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## Exploring Professional Behavior Development in Entry-Level Occupational Therapy Students

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# Exploring Professional Behavior Development in Entry-Level Occupational Therapy Students

## Abstract

Professional behaviors are critical for fieldwork success and entry-level competency. A convergent mixed-methods institutional case study was utilized as a means to enhance professional behavior outcomes.

The *Philadelphia Region Fieldwork Consortium (PRFC) Level I Fieldwork Student Evaluation (2<sup>nd</sup> ed.)* was implemented as a pretest posttest measure, in the didactic context, to track one cohort of entry-level Master of Occupational Therapy (OT) students' professional behavior development during their last academic semester. Students (n=46) and academic professors (n=5) completed pre and posttest ratings across one semester. Paired t-tests demonstrated significant differences between student and faculty ratings and within group difference among students at both time points. Constant comparative analysis of concurrent student journal reflections was triangulated with the *PRFC (2<sup>nd</sup> ed.)* categories and quantitative outcomes to gain further insight into student perceptions and experience. Results indicate that OT students' professional behavior development is developmental and that students are receptive to education on professional behavior expectations and practice. Further research is warranted to develop: 1) a framework to best guide academicians to implement professional behavior curricula within an academic context and 2) a tool with strong psychometric properties that can be consistently utilized within an academic context to measure professionalism. This study adds to a growing body of evidence that supports the need for professional behaviors in OT programs to be consistently assessed and addressed within academia.

## Keywords

Professional behavior, professional development, occupational therapy education, fieldwork

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## Exploring Professional Behavior Development in Entry-Level Occupational Therapy Students

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### ABSTRACT

Professional behaviors are critical for fieldwork success and entry-level competency. A convergent mixed-methods institutional case study was utilized as a means to enhance professional behavior outcomes. The *Philadelphia Region Fieldwork Consortium (PRFC) Level I Fieldwork Student Evaluation (2<sup>nd</sup> ed.)* was implemented as a pretest posttest measure, in the didactic context, to track one cohort of entry-level Master of Occupational Therapy (OT) students' professional behavior development during their last academic semester. Students (n=46) and academic professors (n=5) completed pre and posttest ratings across one semester. Paired t-tests demonstrated significant differences between student and faculty ratings and within group difference among students at both time points. Constant comparative analysis of concurrent student journal reflections was triangulated with the *PRFC (2<sup>nd</sup> ed.)* categories and quantitative outcomes to gain further insight into student perceptions and experience. Results indicate that OT students' professional behavior development is developmental and that students are receptive to education on professional behavior expectations and practice. Further research is warranted to develop: 1) a framework to best guide academicians to implement professional behavior curricula within an academic context and 2) a tool with strong psychometric properties that can be consistently utilized within an academic context to measure professionalism. This study adds to a growing body of evidence that supports the need for professional behaviors in OT programs to be consistently assessed and addressed within academia.

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## **Introduction**

Professional behaviors are critical for fieldwork success and entry-level competency (Campbell et al., 2015; Koenig et al., 2003a). “Professionalism is manifested by a combination of physical, observable behaviors (extrinsic) and an individual’s personal mindset, values and knowledge (intrinsic)” (Deluliis, 2017, p.13). Some examples of these professional qualities include communication skills, initiative, clinical reasoning, engagement in learning, and ability to handle stress (Campbell et al., 2015; Gutman et al., 1998; James & Musselman, 2006; Kasar & Muscari, 2000; Koenig et al., 2003a; Scheerer, 2003). According to Nicola-Richmond et al. (2016), poor professional behaviors, including poor interpersonal communication skills, poor reflection skills, organization, and inability to accept feedback often leads to fieldwork failure. Therefore, student competence requires a combination of both hard and soft skills. Occupational therapy (OT) academicians recognize that professional behaviors need to be developed and nurtured in the academic setting, however, few studies support how to identify, measure, and address them within academic courses (Evenson et al., 2015). Furthermore, there is no gold standard for the measurement of professional behavior within entry level OT programs.

Gutman et al. (1998) reported that faculty may feel powerless in addressing professional behaviors because they are not indicative of poor academic performance or do not affect the students’ grade. While professional behavior/professionalism is an expectation within all graduate OT programs, the methods for assessment are typically not reliable, consistent, nor standardized within and across programs or institutions (Gutman et al., 1998). Furthermore, there is and has been an evolution of professionalism. As more of Generation Z enters higher education and the workforce, professional challenges arise (Deluliis, 2017). Therefore, concerns and professional behavior challenges still emerge in Level II fieldwork due to a lack of consensus in the education and assessment of professional behaviors in academic programs which lead to unclear expectations for students.

Many OT curriculums have proposed strategies and methods for identifying and remediating professional behavior concerns including various assessment tools and interventions which will be detailed in the review of the literature. However, thus far, there has been no best practice or gold standard established for the development of educational professional development strategies or evaluative tools to support the proactive development of professional behaviors in OT students (Evenson et al., 2015). As a result, students are often confused by the abstract nature of professionalism, the complexity of professional behavior continuums, and unsure of supervisors’ expectations (Robinson et al., 2012; Sullivan & Thiessen, 2015). There is an identified need for a structured approach to teaching and evaluating professional behaviors, so that students can not only understand, but develop the behavioral expectations within the profession prior to Level II fieldwork (Brehm et al., 2006). It is imperative that a standard be set of what constitutes professionalism within the field to facilitate adherence to the core values of the field, well-being of clients served, and the future of

the profession. The purpose of this study was to explore the construct of professionalism and professional behaviors, as perceived by students and rated by faculty and students, to improve the ability to teach and evaluate these important skills. Thereby, academic institutions can best prepare students (both academically and professionally) as competent entry-level clinicians.

