

2020

Student Perspectives of the Effective Behaviors of Occupational Therapy Level II Fieldwork Educators

Leah S. Dunn

Xavier University - Cincinnati

Stephanie Arias

Alexa Beyer

Elizabeth Hermes

Sydney Radcliff

Follow this and additional works at: <https://encompass.eku.edu/jote>Part of the [Occupational Therapy Commons](#)

Recommended Citation

Dunn, L. S., Arias, S., Beyer, A., Hermes, E., & Radcliff, S. (2020). Student Perspectives of the Effective Behaviors of Occupational Therapy Level II Fieldwork Educators. *Journal of Occupational Therapy Education*, 4 (4). <https://doi.org/10.26681/jote.2020.040408>

This Original Research is brought to you for free and open access by the Journals at Encompass. It has been accepted for inclusion in Journal of Occupational Therapy Education by an authorized editor of Encompass. For more information, please contact laura.edwards@eku.edu.

Student Perspectives of the Effective Behaviors of Occupational Therapy Level II Fieldwork Educators

Abstract

Occupational therapy students complete a period of clinical education, when they apply academic learning in clinical situations, supervised by a fieldwork educator. Fieldwork education supports the student in developing technical and clinical reasoning skills, engaging in evidence-based practice, and socialization to the profession. Despite the key role fieldwork educators play in occupational therapy student professional and skill development, evaluation of educator skills and the fieldwork experience are slight. This descriptive study explored occupational therapy fieldwork educator behaviors to determine those behaviors indicative of a quality experience from the student perspective, using the Clinical Teaching Effectiveness Inventory (CTEI). Student responses identified the quality and frequency of fieldwork educator behaviors experienced. A Spearman correlation showed frequency and quality of educator behaviors were positively associated, possibly indicating students perceive higher quality of the behavior when observed more frequently. Behaviors associated with a quality clinical experience included both educator characteristics and teaching skills pertinent to learning. Specifically, an approachable fieldwork educator who uses teaching strategies to develop clinical skills creates a positive learning environment. The results of this study can inform academic programs in providing professional development opportunities for fieldwork educators to enhance their teaching skills. Additionally, the results guide fieldwork educators in interpersonal and teaching skills to create a positive fieldwork experience. Through improvement of fieldwork experiences, both the profession and clients benefit.

Keywords

Fieldwork education, teaching effectiveness, teaching evaluation, occupational therapy

Creative Commons License



This work is licensed under a [Creative Commons Attribution-Noncommercial-No Derivative Works 4.0 License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

JOTE

Journal of Occupational
Therapy Education

Volume 4, Issue 4

Student Perspectives of the Effective Behaviors of Occupational Therapy Level II Fieldwork Educators

Leah S. Dunn, EdD, OTR/L¹, Stephanie Arias, MOT, OTR/L²,
Alexa Beyer, MOT, OTR/L³, Lizzie Hermes, MOT, OTR/L⁴,
Sydney Radcliff, MOT, OTR/L⁵

Xavier University, Cincinnati, OH¹, John H. Stroger Cook County Hospital²,
Ascension All Saints Hospital, Racine, WI³,
University Hospitals, Cleveland, OH⁴, Chicago, IL⁵
United States

ABSTRACT

Occupational therapy students complete a period of clinical education, when they apply academic learning in clinical situations, supervised by a fieldwork educator. Fieldwork education supports the student in developing technical and clinical reasoning skills, engaging in evidence-based practice, and socialization to the profession. Despite the key role fieldwork educators play in occupational therapy student professional and skill development, evaluation of educator skills and the fieldwork experience are slight. This descriptive study explored occupational therapy fieldwork educator behaviors to determine those behaviors indicative of a quality experience from the student perspective, using the Clinical Teaching Effectiveness Inventory (CTEI). Student responses identified the quality and frequency of fieldwork educator behaviors experienced. A Spearman correlation showed frequency and quality of educator behaviors were positively associated, possibly indicating students perceive higher quality of the behavior when observed more frequently. Behaviors associated with a quality clinical experience included both educator characteristics and teaching skills pertinent to learning. Specifically, an approachable fieldwork educator who uses teaching strategies to develop clinical skills creates a positive learning environment. The results of this study can inform academic programs in providing professional development opportunities for fieldwork educators to enhance their teaching skills. Additionally, the results guide fieldwork educators in interpersonal and teaching skills to create a positive fieldwork experience. Through improvement of fieldwork experiences, both the profession and clients benefit.

Occupational therapy fieldwork experiences gear the student toward feeling ready and confident in the transition from education into the workplace (Seah et al., 2011). In order to educate the student, the fieldwork educator must use teaching methods that mentor the student to become a competent occupational therapy practitioner (OTP; Hanson & Deluliis, 2015). The qualification of a fieldwork educator is one year of clinical experience with adequate preparation for the role (American Occupational Therapy Association [AOTA], 2012; 2018), and programs rely on fieldwork educators to assist students in obtaining competent, entry-level skills. Yet, to date, there is no evaluation tool of how a fieldwork educator facilitate the development of those entry-level skills. This literature review focuses on clinical education, specifically fieldwork and clinical educator behaviors, the perspective of the student, and feedback to fieldwork educators in occupational therapy education.

