty involved in the training of DPT and other healthcare students may consider utilization of emotional intelligence training. Results of this study warrant further research to evaluate the importance of emotional intelligence training in DPT programs.

 $\textbf{Keywords:} \ Emotional \ intelligence, \ patient \ interview, \ physical \ therapy, \ education$ 

#### Introduction

Physical therapists play an important role in the healthcare environment and make positive differences in the lives of their patients. Trust and rapport between therapist and patient is critical and affected by myriad factors. Before Doctorate of Physical Therapy (DPT) students begin patient care, university educators patient interviewing competence (Boissonnault, & Hetzel, 2013). Research examining patient's opinions of physical therapy services identified relations between patient and therapist to be highly indicative of patient satisfaction. Key characteristics related to aspects of patient satisfaction with clinician interactions included good listening and communication skills, clear explanations of treatments (Beattie, Pinto, Nelson, & Nelson, 2002), as well as patients feeling they were treated with respect and involved in treatment decisions (Goldstein, Elliott, & Guccione, 2000). University educators tasked with training DPT students endeavor to develop these patient interview skills in preparation for clinical rotations and transition to

autonomous professional practice.

Emotional intelligence (EI) is widely considered essential to successful personal and professional relationships and is defined as, "...the ability to perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006). Research investigating EI and patient interactions with dental students revealed clinicians with higher EI had superior interview structure (Hannah, Lim, & Ayers, 2009) as well as clinical performance (Hannah et al., 2009; Victoroff & Boyatzis, 2013). Medical students with higher EI are reported to receive greater patient satisfaction scores (Dugan, Weatherly, Girod, Barber, & Tsue, 2014) and possess superior communication skills (Stratton, Elam, Murphy-Spencer, & Quinlivan, 2005). In physicians, higher EI was correlated with higher levels of patient trust (Weng, Chen, Chen, Lu, & Hung,

2008), patient relationships (Weng et al., 2011), and patient satisfaction (Wagner, Mosley, Grant, Gore, & Owens, 2002). A meta-analysis of fourteen studies has shown that EI can improve with training in medical students (Cherry, Fletcher, O'sullivan, & Shaw, 2012). EI levels in DPT students and respective patient interview skills have not been studied. The aim of this study was to measure EI in a group of DPT students. Then, after these students conducted patient interviews, to look for a possible correlation between EI and the respective interview satisfaction reported by patients.

#### Methods

#### **Participants**

Participants included a convenience sample of 68 first-year Doctor of Physical Therapy student volunteers (35 female and 33 male, with age range 23-38 ± 3.56 years old), recruited from the 2018 and 2019 classes at the Franklin Pierce University Goodyear, Arizona campus. Prior to the study, participants had received training on patient interview techniques with specific education on methods of interviewing patients related to musculoskeletal pain.

#### **Procedures**

Prior to data collection, ethics approval was granted by the Franklin Pierce University Institutional Review Board. After study participants provided consent to participate, they were administered the Assessing Emotions Scale questionnaires via online survey during the first study term. Students had received training specific to patient interviews related to pain prior to participating in this study. Volunteer patients completed the CARE assessment tool after they were interviewed by DPT students as part of a practical examination. Volunteer patients agreed to come to the university to assist with the practical examination and were interviewed about their actual musculoskeletal pain. Results from the EI survey were analyzed for possible relationships between emotional intelligence levels and patient interview scores using a Spearman Correlation test.

#### Measures

There are three major EI models: the ability, trait, and mixed model. Schutte's Assessing Emotions Scale emerged from the trait model and is a 33-item validated self-report measure of emotional intelligence (Schutte et al., 1998). The Assessing Emotions Scale asks about emotions or reactions associated with emotions in order to determine level of emotional intelligence of each participant. Examples of questions from this scale are: "I am aware of my emotions as I experience them" and "I like to share my emotions with others". Item responses were scored using a Likert scale as

follows: Strongly disagree = 1, Somewhat disagree = 2. Neither agree nor disagree = 3, Somewhat agree = 4, and Strongly agree = 5. Score values were then summed for each participant to provide an overall score to determine their level of emotional intelligence. Higher overall scores indicate higher emotional intelligence.