### Literature Review

The OT profession is guided by the *Occupational Therapy Code of Ethics* (American Occupational Therapy Association (AOTA), 2020a), *Standards of Practice for Occupational Therapy* (AOTA, 2021), *Occupational Therapy Practice Framework: Domain & Process, 4<sup>th</sup> Edition* (AOTA, 2020b), and core values of client-centered care, occupation-based intervention, and evidenced-based practice. These AOTA official documents all reference professionalism; however, none of them provide a specific or clear definition of professionalism. There is currently no official document which describes or defines professionalism or professional behaviors within the field of OT (Deluliis, 2017). Furthermore, many of the accreditation standards outlined by the Accreditation Council for Occupational Therapy Education (ACOTE), emphasize the adequate preparation of the OT student for “professional roles and responsibilities” (ACOTE, 2018, p.38). However, ACOTE offers no further detail in the interpretative guide for what or how these roles and responsibilities should be covered and/or evaluated.

Despite professional, ethical, and regulatory standards, there are an alarming prevalence of unprofessional behaviors in healthcare settings (Mackenzie et al., 2020). Undoubtedly, the way one behaves is a reflection of their professionalism and profession. Teaching professionalism has long been discussed as a critical part of educational curricula with many calls to action in medical (Birden et al., 2013; Elcin et al., 2006), nursing (Shepard, 2013), OT (Gutman et al., 1998; Hackenberg & Toth-Cohen, 2018; Sullivan & Theissen, 2015;), pharmacy (Brehm et al., 2006), and physical therapy programs (Gleeson, 2008). While there are variances between professions and contexts, generally, professional behavior is the appropriate reflection of professionalism (Yusoff, 2009). It is important to define and describe these manifestations of professionalism consistently in order to define the expectations of an OT professional. Through a review of the health sciences literature, professional behaviors required by the OT professional include communication skills, initiative, clinical reasoning, engagement in learning, and ability to handle stress (Campbell et al., 2015; Gutman et al., 1998; James & Musselman, 2006; Kasar & Muscari, 2000; Koenig et al., 2003a; Scheerer, 2003). However, one cannot begin to teach these concepts until they are consistently defined, understood, modeled, and measured by faculty. The absence of further guidance from accrediting bodies, professional organizations, or official documents adds to the struggle academicians face when attempting to evaluate criteria that are largely subjective in nature.

### **Fieldwork Site Professional Behavior Expectations**

According to a recent survey study by Mason et al. (2020), fieldwork educators expect students to be knowledgeable and prepared with a variety of technical and professional skills. Fieldwork has become a highly competitive market and the fieldwork shortage only exacerbates the need for a high level of student performance in all aspects. According to Hanson (2011), the “workforce shortage, lack of therapist time to train students, and fieldwork supervisory positions left vacant or converted per diem positions may impact the availability of quality Level II fieldwork sites” (p. 164). The COVID-19 pandemic has only amplified these factors of workforce shortage, poor working conditions, and staff stress (Maunder et al., 2021) further driving supervisor burnout and reluctance to provide fieldwork education. Fieldwork sites can also be more selective in their process of accepting students for Level II fieldwork opportunities, through preliminary interviews or Level I opportunities to evaluate the student’s professionalism and “fit” even prior to acceptance into a Level II opportunity (Barlow et al., 2020). Vogel et al. (2004) found that fieldwork educators’ expectations for students have also increased. The rising demands within healthcare settings including increased patient complexity, productivity standards and documentation requirements, all contribute to higher fieldwork site expectations. The need for greater self-sufficiency and independent/self-directed learning is therefore increasing due to fieldwork educators’ limited time to spend teaching professional behavior skills (Vogel et al., 2004).

Hanson (2014) identified the students’ ability to clarify expectations, monitor performance and workload (requiring self-assessment and time management), implement coping strategies during particular negative or stressful situations, and engage in an exchange of thoughtful ideas as contributing to fieldwork success. James and Musselman (2006) also cited students’ ability to handle stress, clinical reasoning skills, emotional intelligence, interpersonal skills, and professional behavior as the key factors identified within the literature as either positively or negatively affecting fieldwork performance. While Mason et al. (2020) identified clinical reasoning, communication, confidence, creativity, initiative, judgement, organization, time management and willingness to learn as critical to student success on Level II fieldwork.

### **Academic Approaches to Professional Behavior Development**

The implications for academicians to develop professional behaviors in students are many. Thus far, OT programs use a variety of assessments and interventions to track students’ professional behaviors, but to date there is no singular or superior approach.

#### ***Curriculum***

Per ACOTE (2018) requirements, OT students must pass 24 weeks of fieldwork education prior to graduation and post completion of their didactic course work. Graduates must then pass the National Board for Certification in Occupational Therapy (NBCOT) certification exam to be deemed entry level competent OTs. However, academic educators cannot solely rely on clinical skills and procedural knowledge as a measure of adequate preparation and competence prior to Level II fieldwork and the board examination. Academicians must intentionally consider professional behavior skills as a measure of professional competence.