The Fieldwork Educator

During fieldwork education, a fieldwork educator mentors, coaches, and supervises the student's growth and development into a practitioner. A fieldwork educator must fulfill multiple teaching roles including instructing, assessing, and providing feedback (Hunt & Kennedy-Jones, 2010). Effective fieldwork educator qualities are presented in the following categories: personal characteristics, communication styles, student-fieldwork educator relationship, teaching skills, and learning environment. Specific personal characteristics of a successful fieldwork educator center on being a professional role model (Burgess et al., 2015; Haider et al., 2016; Ludin & Fathullah, 2016) by demonstrating clinical competence (Campbell & Corpus, 2015) and participating in professional activities (McCallum et al., 2016). Additional characteristics include being a reflective practitioner (McCallum et al., 2016); that is, demonstrating an awareness of personal and professional limitations (Ludin & Fathullah, 2016). Personality traits of an effective fieldwork educator include being non-judgmental (Perram et al., 2016) and patient (Busari et al., 2005).

One aspect of being a professional role model is the demonstration of an effective communication style. Students prefer a clear and concise communication style (Campbell & Corpus, 2015; McCallum et al., 2016). Having a constructive formal evaluation supported by clear student responsibilities and objectives is another essential of an effective communication style (McCallum et al., 2016). A communication style that treats students as adult learners promotes learning (Busari et al., 2005). Students also reported appreciating a reciprocal communication style with the fieldwork educator, e.g., by having a fieldwork educator who is open to constructive criticism (Campbell & Corpus, 2015).

The interpersonal relationship between the student and fieldwork educator consists of the emotional aspects of interactions between the two. Interacting with an appropriate communication style is a solid foundation for the interpersonal relationship between the student and fieldwork educator. Having a reciprocal relationship between the student and fieldwork educator (Rodger et al., 2014) allows a climate of mutual respect (Ludin & Fathullah, 2015) and collaboration (Koski et al., 2013). An open collegial student-fieldwork educator relationship (McCallum et al., 2016) is one of inspiration (Perram et

al., 2016), encouragement (Rodger et al., 2014), and support (Ludin & Fathullah, 2016). Through the effective student-fieldwork educator relationship, student autonomy was encouraged, and students reported feeling independent (Rodger et al., 2014). Most significantly, students recognized interpersonal relations as the primary characteristic of an effective fieldwork educator (Ozga et al., 2016).

In addition to personal traits, communication styles, and interpersonal relationships, appropriate teaching skills are necessary for effective practice education. Setting clear expectations (Ludin & Fathullah, 2015) evaluated in an objective assessment of student learning (Busari et al., 2005; Kirke et al., 2007; Koski et al., 2013) is required for fieldwork education. Understanding student learning styles (Grenier, 2015; Koski et al., 2013) allows the fieldwork educator to collaborate with the student to maximize their learning (Koski et al., 2013). Collaboration with the student entails tailoring learning experiences to the student's level of knowledge and skill (Jensen & Daniel, 2010). Basing the just-right challenge on realistic expectations is the basis for scaffolding the learning experiences to facilitate the student's development toward entry-level competence (Grenier, 2015; Jensen & Daniel, 2010).

Teaching skills that facilitate learning opportunities adapted to the student for a just-right challenge promote student learning (McCallum et al., 2016; Rodger et al., 2014). The act of teaching includes both direct instruction in and supervision of therapeutic skills (Busari et al., 2005). Receiving feedback is critical for learning (Brown et al., 2013; Koski et al., 2013). Feedback consisting of questioning and active discussion strengthens clinical reasoning (Ludin & Fathullah, 2016; McCallum et al., 2016). Students reported that receiving positive reinforcement for student contributions to discussions was beneficial (Ludin & Fathullah, 2016).

The influence of the fieldwork educator on student learning is paramount. Students identified the fieldwork educator had an impact on creating an effective learning environment (Brown et al., 2013; Bruijn et al., 2006). Having an organized systematic program with formal and informal meetings for instruction and feedback are crucial aspects of the desired learning environment (Koski et al., 2013). A formal orientation program to the healthcare team establishes the student as a member of the team and expands the potential learning opportunities (Hall et al., 2012; Koski et al., 2013). As a member of the healthcare team, the student appreciates adaptability and teamwork evident in an effective team (McCallum et al., 2016)

Evaluation of Fieldwork Educators

The field of physical therapy (PT) has an optional certification for their clinical instructors (Housel et al., 2010). In a systematic review by McCallum et al. (2016), the authors found a positive correlation between the effectiveness of PT clinical instructors and having earned the American Physical Therapy Association (APTA) clinical instructor credential. Credentialed clinical instructors were rated higher in some clinical instruction skills, such as explaining responsibilities to the student and integration of the student's learning style, which were skills included in the credential training (Morren et al., 2008). These studies show providing training and resources to clinical instructors has

increased effectiveness in some aspects of clinical teaching. In the field of occupational therapy, fieldwork educators may attend an optional AOTA-sponsored workshop that provides guidance on being an effective fieldwork educator. Yet to date, research determining the effectiveness of this training has not been reported.

The interpersonal relationship between the student and fieldwork educator is essential, as it supports the foundation of the student's professional identity. The fieldwork educator's knowledge, skills, and behaviors help facilitate the role change from student to practitioner. Continuous evaluation and reflection on fieldwork educator behaviors is necessary to produce the next generation of practitioners. Ultimately, the knowledge, skills, and behaviors demonstrated will influence client care in future generations of practitioners.

Methods

Research Design

Using a descriptive survey research design, the purpose of this study was to identify fieldwork educator behaviors that supported a quality experience from the student perspective by their rating of the quality and frequency of those behaviors. Thus, the research questions included:

1. What is the quality and frequency of common fieldwork educators' behaviors as determined by student report using the CTEI?
2. What interpersonal and teaching skills are most associated with the student perception of a quality fieldwork experience?