The Consultation and Relational Empathy (CARE) measure is a 10-item validated (Mercer, Maxwell, Heaney, & Watt, 2004) tool completed by patients to assess perceptions related to patient-clinician interactions. The tool consists of the question "How good was the practitioner at:", with 10 items such as "Making you feel at ease", and "Letting you tell your story". Patients choose between "poor, fair, good, very good, or excellent" responses.

#### Methods

#### **Participant Characteristics**

Participants included 35 females and 33 males with a mean age of  $26.2 \pm 4.51$ . The sample was composed of 32 students from the class of 2018 and 36 students from the class of 2019. Results from Mann-Whitney U tests showed that effects of both gender differences (p = 0.26) and graduate year (p = 0.21) on EI scores were insignificant.

Table 1. Participants

	Class of 2018	Class of 2019	p value
EI scores	$132.81 \pm 10.12$	131.83 ± 11.95	0.24
CARE scores	$3.84 \pm 0.73$	$3.92 \pm 0.66$	0.48
Age	$25.7\pm3.37$	$26.4 \pm 5.12$	0.36
Gender	17 female/15 male	18 female/18 male	0.63

# **Emotional Intelligence Scores**

The mean EI score was  $132.81 \pm 10.12$  (range: 105-146) for class of 2018 students and  $131.83 \pm 11.95$  (range: 102-155) for class of 2019 students. The overall mean EI score was  $132.29 \pm 10.90$ , p = 0.24.

#### **CARE Scores**

The mean interview score was  $3.84 \pm 0.73$  (range: 2.67-4.56) for class of 2018 students and  $3.92 \pm 0.66$  (range: 2.78-4.51) for class of 2019 students. The overall mean interview score was  $3.89 \pm 0.69$ , p = 0.48.

# **Correlation Analysis**

Spearman Correlation analysis identified a significant positive correlation between students' emotional intelligence and CARE scores from volunteer patients (rs = 0.640, p = 0.00001). Mean emotional intelligence score  $132.29 \pm 10.90$ , mean patient interview score  $3.89 \pm 0.69$ .

Table 2. EI and CARE score correlation results

Emotional	CARE	Spearman Rho	p value
Intelligence			
$132.29 \pm 10.90$	$3.89 \pm 0.69$	$R_s = 0.640$	0.0001

#### Discussion

In the present study, a positive correlation was found between EI and patient interview scores in this sample of graduate DPT students. In clinical settings, clinicians will encounter patients with many different types of personalities and needs, as well as patients with varying levels of pain, vulnerability, and emotional turmoil. Successful patient interactions rely on the clinician's ability to establish a rapport with and gain the trust of the patient. EI involves awareness of and effective management of the emotions of oneself and those of others. In clinical practice, higher EI skills allow the clinician to make effective clinical decisions using the emotional information they have gathered. Similar research conducted with dental (Hannah et al., 2009) and medical (Dugan et al., 2014) students resulted in findings of a positive correlation between EI and patient satisfaction.

Findings of the present study are consistent with previous research with healthcare students of different disciplines. A correlation appears to exist between higher levels of EI and superior abilities to build rapport and emotional connection, and to develop a better emotional understanding of patients. These factors appear to result in higher levels of patient satisfaction with interviews. Results of this research indicate preliminary evidence supporting inclusion of EI training for DPT students to support their success with patient interactions. Further, university educators preparing students in all areas of healthcare where patient interviews are conducted may consider inclusion of EI training to improve patient interview outcomes.

Future research can include larger samples of DPT students in different graduate programs to increase the generalizability of the findings and to compare results among DPT programs. Are there differences in delivery of EI training that may affect outcomes? Would incorporation of EI training throughout all phases of a DPT curriculum change outcomes compared to EI training at the beginning of a curriculum? The universal importance of effective clinician/patient interactions across all healthcare disciplines make this an important topic for future investigation.

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