The *AOTA Fieldwork Performance Evaluation (FWPE)*, the most utilized evaluation for Level II fieldwork performance, has one section devoted to professionalism and communication, which accounts for approximately 25 percent of the evaluation (AOTA, 2020c). Therefore, it is implied that students will be at least partially equipped to meet these performance criteria upon entry into Level II fieldwork. However, academicians cannot rely on Level II fieldwork educators for developing students' professional behavior, without also recognizing that students may fail Level II fieldwork without these desired skill sets from the start (Hackenberg & Toth-Cohen, 2018). For best practice, academicians should consistently embed, integrate, and reinforce professional behavior expectations, detailed on the *FWPE*, throughout the didactic program to facilitate competency prior to Level II fieldwork (Reiter et al., 2018). This requires objective measure and evaluation of professional behaviors. Brehm et al. (2006) suggested presenting material and assessing student performance throughout a curriculum; however, there is little guidance provided in the literature on how this should be executed. Bossers et al. (1999) identified professionalism as a "core process component" when developing a new OT curriculum (p. 118). The researcher's resultant schematic diagram includes professional parameters, professional behaviors, and professional responsibilities. However, they also identify a further need to extrapolate components of professionalism/professional behaviors that are both innately possessed and/or learned, identify effective ways to track and measure professional skills, and identify and evaluate effective teaching methods prior to implementation (Bossers et al., 1999). Deluliis (2017) identified a schematic diagram of professionalism components, including professional ethics, professional responsibility, professional behavior, and professional competency. These schemas are then broken down into intrinsic and extrinsic qualities of professionalism (Deluliis, 2017). Deluliis (2017) further supported the development of professionalism with learning theory and a wide variety of strategies for developing these skills ranging from learning style inventories, self-reflection, in class discussion opportunities, observation logs, and a sample professional development plan. Hackenberg and Toth-Cohen (2018) suggested addressing verbal/nonverbal communication, written communication, professional responsibility, work behaviors, and time management specifically through creation of fieldwork seminar curricula, continual review of each student's professional behaviors via both faculty and self-assessments, and the use of professional development plans. Chien et al. (2020) proposed use of *intentional role-modeling pedagogy* where students have the opportunity to learn professionalism via experts in the field role modeling intentional reflection on their own knowledge gaps. Chien et al. (2020) also recognized that genuine professionalism development is developmental in nature and thus, this strategy may not be relevant based on student readiness within their own personal and professional continuum (Chien et al., 2020).

### **Assessment**

Evaluation and evaluative feedback have been identified as an essential component to goal achievement in academics (Koenig et al., 2003a). Through reviewing the literature, several interdisciplinary professional behavior assessments and/or Level I fieldwork assessments are currently being utilized as a means to offer evaluative feedback to

students (Randolph, 2003). Of those that are OT specific, some are institutionally derived, and others regionally dispersed; however, of the identified professional behavior assessments out there, there is limited research on the psychometric properties of these tools currently being used. Through a systematic literature review completed of existing instruments from 1997-2020 designed to measure OT student professional behavior completed by McCallum et al. (2020), there were three tools found with good psychometric properties:

1. *The Philadelphia Region Fieldwork Consortium (PRFC) Level I Fieldwork Student Evaluation (2<sup>nd</sup> ed.)*, contains 12 items, and was found to be a valid and reliable measure of professional behaviors (Koenig et al., 2003a). The tool was designed to be completed by Level I fieldwork educators.
2. The Occupational Therapy Attribute Scale (OTAS) was developed for Level II FW and has strong validity and reliability to assess students' professional behavior after completing all academic coursework (Hubbard et al., 2007).
3. The Student Professional Behavior Questionnaire is a student self-assessment tool which also has solid psychometric properties (Yuen et al., 2016).

None of the three aforementioned tools are faculty rating assessment tools. The Professional Development Assessment tool was designed in 1996, thereby not meeting the inclusion criteria, and was designed for both faculty and clinicians, which was found to have promising psychometric properties on a small sample (Kasar et al., 1996). However, no further research on the Professional Development Assessment was found and the tool was never published.

There are several problems with assessment alone in meeting accreditation standard A.3.5 Evaluation (of professional behaviors) on a Regular Basis (ACOTE, 2018, p.15). Typically, there are discrepancies between faculty and student self-ratings (Arnold, 2002; Gude et al., 2017; O'Donoghue et al., 2018; Poirier et al., 2017). Some common observations with self-rating comparisons include new clinicians or new students overestimating their performance (Abadel & Hattab, 2013), greater discrepancies occurring between student and examiner for poorer performing students (Abadel & Hattab, 2013; Arnold, 2002; Davis et al., 2006), women rating themselves lower than men (Abadel & Hattab, 2013, Davis, 2015; Gude et al., 2017) and high performers under-estimating their performance (Davis, 2015; Gude et al., 2017).

Level I fieldwork takes place during the didactic portion of the curriculum and thus, the PRFC tool was ultimately selected as a reasonable expectation of professional behaviors in the classroom. It was also an OT derived assessment which speaks to the professional identity and expectations of the OT field. The tool also offered opportunity for qualitative comments for written feedback, to help frame a discussion, facilitate reflection, and/or teachable moments for students.