An online survey was used to collect quantitative data to accommodate for the fieldwork students' busy and varied schedules. Due to college student proficiency with, and access to computers, electronic surveys were found to produce higher response rates than other forms of survey (Amar, 2008). The online survey consisted of the CTEI and basic demographic questions. The CTEI is a well-researched instrument for assessing clinical educator effectiveness. The Cleveland Clinic, a non-profit academic medical center in Cleveland, Ohio, developed the 15-item questionnaire to rate clinical teaching behaviors on a 5-point Likert scale (Copeland & Hewson, 2000). Schönrock-Adema et al. (2012) added a separate 5-point Likert scale for rating the frequency of each behavior. Physicians and senior medical students have rated each questionnaire item relevant in a teaching role (Stalmeijer et al., 2008). The CTEI has been shown to be a reliable and valid method of evaluating clinical instructors (Copeland & Hewson, 2000; Van der Hem-Stokroos et al., 2005). While the CTEI was developed initially in medical education, its use has expanded to include undergraduate allied health education, such as paramedic, occupational therapy, physiotherapy, midwifery, nutrition and dietetics, pharmacy, social work, and radiography and medical imaging (Brown et al., 2013; Ross et al., 2013).

The survey instrument for this study used the adapted version of the CTEI as revised by Schönrock-Adema et al. (2012) that added a second Likert scale for rating the frequency of each behavior. Additionally, for this study, the authors modified the

wording of item 5 to read "evidence-based practice" versus "practice guidelines" to make the survey more specific to occupational therapy. This decision was due to the results of the pilot study, which resulted in a significantly lower rating for the original item, possibly due to the word choice of "practice guidelines" as it is not as common in occupational therapy (Arias et al., 2017). Similar to Bierer and Hull (2007) and Bruijn et al. (2006), an item was added to the survey to provide a rating for the overall quality of the fieldwork education experience (Bierer & Hull, 2007; Bruijn et al., 2006). To discover the similarities and differences between different settings, demographic data was collected. According to Hughes et al. (2016), use of demographic data questions allows an accurate description of their sample, and for readers to determine the applicability to their own setting.

Sample

The sample was obtained using a convenience sample of an existing group that had desired characteristics (Jackson, 2016). The inclusion criteria required the respondents to be a student from a private, Midwestern university enrolled in their Level II fieldwork experiences, with access to a computer and could read and write in English. The cohort had 36 students available to participate in the study during their first and second placements, which could result in 72 surveys completed.

Procedure

After obtaining Institutional Review Board approval, all students enrolled in a Level II fieldwork experience were invited to complete the CTEI on Qualtrics (Qualtrics, Version June 2018) midway through the fieldwork experience. The survey cover letter served as the consent form. Participation in the study did not influence course grades as none of the researchers were the instructor of record for the fieldwork course.

Analysis

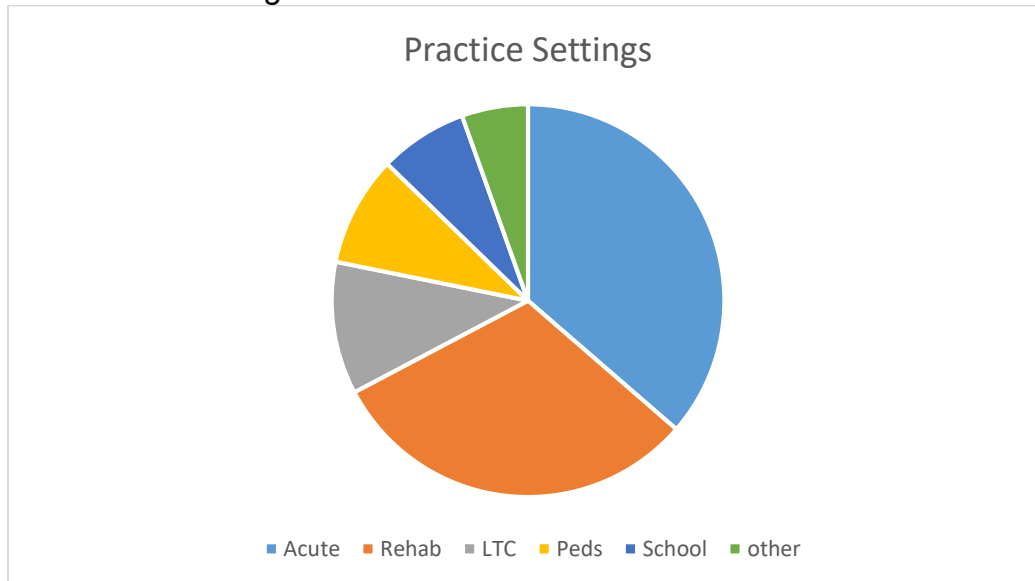
Qualtrics (<https://www.qualtrics.com>) produced the means, modes, and standard deviations for each item. The authors used IBM SPSS Statistics (Version 24) to perform Spearman correlation and stepwise regression tests (Portney & Watkins, 2009).

Results

Of the 63 returned surveys, only 55 of the surveys were completed fully, resulting in a response rate of 87%. Demographic responses received from each participant included state and clinical setting of fieldwork placements. The hospital acute care and rehabilitation (inpatient or outpatient) settings made up over 50% of the practice settings reported by the fieldwork students (see Figure 1).