The aims of this study were to compare results of professional behavior assessments completed by both faculty and students within key points in the didactic curriculum to determine whether this method of assessment could inform fieldwork preparation pedagogy. This study also aimed to examine students' perceived personal growth across the final didactic semester when professional behaviors were explicitly taught within a single course.

## Methods

### Design

This convergent mixed methods, single cohort, institutional retrospective case study was approved by the college's Institutional Review Board where the students attended a full-time entry-level master's OT program. Consent was waived due to the retrospective review of deidentified, existing coursework, and student assessments. The study consisted of two phases. Phase one was a retrospective quantitative analysis of faculty-student and student self-assessment pre/posttest scores on the *PRFC Level I Student Fieldwork Evaluation (2<sup>nd</sup> ed.)* (Koenig et al., 2003b). Phase two was a retrospective qualitative analysis of a pre/post student self-reflection journal assignment over the last didactic term in the OT curriculum as a part of existing coursework assigned in a Fieldwork Seminar course aimed at increasing student self-awareness and reflection.

### Participants

Convenience sampling was utilized due to the researcher's dual role as an Academic Fieldwork Coordinator and Fieldwork Seminar course instructor at the institution. There were initially 47 students in the cohort including 9 males (one male student withdrew from the program) and 38 females for a final sample of  $N = 46$ . The faculty advisors completing the *PRFC* assessment were ( $n = 5$ ) during the pre-test measure and  $n = 4$  during the posttest, due to one faculty leaving the institution and no longer serving in an advisor capacity. No other demographic information was collected on the students and faculty to protect their anonymity.

### Instrument

The *PRFC Level I Student Fieldwork Evaluation (2<sup>nd</sup> ed.)* is a 12-item instrument used to score student professional behaviors that contribute to clinical competence (Koenig et al., 2003b). The 12 items were initially developed from a survey ( $n = 75$ ), followed by content review by experts ( $n = 5$ ) who established content validity (Koenig et al., 2003a). The resultant 12 items include: 1) Time management skills; 2) Organization; 3) Engagement in the fieldwork experience; 4) Self-directed learning; 5) Reasoning/problem solving; 6) Written communication; 7) Initiative; 8) Observation Skills; 9) Participation in the supervisory process; 10) Verbal communication and interpersonal skills; 11) Professional and personal boundaries; and 12) Use of professional terminology. Each item is rated on a Likert scale of 1-5. The description of each level (1-5) is represented below in Figure 1. The requirements for passing the assessment include "No more than one item below a 2" and/or "No more than two items below a 3". Through field study of both OT and OTA students ( $n = 317$ ) a principal component factor analysis and item analysis was conducted to demonstrate both

internal consistency reliability (Cronbach's alpha = 0.89) and an intra-rater reliability range between items of 0.68-0.89. Koenig et al. (2003a) also indicated that the assessment has discriminant validity with students scoring lower earlier on in fieldwork rotations, demonstrating the developmental nature of student maturation and professional socialization. The tool appears to be a psychometrically strong evaluation to identify students who may need more direct intervention and to also provide students with formative and summative feedback of their professional behavior performance.

## Figure 1

### *PRFC Level I Student Evaluation Performance Rating Scale*

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<b>1=Well Below Standards:</b>	Performance is weak in most required tasks and activities. Work is frequently unacceptable.
<b>2=Below Standards:</b>	Opportunities for improvement exist however student has not demonstrated adequate response to feedback. Work is occasionally unacceptable.
<b>3=Meets Standards:</b>	Carries out required tasks and activities. This rating represents good, solid performance and should be used more than all the others.
<b>4=Exceeds Standards:</b>	Frequently carries out tasks and activities that surpass requirements. At times, performance is exceptional.
<b>5=Far Exceeds Standards:</b>	Carries out tasks and activities in consistently outstanding fashion. Performance is the best that could be expected from any student.

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## Data Collection

### **Quantitative**

All students completed the *PRFC Level I Student Evaluation (2<sup>nd</sup> ed.)* as a self-assessment twice during their fifth and final didactic semester as a pre-test and post-test measure. The pre-test was completed in the first week of the semester as an in-class learning activity aimed at increasing self-awareness and identifying potential blind spots prior to Level II fieldwork. The posttest followed at the end of the semester as a means of self-assessment and reflection of their own professional development. Faculty advisors also completed the *PRFC Level I Student Evaluation (2<sup>nd</sup> ed.)* on their advisees, as a pretest/posttest measure. All *PRFC* assessments were briefly reviewed by the Academic Fieldwork Coordinator, who was the principal investigator (PI) of this study for potential student follow-up and then de-identified and set aside for retrospective statistical analysis using Microsoft Excel.

### **Qualitative**

Students were asked to complete a self-reflection journal assignment consisting of five open ended questions about their perceptions of their own professional behavior and development after completing the *PRFC* self-assessment at the beginning of their final semester. To identify defining moments within the course and/or program (as an added

means of program evaluation) and to facilitate reflection regarding professional growth across the semester, students were then asked to complete the second journal reflection assignment as a “post-test” during the last class of the term. The second journal reflection assignment consisted of six questions - the same five open ended questions used in the first reflection assignment and one yes/no/maybe or unsure response question (“Did your strengths/weaknesses change during the course of the semester?”).

## Data Analysis

### **Quantitative**

The total mean scores, means for each assessment item, and standard deviation from the means were calculated for all student and faculty pretest and posttest assessments. Both between group (faculty and student at both time points) and within group (faculty pretest/posttest and student pretest/posttest) differences were calculated using two-tailed t-tests ( $p < 0.01$  and  $p < 0.05$ , respectively). A Bonferroni’s correction, for multiple comparisons, was utilized as a protection against Type I error when running multiple t-tests simultaneously (Portney, 2020). The corrected desired  $p$  value for within group differences was ( $p \leq 0.004$ ). Additional examination of the five students rated by different faculty at pretest versus posttest, indicated there was no difference from the other students’ scoring patterns. Microsoft Excel was used for all data analysis.

### **Qualitative**

Student journal reflections were collected at two time points across the duration of a 15-week course taught by the first author, demonstrating prolonged engagement with the participants. The journals were deidentified, organized, coded, and analyzed manually using constant comparative analysis to identify themes. As codes were identified they were tracked in a separate Microsoft Word Document, reviewed, and narrowed by the first author. To ensure confirmability in the data collection and analysis, the researcher utilized the technique of bracketing assumptions defined by Brown (2016), which is referred to as identifying personal assumptions related to the data prior to the analysis process to ensure that study results are reflective of actual data gathered rather than researcher bias. The student reflections from both time points were initially analyzed separately, and a list of themes and subthemes were identified for each during open coding. The second author reviewed codes at several stages to cross compare and discuss emerging themes and discrepancies until consensus was achieved for dependability. Then a code-recode procedure was utilized during axial coding due to the primary involvement of a single researcher to facilitate further dependability. Next, the nine initial and eight follow up list of themes were combined into one continuous list where duplicates were omitted, and similar themes were combined for a list of 13 initial themes by two raters. The 13 themes (professional behaviors) were then presented to a group of 22 first year OT students who were instructed to define each term in their own words for credibility data. Finally, the researchers’ codebook definitions were triangulated with the first-year student definitions and current literature. This process led to combining codes and refining the list to seven themes. To ensure rigor one additional discussion to determine congruence was held with the second author, and two

additional independent reviewers (an Academic Fieldwork Coordinator and an OT fieldwork educator) to further validate resulting themes/definitions for confirmability. This process led to further refinement and categorization into four professional behavior themes: communication skills, executive function skills, emotional intelligence, and identity.

## Results

### Quantitative

The quantitative analyses demonstrated a statistically significant difference between faculty and student scores on the *PRFC Level I Fieldwork Student Evaluation (2<sup>nd</sup> ed.)* at both pretest ( $p = 0.00006$ ) and posttest ( $p = 4.14 \times 10^{-9}$ ). Within group (pre/post-test) total scores of student self-assessments were significant ( $p = 0.0003$ ), but not for faculty pre/posttest rating of students ( $p = 0.959$ ). Individual t-tests were run on each of the 12 *PRFC Level I Fieldwork Student Evaluation (2<sup>nd</sup> ed.)* assessment items to determine items that may be more sensitive to change or effecting total score. Items 5 (“Reasoning/Problem Solving”), 7 (“Initiative”), 9 (“Participation in the Supervisory Process”), and 12 (“Use of Professional Terminology”) were all found to have statistically significant differences between the pre/post-test student self-assessments. See Table 1 below for statistical results. The faculty assessments yielded no statistically significant differences when looking at individual items within the faculty group.

**Table 1**

*t-test Comparisons of Faculty and Student Pre/Post-test PRFC Scores*

Group	Pretest <i>M</i>	Post-test <i>M</i>	<i>p</i> value
Faculty	43.19	43.37	0.959
Student	47.87	51.22	0.00035*
Faculty-Student Pre	-	-	0.00006*
Faculty-Student Post	-	-	$4.14 \times 10^{-9}$ *

*Note.* \* Indicates statistical significance ( $p \leq .01$ ).

**Table 2**

*Mean, Standard Deviation, and t-test Comparisons of Student Pre/Post-test PRFC Assessment Items*

Assessment Item	Pretest <i>M</i> ( <i>SD</i> )	Post-test <i>M</i> ( <i>SD</i> )	<i>p</i> value
Time management	4.173	4.261	0.4204
Organization	4.239	4.434	0.0732
Engagement	4.333	4.369	0.6427
Self-Directed Learning	4.021	4.195	0.1596
Reasoning/ Problem Solving	3.673 (0.732)	4.043 (0.698)	0.0035 *
Written Communication	3.804	4.130	0.0219
Initiative	3.913 (0.755)	4.639 (.679)	0.0013 *
Observation Skills	3.826	4.239	0.0065
Participation in the Supervisory Process	3.717 (0.911)	4.130 (0.718)	0.0035 *
Verbal Communication & Interpersonal Skills	4.195	4.261	0.5730
Professional & Personal Boundaries	4.413	4.565	0.1096
Use of Professional Terminology	3.652 (0.674)	4.217 (0.696)	9.451 x 10 <sup>-5</sup> *
<b>Total score</b>	47.87 (5.286)	51.22 (5.633)	0.00035 *

*Note.* \* Indicates statistical significance ( $p \leq .004$ ) with Bonferroni's correction.