Figure 1

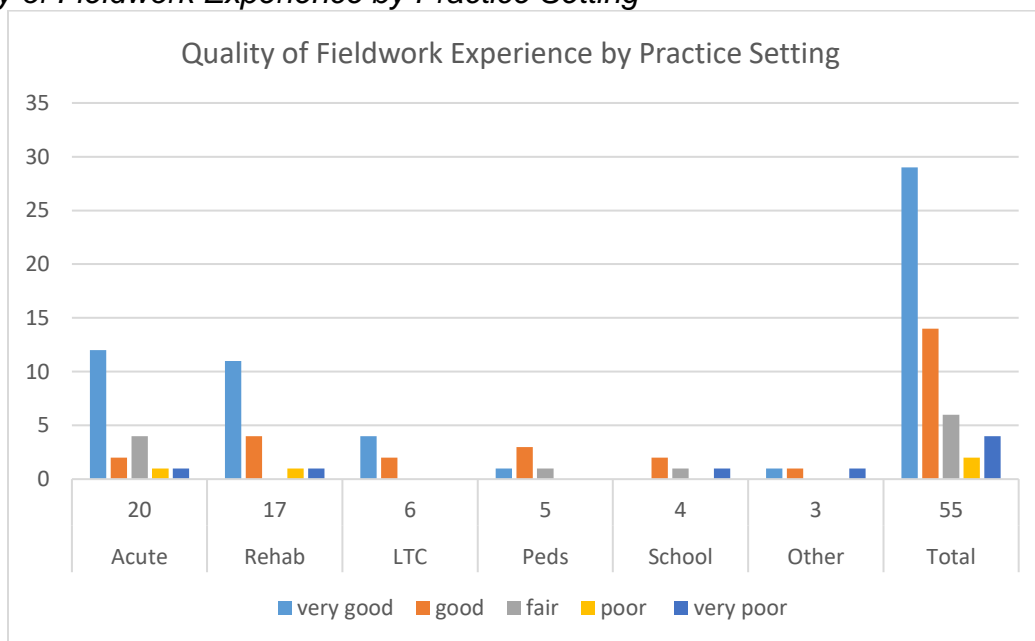
Fieldwork Practice Settings



Comparing practice settings with student responses to the overall quality of the fieldwork experience, the acute care and rehabilitative settings received a majority of “very good” ratings. The majority of overall quality of fieldwork experience responses for all practice settings combined were rated as “very good” or “good”.

Figure 2

Quality of Fieldwork Experience by Practice Setting



Descriptive statistics generated the mean and standard deviation of each question of the survey (see Table 1). The highest quality mean score was for item 1 (“Establishes a good learning environment”) ($\mu=4.16$) and item 3 (“Stimulates me to learn independently”) ($\mu=4.14$), while the lowest quality mean score was for item 5 (“Incorporates research data and/or evidence-based practice into teaching”) ($\mu = 3.18$). The highest frequency mean score was item 1 (“Establishes a good learning environment”) ($\mu = 4.13$), while the lowest frequency mean score was item 5 (“Incorporates research data and/or evidence based practices into teaching”) ($\mu = 3.04$).

Question	Quality of Behavior			Frequency of Behavior		
	<i>n</i>	M	SD	<i>n</i>	M	SD
1 Establishes a good learning environment (approachable/non-threatening, enthusiastic, etc.)	56	4.16	1.156	56	4.13	1.063
2 Allows me autonomy appropriate to my level/experience/competence	56	4.07	1.024	56	3.93	1.11
3 Stimulates me to learn independently	56	4.14	0.943	56	4.00	0.915
4 Gives clear expectations/reason for opinions, advice, actions, etc.	56	3.96	1.159	56	3.82	1.029
5 Incorporates research data and/or evidence based practice into teaching	56	3.18	1.177	56	3.04	1.095
6 Asks questions that promote learning (clarifications, probes, Socratic questions, reflective questions, etc.)	56	3.5	1.176	56	3.29	1.124
7 Adjusts teaching to my needs (experience, competence, interests, etc.)	56	3.91	1.133	56	3.93	1.042

8 Offers regular feedback (both positive and negative)	56	3.98	1.12	56	3.96	1.061
9 Clearly specifies what I am expected to know and do during the training period	56	3.8	1.182	56	3.91	1.149
10 Teaches diagnostic skills (clinical reasoning, selection/interpretation of tests, etc.)	56	3.64	1.257	56	3.73	1.07
11 Organizes time to allow for both teaching and care giving	56	3.89	1.123	56	3.98	0.963
12 Adjusts teaching to diverse settings (bedside, view box, OR, consultation room, etc.)	56	3.89	1.073	56	3.75	1.083
13 Coaches me on my clinical/technical skills (interview, diagnostic, examination, procedural, lab, etc.)	56	3.75	1.195	56	3.86	1.052
14 Teaches effective patient and/or family communication skills	56	4.05	1.102	56	4.09	1.066
15 Teaches principles of cost-appropriate care (resource utilization, etc.)	56	3.64	1.086	56	3.34	1.18
16 Overall supervision	55	4.13	1.203	55	4.13	1.203

A Spearman correlation determined the correlation between the quality of behavior and frequency of behavior for each question. Results of these tests are included in Table 2. The correlations between frequency and quality scores for individual questionnaire items ranged from $r = 0.563$ to $r = 0.737$ with 15 out of 15 items being statistically significant ($\alpha < .05$) (Portney & Watkins, 2009).