### **Qualitative**

The qualitative analysis resulted in four themes and two subthemes that categorize professional behaviors. The four themes include: communication skills, executive function skills, emotional intelligence, and identity. The final theme of identity also includes subthemes of engagement in learning and confidence. Each theme and subtheme will be defined and illustrated with quotations from the students' journal reflections to support data authenticity.

#### **Theme 1: Communication Skills**

Communication Skills were defined as written, verbal, or non-verbal means of connecting or transferring information, active listening, and/or therapeutic use of self.

Communication skills were identified as the most important professional behavior skill for Level II fieldwork by 48% of participants ( $n=46$ ), with many students indicating their current strength in this area. Students recognized the various forms of communication including active listening, written, verbal, and non-verbal/body language as being essential. One student declared,

“I am a good active listener, ... with the ability to read both verbal and nonverbal communication cues” – Student 001.

Students also identified awareness of ways in which their communication can affect group dynamics:

“I need to improve my communication, especially when it comes to working in a group” – Student 033;

“I have worked on my tone of voice especially when I am stressed and working in a group” – Student 029.

Students also identified communication skills relative to clinical interviewing skills, emphasizing the importance of eye contact and ability to generate “professional” responses as being important skill areas for future development.

“I think my weakness is making sure to maintain eye contact when speaking with someone during an interview” – Student 006;

“I identified a flaw in my communication skills when I am under stress. For example, if I am not prepared enough to answer questions, like in an interview, I will not be able to effectively and professionally communicate. It's very frustrating, because it makes me sound unintelligent, when really, it's just my nerves getting to me” – Student 001.

In the second journal response, completed after their professional behavior course, subjects' comments further stressed the importance of good communication with their professors, fieldwork supervisor, peers, and interdisciplinary team and specifically named effective communication as a strategy that can contribute to their overall success:

“When we communicate openly and respectfully with our supervisors, clients, and coworkers, they are going to want to help us succeed, rather than if we demonstrate a lack of [communication]” – Student 015;

“I realized with most group work I take a passive role...I usually tend to go with the flow and allow others to choose and take whatever is left. Many times during the semester this has caused me frustration...if I do not advocate for myself, my skills, and my interests then I'll be left with work that is not interesting to me” – Student 039.

Students self-identified additional weaknesses or areas for improvement that included awareness of one's own appropriate body language/eye contact/facial expressions and effective communication within the telehealth/remote context of their class as being important. They highlighted stress, fear, anxiety, and nerves as impeding their ability to effectively communicate, both in the classroom and when on fieldwork:

“...when I am under stress, for example, if I am not prepared to answer questions on the fly, I will not be able to effectively and professionally communicate. It’s very frustrating because it makes me sound unintelligent, when it’s really just my nerves getting in the way” – Student 001.

Students identified the exchange of feedback, conflict management, and use of professional terminology as being most challenging and areas with room for future development. In contrast, they identified active listening and interpersonal skills as being easier/something they were good at.

### ***Theme 2: Executive Function Skills***

Executive function skills were defined as: attention/attending to task, task persistence, organizing, planning and prioritizing, flexibility, ability to regulate one’s emotions, engaging in self-monitoring, and working memory (keeping track of what you are doing).

Students identified several executive function skills as being both strengths and weaknesses including time management, organization, multitasking, preparation, and flexibility/adaptability. Some students identified flexibility and adaptability as being an area they made the most progress in across the semester mainly attributed to the COVID-19 pandemic and the demands of shifting from in-person to remote learning.

“Flexibility is so important. We are going to be entering a new world of practice due to COVID, we must be flexible in order to be successful with our patients and Level II supervisors” – Student 007.

Students identified executive function skills like time management, organization and flexibility as being critical to fieldwork success and being viewed as a “professional”.

“Professionalism means you need to be able to adapt and work around everything that is going on” – Student 046;

“...being punctual helps to build your professional image and it is something we should have already adapted in our schooling and mastered” – Student 024;

“The most important professional behavior to display is time management. Being on time and the ability to manage work tasks effectively will have an influence on an entire workday. It also shows I am proactive and motivated to complete tasks successfully” – Student 040.

Students discussed several strategies to assist in these areas including the use of time tracker apps, planners, calendars, assignment agendas, “to do” lists, and walking away to refocus their attention. However, students also expressed how these strategies were difficult to implement under the stress of an intense semester and COVID-19 pandemic.

“I honestly have not made as much progress as I would have liked to in regard to time management. I started writing in a planner but the semester got so hectic with the class/ assignment changes due to COVID, I went back to taking assignments one day at a time” – Student 012.

Additionally, students shared particular difficulty with focusing or organizing themselves as a whole during a particularly stressful time. At times their lack of organization impacted their ability to focus; complete timely, efficient, and quality work/assignments, and also their ability to effectively communicate.

“Becoming massively aware of how IMPORTANT is to MANAGE TIME wisely!!! I now use a time tracker apps to better manage time” – Student 004;

“I have learned to walk away from my assignment for just 10 minutes to give myself time to decompress. It helps me to refocus and helps me with performing better within my work” – Student 037;

“I tend to have all of these thoughts floating around in my head, but when I am nervous, I cannot get [them] out in an effective and professional way” – Student 001.

All of these examples demonstrate strategies students experimented with during the academic program. Some students also expressed the interconnectedness between demonstrating organization and time management as a demonstration of their level of engagement.

### **Theme 3: Emotional Intelligence**

Emotional Intelligence was defined as: awareness and respect; the capacity for self-reflection and the understanding and perception of self and regard for others.