Question	Correlation Coefficient (r)
1 Establishes a good learning environment (approachable/non-threatening, enthusiastic, etc.)	0.694**
2 Allows me autonomy appropriate to my level/experience/competence	0.752**
3 Stimulates me to learn independently	0.647**
4 Gives clear expectations/reason for opinions, advice, actions, etc.	0.681**
5 Incorporates research data and/or evidence based practice into teaching	0.624**
6 Asks questions that promote learning (clarifications, probes, Socratic questions, reflective questions, etc.)	0.616**
7 Adjusts teaching to my needs (experience, competence, interests, etc.)	0.618**
8 Offers regular feedback (both positive and negative)	0.688**
9 Clearly specifies what I am expected to know and do during the training period	0.680**
10 Teaches diagnostic skills (clinical reasoning, selection/interpretation of tests, etc.)	0.581**
11 Organizes time to allow for both teaching and care giving	0.645**
12 Adjusts teaching to diverse settings (bedside, view box, OR, consultation room, etc.)	0.604**
13 Coaches me on my clinical/technical skills (interview, diagnostic, examination, procedural, lab, etc.)	0.581**
14 Teaches effective patient and/or family communication skills	0.624**
15 Teaches principles of cost-appropriate care (resource utilization, etc.)	0.563**

Note: ** Correlation is significant at the 0.01 level (2-tailed)

Second, a Spearman correlation determined the correlation between the quality of behavior for each question and the student perception of the overall fieldwork quality. For these results, see Table 3.

Question	<i>r</i>
1 Establishes a good learning environment (approachable/non-threatening, enthusiastic, etc.)	0.708**
2 Allows me autonomy appropriate to my level/experience/competence	0.580**
3 Stimulates me to learn independently	0.395**
4 Gives clear expectations/reason for opinions, advice, actions, etc.	0.600**
5 Incorporates research data and/or evidence based practice into teaching	0.555**
6 Asks questions that promote learning (clarifications, probes, Socratic questions, reflective questions, etc.)	0.466**
7 Adjusts teaching to my needs (experience, competence, interests, etc.)	0.566**
8 Offers regular feedback (both positive and negative)	0.592**
9 Clearly specifies what I am expected to know and do during the training period	0.640**
10 Teaches diagnostic skills (clinical reasoning, selection/interpretation of tests, etc.)	0.631**
11 Organizes time to allow for both teaching and care giving	0.600**
12 Adjusts teaching to diverse settings (bedside, view box, OR, consultation room, etc.)	0.604**
13 Coaches me on my clinical/technical skills (interview, diagnostic, examination, procedural, lab, etc.)	0.596**
14 Teaches effective patient and/or family communication skills	0.542**
15 Teaches principles of cost-appropriate care (resource utilization, etc.)	0.372**

Note: Correlation is significant at the 0.01 level (2-tailed)

A stepwise multiple regression was calculated to determine the item influence on the student report of fieldwork experience quality. Model 6 included all six variables to predict the student perception of fieldwork experience quality, with all six variables and the constant factor demonstrating statistical significance, $p < 0.05$. Model 6 itself was statistically significant, $R^2 = .892$, $F(6, 48)$, $p < .001$, adjusted $R^2 = .770$. R^2 provides a “goodness of fit” measure, with higher numbers indicating a more accurate model, suggesting which item combinations best predict student determination of a quality fieldwork experience.

As displayed in Table 4, Item 12 (“*Adjusts teaching to diverse settings*”) was the strongest predictor of student reports of quality fieldwork experiences, accounting for 69.3% of the variance of student reports.

Both Item 3 (“*Stimulates me to learn independently*”) and Item 6 (“*Asks questions that promote learning*”) yielded a negative β coefficient indicating an inverse relationship with the student perception of the overall quality of the fieldwork experience. Both of these

items could be interpreted by the student as either (1) essentially challenging the student to work harder or (2) suggesting the fieldwork educator posed expectations perceived by the students as overly challenging. Either perception could increase student anxiety or frustration, resulting in lowered perception of overall quality of experience. It is difficult to understand how students interpreted these items, and their interpretation may reflect the manner in which these behaviors were presented. Yet, these behaviors are usually viewed as promoting learning.

Table 4

Stepwise Regression

Variable	Student Report of Fieldwork Experience Quality											
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	B	β	B	β	B	β	B	β	B	β	B	β
Constant	1.103*		.005		-.314		.128		.068		.133*	
Item 12	.777**	.693	.532**	.475	.331*	.295	.401**	.358	.402**	.358	.468**	.418
Item 1			.490**	.467	.453**	.431	.512**	.488	.449**	.428	.481**	.458
Item 13					.335**	.333	.371**	.369	.285*	.284	.395**	.393
Item 3							-.264*	-.205	.290*	-.225	-.333*	-.259
Item 9									.197*	.194	.251*	.246
Item 6											-.255*	-.250
R ²	.693		.807		.850		.865		.877		.892	
F	49.039**		48.461**		44.235**		37.225**		32.557**		31.140**	

Note: N=55. *p<.05, **p<.001.

Discussion

Much of the literature identifying quality fieldwork educators presents their findings in the categories of personal characteristics, communication styles, teaching skills, and learning environment. Items in the CTEI fall within these categories but are not grouped as such. Nevertheless, the use of the CTEI allows for evaluation of fieldwork educator behaviors as perceived by the student. The results of this study found a positive correlation between the quality and the frequency of each behavior as outlined in Table 1, indicating students may perceive quality of the behavior higher when the fieldwork

educator frequently demonstrates it. Schönrock-Adema et al. (2012) proposed having both the frequency and quality scales due to a significant difference reported by medical residents. The layout of the instrument is unclear in their study. Our study presented the behavior followed by the quality and frequency Likert scale response for each behavior. It is possible students chose a straight-line response for each scale as a matter of ease.

An item analysis of the CTEI identified the highest rated behaviors as Item 1 (“*establishes a good learning environment*”) and Item 3 (“*stimulates me to learn independently*”). A good learning environment defined by the CTEI included positive fieldwork educator characteristics such as approachable, non-threatening, and enthusiastic. Several studies have indicated a positive learning environment as one that stimulated learning (Koski et al., 2013; Ozga et al., 2016; Rodger et al., 2014). In addition, teaching and communication skills coupled with personal and environmental characteristics promote positive clinical experiences (McCallum et al, 2016).

In contrast, one behavior least observed was Item 5 (“*incorporates research data and/or evidence based practice into teaching*”). Due to the low score for this item in the results of the pilot study (Arias et al., 2017), the authors added the phrase *and/or evidence-based practice* as that verbiage is more familiar to the occupational therapy student. Not only was this item the least observed behavior, studies have found that evidence-based practice is one of the least valued fieldwork educator characteristics by allied health students, specifically occupational therapy (Perram et al., 2016). Additionally, Stronge and Cahill (2011) reported students experienced challenges to evidence-based practice while on fieldwork as lack of time, fieldwork educators not practicing it, and difficulty finding evidence. In a small study by Nichols (2017), fieldwork educators who participated in a three hour evidence-based practice course improved their knowledge, skills, and confidence in evidence-based practice. Courses such as these could lead to better modeling of evidence-based practice for fieldwork students, assisting them to translate classroom knowledge to the clinic.

Although the experience and knowledge of educators is critical, one can never overstress the value of trusted human relationships and solid communication skills. According to the results of this study, students reported that a quality fieldwork experience centered on the teaching and interpersonal skills of fieldwork educators. Teaching skills encompassed interpersonal skills such as being approachable and enthusiastic. Similarly, Ludin and Fathullah (2016) found the teaching skills of encouraging participation, the ability to prompt discussion through learning, and communicate expectations as having a positive influence on student learning. Scaffolding learning experiences tailored to student knowledge and skills is indicative of a quality fieldwork experience (Francis et al., 2016; Grenier, 2015).

Yet, our results indicated that student perception of the overall quality of the fieldwork experience decreased with behaviors of “challenging students by questioning” and “forcing independent learning”. One possible explanation is the student perception of a lack of skill or knowledge, indicating the lack of a just-right challenge. This identifies a need and opportunity for fieldwork educator training about effective teaching strategies to foster independent learning.

The results pointed to the importance of both interpersonal skills and teaching abilities to promote the transition from student to practitioner. Interpersonal skills and teaching ability are codependent, making it difficult to separate the two. Students identified a quality fieldwork experience as having a fieldwork educator open and willing to teach to set clear expectations, coach skill development, and promote student learning. Furthermore, a solid commitment and willingness to work beyond time constraints, whenever possible, helped to reassure the student that the educator truly cared about their eventual career success.

Existing literature about fieldwork educator knowledge, skills, and behaviors primarily utilized qualitative or researcher developed surveys as the method of inquiry. Our results demonstrate how using an established reliable and valid instrument confirm the effective fieldwork educators' behaviors. Additionally, the use of the CTEI could provide professional development opportunities across the career of a fieldwork educator.

Implications for Occupational Therapy Education

Both allied health students and fieldwork educators identified attitudes toward teaching and learning as central to a successful clinical experience (Hall et al., 2012). While there are similarities between the role of clinician and educator, there are inherent challenges transitioning to the role of educator, mainly the challenge of feeling confident and competent in the educator role (Frantz & Smith, 2013). Furthermore, fieldwork educators may not have training in instructional design, but rather rely on strategies they experienced as a fieldwork student (Chapman, 2016).

Having a fieldwork educator evaluation process is required by accreditation standards (AOTA, 2012; 2018). Using the CTEI as a measure of fieldwork educator behaviors allows for objective feedback from students. Yet, the student perspective is only one data point of assessment. Having colleagues and academicians provide feedback through observations would provide a more comprehensive assessment of the effectiveness of fieldwork educators. Furthermore, this evaluation should be considered a formative assessment to help identify additional trainings where warranted.

The results of our study indicate an opportunity for academic programs to develop and implement professional development in instructional design for fieldwork educators. Academic fieldwork coordinators are educators, who can develop and provide trainings for fieldwork educators, thus meeting the accreditation standard ensuring all fieldwork educators are adequately prepared for the role. Appropriate instructional design will allow fieldwork educators to develop learning experiences with a just-right challenge (Provident et al., 2009). In addition, further research is needed to determine the most effective instructional design strategies for fieldwork education.

Future Research

Additional studies with larger sample sizes are warranted to further determine the feasibility of using the CTEI as a measure of fieldwork educator performance. A multi-year study across academic programs throughout the country would allow benchmarking of behaviors, and using the CTEI provides an opportunity to allow

comparison across programs and practice settings. Research on fieldwork educator self-assessment using the CTEI would provide additional data for academic programs.

As stated previously, assessment of fieldwork educators should include multiple data points, including student, fieldwork educator self-assessment, peer feedback (if available) and academic program feedback. This will allow a comprehensive picture of the strengths and areas for development to focus professional development opportunities offered by academic programs. Using a comprehensive assessment process as a formative measure, promotes life-long learning and continued development of fieldwork educators, ultimately benefitting fieldwork students.

Conclusion

Using the CTEI for students to evaluate behaviors of their fieldwork educators can identify strengths and areas for improving the fieldwork experience. Not only does this instrument give students a voice in the continuing professional development of fieldwork educators but also the results can identify characteristics of what students perceive as a quality fieldwork experience. Our results indicated both fieldwork educator characteristics and teaching skills pertinent to learning, specifically creating a good learning environment as an approachable fieldwork educator who uses teaching strategies to promote the development of clinical skills.