Student’s perception of their own emotional intelligence (self-awareness, interpersonal skills, and control) appeared to increase dramatically during their final didactic semester:

“I have learned to read my audience. My friends can handle my large personality but maybe my professors find it unprofessional” – Student 019.

Some students named particular fieldwork seminar course activities that facilitated this process including an interprofessional career event, lab activities geared towards the exchange of feedback and developing self-awareness through frequent opportunities for self-reflection.

“I learned I am emotional intelligence competent. Other courses require portions of emotional intelligence but in this course, we had a thorough discussion on the topic and its importance and an opportunity to practice in labs” – Student 015.



Other activities contributing to their emotional intelligence throughout the program and students' personal lives, were also discussed including participation in group work, remote learning, and social situations.

There was also a concept of mutual respect conveyed. Students discussed establishing mutual respect with a one-on-one supervisory relationship as being a primary goal and/or that this interaction would come naturally. Some described themselves as subordinates or there being a fear or lack of approachability in the classroom with professors, thereby impacting their behavior.

“Prior to fieldwork, I am eager to overcome my tendencies to overthink [or] become anxious as a result of negative feedback from those I fear or I am subordinate to” – Student 013.

They stressed the importance of respect in relationship building in order to remain engaged and committed.

“Respect shows you value your CI’s [clinical instructor] time and effort placed into teaching you and vice versa. Respect includes respecting your CI, other coworkers, students, time, and the space you share with others” – Student 019.

Students believed that demonstrating respect would show their regard for others.

#### ***Theme 4: Identity***

Identity was defined as: self-actualization, who you are, the way you think about yourself, the way you are viewed by the world and how you would be labeled. It was further broken down into personal identity including personality traits, roles, self-efficacy, belief in one's own abilities and professional identity as a clinician/ practitioner including clinical skills, engagement and integrity.

Over the course of the semester students described their identity development transitioning from student to clinician (i.e, student, fieldwork student, student clinician, professional, future clinician, clinician, OT). Importantly, they noted their lack of confidence and fear as largely impacting their progression along this transition.

The responses demonstrate that professional behavior and identity is developmental in nature. Also, that there is no singular trajectory for identity development considering the many labels students identify with at the same time points. Additionally, engagement in learning and confidence must be built within the classroom in order for students to perform during Level II fieldwork.

There was a realization of boundaries and separation of personal and professional image/identity which was conveyed.

“I have been working on separating what is happening personally to what is going on with school/work and having it not affect me as it has this semester. Trying to leave what’s happening personally at the door, when working is something I would like to continue to work on” – Student 017.

This demonstrates the students’ actualization of defining a “professional” self. The key influencers of identity development extrapolated from student responses include the subthemes of their engagement in learning and their self-confidence.

**Engagement in learning.** Students continued their active voice when it came to the area of engagement:

“As student clinicians, we’re expected to gather as much knowledge as possible during fieldwork. I can’t afford to be a passive participant. I need to ask a lot of specific questions. I want my supervisor to know I’m giving 100% everyday. I want to reflect on my experience and say with confidence, I gave 100%” – Student 041.

Students identified their ability to be assertive, proactive, take initiative, self-advocate, and ask questions to facilitate understanding as being both strengths and weaknesses. They also identified the importance of asking questions, self-advocating, and proactively communicating in order to demonstrate their level of engagement.

“Being professional overall is a big one, but in order to do that you need to show your clinical instructor that you are there to learn and you are listening and engaged in every conversation, repeating what is said if needed, therefore they know you understand” – Student 009.

While these themes were consistent across the semester students communicated an understanding of the repercussion or impact of not being engaged in the follow up, rather than stressing the importance alone in their initial reflections.

**Confidence.** Students discussed their lack of confidence as a weakness: being too passive, more passive, or intimidated/fearful when in a stressful situation or with an individual in a position of power. Some students reported their fear of being wrong as paralyzing or inhibiting their ability to try or participate.

“I have a fear of being wrong, so I do not try at times” – Student 019;

“I think I have made small steps in advocating for myself and others. I have tried more and more to voice my opinions and answering questions. I know that one of my blind spots is that I am afraid to be wrong - due to this fear I tend to not offer comments, suggestions, or feedback readily” – Student 039.

They also discussed how their lack of confidence may contribute to their patients’ lack of confidence in their abilities as an OT:

“If I am not confident in my knowledge abilities, then that might reflect in my demeanor and treatments. In turn it may affect the patients’ confidence in my abilities as an OT and their trust in me” – Student 039.

Thus, the need to demonstrate confidence or appear confident became real when considering their professional identity and building therapeutic relationships. Again, students named specific experiences in the final didactic semester which built their confidence, self-actualization, or at least caused them to overcompensate.

“I am better at interview questions and answers than I thought. I thought I came across nervous or not having good enough answers, however, during the IEP event I got great feedback from the employers. I feel more comfortable answering questions now” – Student 020.