References

- Amar, A.F. (2008). Successful links for electronic surveys. *Journal of Forensic Nursing*, 4, 138-140. <https://doi.org/10.1111/j.1939-3938.2008.00022.x>
- American Occupational Therapy Association. (2012). 2011 Accreditation Council for Occupational Therapy Educations (ACOTE®) Standards. *American Journal of Occupational Therapy*, 66, 6-74. <https://doi.org/10.5014/ajot.2012.66S6>
- American Occupational Therapy Association. (2018). 2018 Accreditation Council for Occupational Therapy Educations (ACOTE®) Standards. *American Journal of Occupational Therapy*, 72(Supplement_2):72124410005. <https://doi.org/10.5014/ajot.2018.72S217>
- Arias, S., Beyer, A., Hermes, E., & Radcliff, S. (2017). *Student perspectives of the effectiveness of occupational therapy level II fieldwork educators*. [Unpublished manuscript]. Department of Occupational Therapy, Xavier University.
- Bierer, S., & Hull, A. L. (2007). Examination of a clinical teaching effectiveness instrument used for summative faculty assessment. *Evaluation & the Health Professions*, 30(4), 339-361. <https://doi.org/10.1177/0163278707307906>
- Brown, T., Williams, B., & Lynch, M. (2013). Relationship between clinical fieldwork educator performance and health professional students' perceptions of their education learning environments. *Nursing and Health Sciences*, 15, 510-517. <https://doi.org/10.1111/nhs.12065>
- Bruijn, M., Busari, J.O., & Wolf, B.H.M. (2006). Quality of clinical supervision as perceived by specialist registrars in a university and district teaching hospital. *Medical Education*, 40, 1002-1008. <https://doi.org/10.1111/j.1365.2929.2006.02559.x>

- Burgess, A., Goulston, K., & Oates, K. (2015). Role modeling of clinical tutors: A focus group study among medical students. *BMC Medical Education*, 15(17), 1-9. <https://doi.org/10.1186/s12909-015-0303-8>
- Busari, J. O., Weggelaar, N. M., Knottnerus, A. C., Greidanus, P. M., & Sherpbier, A. J. J. A. (2005). How medical residents perceive the quality of supervision provided by attending doctors in the clinical setting. *Medical Education*, 39, 696-803. <https://doi.org/10.1111/j.1365-2929.2005.02190.x>
- Campbell, M.K., & Corpus, K. (2015). Fieldwork educators' perspectives: Professional behavior attributes of level II fieldwork students. *Open Journal of Occupational Therapy*, 3(4), Article 7. <https://doi.org/10.15433/2168-6408.1146>
- Chapman, L.M. (2016). Transitioning from clinician to fieldwork educator. *OT Practice*, 31-33. <https://www.aota.org/~media/Corporate/Files/Secure/Publications/SIS-Quarterly-Newsletters/2016/May/May-2016-SISQPC.pdf>
- Copeland, H. L., & Hewson, M. G. (2000). Developing and testing an instrument to measure the effectiveness of clinical teaching in an academic medical center. *Academic Medicine*, 75(2), 161-166. <https://doi.org/10.1097/00001888-200002000-00015>
- Francis, A., Hills, C., MacDonald-Wicks, L., Johnston, C., James, D., Surjan, Y. & Warren-Forward, H. (2016). Characteristics of an ideal practice educator: Perspectives from practice educators in diagnostic radiography, nuclear medicine, nutrition and dietetics, occupational therapy and physiotherapy and radiation therapy. *Radiography*, 22, 287-294. <https://doi.org/10.1016/j.radi.2016.01.001>
- Frantz, J.M., & Smith, M.R. (2013). Exploring the subjective experiences of allied health professionals in their transition from clinical educators to academia. *American Journal of Health Profession Education*, 5(1), 37-41. <https://doi.org/10.7196/AJHPE.224>
- Grenier, M. L. (2015). Facilitators and barriers to learning in occupational therapy fieldwork education: Student perspectives. *American Journal of Occupational Therapy*, 69, 1-9. <https://doi.org/10.5014/ajot.2015.015180>
- Haider, S. I., Snead, D. R. J., & Bari, M. F. (2016). Medical students' perspectives of clinical teachers as role model. *PLoS ONE*, 11(3), 1-9. <https://doi.org/10.1371/journal.pone.0150478>
- Hall, M., McFarlane, L., & Mullholland, S. (2012). Positive clinical placements: Perspectives of students and clinical educators in rehabilitation medicine. *International Journal of Therapy and Rehabilitation*, 19(10), 549-556. <https://doi.org/10.12968/ijtr.2012.19.10.549>
- Hanson, D.J., & Deluliis, E.D. (2015). The collaborative model of fieldwork education: A blueprint for group supervision of students. *Occupational Therapy in Healthcare*, 29(2), 223-239. <https://doi.org/10.3109/07380577.2015.1011297>
- Housel, N., Gandy, J., & Edmondson, D. (2010). Clinical instructor credentialing and student assessment of clinical instructor effectiveness. *Journal of Physical Therapy Education*, 24(2), 26-34. <https://doi.org/10.1097/00001416-201001000-00004>

- Hughes, J.L., Camden, A.A., & Yangchen, T. (2016). Rethinking and updating demographic questions: Guidance to improve descriptions of research samples. *Journal of Psychological Research*, 21(3), 138-151. <https://doi.org/10.24839/2164-8204.JN21.3.138>
- Hunt, K., & Kennedy-Jones, M. (2010). Novice occupational therapists' perceptions of readiness to undertake fieldwork supervision. *Australian Occupational Therapy Journal*, 57, 394-400. <https://doi.org/10.1111/j.1440-1630.2010.00859.x>
- Jackson, S. L. (2016). Descriptive methods. *Research methods and statistics: A critical thinking approach* (pp. 89-91). Cengage Learning.
- Jensen, L. R., & Daniel, C. (2010). A descriptive study on level II fieldwork supervision in hospital settings. *Occupational Therapy in Health Care*, 24(4), 335-347. <https://doi.org/10.3109/07380577.2010.502211>
- Kirke, P., Layton, N., & Sim, J. (2007). Informing fieldwork design: Key elements to quality in fieldwork education for undergraduate occupational therapy students. *Australian Occupational Therapy Journal*, 54, S13-S22. <https://doi.org/10.1111/j.1440-1630.2007.00696.x>
- Koski, K. J., Simon, R. L., & Dooley, N. R. (2013). Valuable occupational therapy fieldwork educator behaviors. *Work*, 44, 307-315. <https://doi.org/10.3233/WOR-121507>
- Ludin, S.M., & Fathullah, N.M.N. (2016). Undergraduate nursing students' perceptions of the effectiveness of clinical teaching behaviours in Malaysia: A cross-sectional, correlational survey. *Nurse Education Today*, 44, 79-85. <https://dx.doi.org/10.1016/j.nedt.2016.05.007>
- McCallum, C., Reed, R., Bachman, S., & Murray, L. (2016). A systematic review of physical therapist clinical instructor demographics and key characteristics: Impact on student clinical education experiences. *Journal of Physical Therapy Education*, 30(3), 11-20. <https://doi.org/10.1097/00001416-201630030-00004>
- Morren, K. K., Gordon, S. P., & Sawyer, B. A. (2008). The relationship between clinical instructor characteristics and student perceptions of clinical instructor effectiveness. *Journal of Physical Therapy Education*, 22(3), 52-63. <https://doi.org/10.1097/00001416-200810000-00007>
- Nichols, A. (2017). Changes in knowledge, skills, and confidence in fieldwork educators an evidence-based practice short course. *The Open Journal of Occupational Therapy*, 5, Article 13. <https://doi.org/10.15453/2168-6408.1204>
- Ozga, K.L., Kenyou, L.K., Engel, A.J., Kool, P.A., Sievers, M.E., & Stephenson, P. (2016). Physical therapist students' perceptions: A pilot study. *Journal of Physical Therapy Education*, 30(4), 35-43. <https://doi.org/10.1097/00001416-201630040-00006>
- Perram, A., Francis, A., Hills, C., MacDonald-Wicks, L., Johnston, C., James, D., Surjan, Y., & Warren-Forward, H. (2016). Characteristics of an ideal practice educator: Perspectives from practice educators in diagnostic radiography, nuclear medicine, nutrition and dietetics, occupational therapy and physiotherapy and radiation therapy. *Radiography*, 22, 287-294. <https://doi.org/10.1016/j.radi.2016.04.007>
- Portney, L.G., & Watkins, M.P. (2009). *Foundations of Clinical Research: Applications to Practice* (3rd Ed.). Pearson Education.

- Provident, I., Leibold, M.L., Dolhi, C., & Jeffcoat, J. (2009). Becoming a fieldwork “educator”: Enhancing your teaching skills. *OT Practice*, 14(19), CE1-CE8.
- Qualtrics. (2018). *Qualtrics* (Version June 2019) [Computer software]. Qualtrics, <https://qualtrics.com>
- Rodger, S., Thomas, Y., Greber, C., Broadbridge, J., Edwards, A., Newton, J., & Lyons, M. (2014). Attributes of excellence in practice educators: The perspectives of Australian occupational therapy students. *Australian Occupational Therapy Journal*, 61, 159-167. <https://doi.org/10.1111/1440-1630.12096>
- Ross, L., Wallis, J., Huggins, C., & Williams, B. (2013). Students’ views of teachers using the Clinical Teaching Effectiveness Inventory. *Journal of Paramedic Practice*, 5(6), 336-340. <https://doi.org/10.12968/jpar.2013.5.6.336>
- Seah, C. H., Mackenzie, L., & Gamble, J. (2011). Transition of graduates of the master of occupational therapy to practice. *Australian Occupational Therapy Journal*, 58, 103-110. <https://doi.org/10.1111/j.1440-1630.2010.00899.x>
- Schönrock-Adema, J., Boendermaker, P. M., & Rimmelts, P. (2012). Opportunities for the CTEI: Disentangling frequency and quality in evaluating teaching behaviors. *Perspectives on Medical Education*, 1, 172-179. <https://doi.org/10.1007/s40037-012-0023-2>
- Stalmeijer, R. E., Dolmans, D. H. J. M., Wolfhagen, I. H. A. P., Muijtjens, A. M. M., & Scherpbier, A. J. J. A. (2008). The development of an instrument for evaluating clinical teachers: Involving stakeholders to determine content validity. *Medical Teacher*, 30(8), 272-277. <https://doi.org/10.1080/01421590802258904>
- Stronge, M., & Cahill, M. (2011). Self-reported knowledge, attitudes and behavior towards evidence-based practice in occupational therapy students in Ireland. *Occupational Therapy International*, 19, 7-16. <https://doi.org/10.1002/oti.328>
- Van Der Hem-Stokroos, H., Van Der Vleuten, C., Daelmans, H., Haarman, H., & Scherpbier, A. (2005). Reliability of the clinical teaching effectiveness instrument. *Medical Education*, 39, 904-910. <https://doi.org/10.1111/j.1365-2929.2005.02245.x>