### Discussion

The field of OT has been emphasizing the importance of students’ professional behavior for over 20 years (Kasar & Clark, 2000). Positive professional behaviors have been found to positively correlate with clinical performance (MacKenzie et al., 2019; Mason et al., 2020) and conversely, poor professional behaviors are the most common characteristics of students who have failed Level II fieldwork (James & Musselman, 2006; Nicola-Richmond et al., 2016). Furthermore, professional behaviors and communication account for 25 percent of the AOTA FWPE assessment (AOTA, 2020c). Despite the emphasis on the importance of soft skill development, academic programs have no clear path to addressing students’ professional behaviors. Likewise, students are still experiencing professional behavior issues on Level II fieldwork. Implementation of professional behaviors at a program level, requires a solid understanding of fieldwork and clinical site expectations, a valid and reliable assessment tool, and a consistent, reflective process for integrating professional behavior feedback and development throughout a curriculum. Currently, there is no best practice approach to how academicians can identify and address professional behaviors within an academic setting (Gutman et al., 1998; Evenson et al., 2015). While there are an existing number of professional behavior assessment tools identified, as many as 14 in a systematic review by McCallum et al. (2020), the need for a valid and reliable assessment tool to be used by OT faculty to first assess and later help teach professional behaviors within the academic portion of the education program is still present.

The current study explored students’ professional behaviors using the *PRFC Level I Fieldwork Student Evaluation (2<sup>nd</sup> ed.)* within the academic setting and student journaling of their perceptions of their professional development across their final academic semester. The assessment results demonstrated no statistical significance for faculty ratings of students’ professional behavior development across their final academic semester. However, there was a significant difference between how the faculty and students rated the students’ professional behavior both at pretest ( $p = 0.00006$ ) and posttest ( $p = 4.14 \times 10^{-9}$ ) (see Table 1). The students also rated themselves with significant change from pretest to posttest ( $p = 0.0003$ ). These results

confirm that faculty and students have different perceptions of student professional behaviors as found by Robinson et al. (2012) and Gurley et al. (2022). Without one-to-one intervention, feedback, and discussion of individual behaviors, assessment alone is not reliable as an intervention for improvement. Likewise, without a clear consensus on how academicians should best address professional behaviors in the classroom, many are incorporating multiple strategies which impedes efficacy and is not efficient. This study demonstrated that students sense the lack of clear expectations among faculty regarding professional behavior and soft skills. In addition, the students conveyed they do not lack or misunderstand the expectations, but rather, are impeded by fear/anxiety/stress in their ability to implement and practice these skills. This further leads to inconsistent soft skill performance during Level II fieldwork and a lack of clear expectations for students entering a profession and assuming a professional identity. Comparative analysis between resulting qualitative themes, current literature, and quantitative data identified an evolution of some professional behaviors and some implications for pedagogy which will be included below.

Due to faculty's difficulty identifying and discussing professional behavior problems with students (Jette & Portney, 2003), an assessment tool to help guide the conversation and provide objectivity is key. It is also recommended that faculty utilize an assessment tool that focuses heavily on the communication skills, soft skill development of students, and in alignment with clinical expectations in the field. Babola and Peloquin (1999) found the best way to facilitate clinical competence in students, is to institute a clinical environment/expectation in the classroom. By further investigating the utility of an assessment that was originally designed to be used by fieldwork educators, the gap between classroom and fieldwork education can be bridged and clinical expectations realized.

The qualitative results of this study indicated that students perceived communication skills to be the most important professional behavior on Level II fieldwork, which is supported by previous literature. In a survey study of fieldwork educators, demonstrating clinical competence and good communication skills were the most important skills for OT students (Campbell et al., 2015). Communicating properly was also found to be one of the five categories defining professional behavior in the newly developed operational definition of professionalism offered by Lecours et al. (2021). With both students and clinical supervisors in agreement that communication is essential to successful completion of fieldwork, communication skills must be addressed throughout the didactic curriculum. Additionally, by openly discussing effective coping strategies that impact positive communication skills (such as verbal communication, non-verbal communication, and listening), we can better prepare students to exercise resilience.

### **Limitations**

It is important to note some limitations with this study. A small, convenience sample from a single college was analyzed, limiting the generalizability of the data. The PI was immersed in the study as both the Academic Fieldwork Coordinator and course instructor where the self-assessment and journal responses were collected, creating the

potential for bias; however, as noted in the methods, numerous strategies were implemented to ensure trustworthiness. More intensive faculty training would have facilitated better interrater reliability. Faculty communicated differing perceptions of some items, as the assessment is designed to be used in the field, which could impact results.

The variable of COVID-19 cannot be excluded from affecting student perceptions, faculty ratings, or student scores. The shift to remote learning, undoubtedly affected students' ability to fully engage with faculty and/or course material exactly as they would in a traditional, in-person format. The results of this study may benefit from further longitudinal data provided by additional cohorts outside of the context of COVID-19.

### Implications for Occupational Therapy Education

In keeping up with today's trends and in response to the literature, one cannot underestimate the importance of developing students' professional behavior. This requires faculty to consider the developmental nature of behavior, assess communication skills and other professional behaviors to engage in an effective and objective method of feedback, and to facilitate student self-reflection as a primary means for professional behavior development in entry-level OT programs. A framework must be developed to be used across programs, so professionalism can be threaded into entry level OT curriculums to create a consistent expectation, understanding, and model of professional behavior within the field. A psychometrically sound, validated tool must be developed for evaluating professional behavior in the classroom that is usable by students and faculty. Using a psychometrically sound assessment tool in a developmental progression over the course of the program, is a start in better preparing students for professional behavior expectations on Level II fieldwork.

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