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Abstract

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Keywords

Fieldwork, professional reasoning, patient-centered care, occupation-centered practice, reflection

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Supporting the Professional Reasoning of Students from Fieldwork to Practice

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ABSTRACT

The Occupation-Centered Intervention Assessment (OCIA) was created to assist occupational therapy practitioners and students to apply knowledge of the core theoretical constructs of occupation from didactic education to clinical practice. This study investigated how the OCIA influenced students' professional reasoning and supported students' transition from academic education to clinical practice during fieldwork. Using an inductive qualitative approach, researchers analyzed master's level students' (n=61) reflection on using the OCIA to analyze an intervention they had reported providing during fieldwork. Collaborative data analysis produced 48 initial codes. Ongoing peer briefing led to grouping of coded data into three themes and 15 subthemes, and subsequently into four subthemes. Trustworthiness was established through use of multiple researchers, reflexivity, an audit trail, thick description, and peer briefing. Three major themes emerged: (1) promotion of reflection on practice; (2) support of the student's developing professional identity; and (3) ease of use of the OCIA. The OCIA serves as a tool to facilitate development of students' professional reasoning while promoting occupation-centered practice.

Occupation serves as a foundational concept of the occupational therapy profession (Meyer, 1922). However, between the 1930s and 1970s, the profession decreased the emphasis on occupation and embraced a more reductionist approach as the profession aligned itself with the medical profession (Christiansen & Haertl, 2019; Gillen, 2013). During the 1980s and 1990s, occupation re-emerged in the profession through the development of various occupation-centered theories and models (Christiansen &

Haertl, 2009; Leclair et al, 2013). Today, didactic courses in occupational therapy education expose students to various occupational theories to promote the importance of occupation-centered practice, as evidenced in chapters in prominent textbooks (Duncan, 2021; Kramer et al., 2018; Schell & Gillen, 2019). However, the use of theory embracing occupation is not always readily observed in practice (Belarmino et al., 2020; Duncan, 2021; Jewell et al., 2019; Ikiugu et al., 2009). LeClair and colleagues (2013) identified that a lack of occupation used in practice is influenced by pragmatic reasons related to health care service delivery and availability of materials. Furthermore, Elliott et al. (2002) suggested that practitioners may not use theory in practice because of their own lack of educational preparation and lack of role models, suggesting a need for educational materials to promote the use of theory in practice (Frigo et al., 2019; Main et al., 2021).

The fieldwork supervisor role includes aiding students with integration of concepts learned in academia into practice (Vroman et al., 2010). However, if fieldwork supervisors are not incorporating occupation into their practice, they are not providing the necessary role modeling and may be unable to support students' integration of occupation in practice. Vroman et al. (2010) expressed concern that the disconnection between the theoretical constructs of the profession and clinical practice has resulted in students lacking an understanding of the power of occupation as a therapeutic intervention and, subsequently, having difficulty using occupations in clinical practice as practitioners. When such a disconnection between academic education and practice occurs, the fieldwork student and fieldwork supervisor have an opportunity to explore possible reasons for identified differences.

The decision-making process, an important component of professional reasoning, encompasses the cognitive process that practitioners undertake while engaging in practice to design, manage, implement, and contemplate client care (Schell, 2019; Schell & Schell, 2008). Applying theories of occupation is one aspect of professional reasoning, specifically scientific reasoning (Schell, 2019). The development of professional reasoning is essential for the evolution from student, or a novice, to practitioner (Schell, 2019). Successful supervision from a fieldwork supervisor supports growth and maturity in reasoning, which promotes higher-level thinking, and ultimately transitions to complex understanding and problem solving (Koenig & Farber, 2008). To explain nuances of professional reasoning, supervisors need a language to describe their thinking to students and connect it to practice (Hooper et al., 2020; Main et al., 2021; Towns & Ashby, 2014). A systematic review on professional reasoning by Unsworth and Baker (2016) identified the need for expert practitioners to be able to describe underlying thought processes using a common language to encourage professional reasoning skills in students and novice practitioners.

As health care environments continue to evolve with external forces emphasizing the need for cost-efficiency, functional results, evidence-based practice, and client-centered care, occupational therapy is challenged to assert its unique contribution to the rehabilitation process (Leclair et al., 2013). Occupational therapy as a profession has been called to embrace the use of occupation as a therapeutic medium (American

Occupational Therapy Association [AOTA], 2017). Despite the need for the shift toward occupation, many practitioners still engage in pre-functional skills and rote exercise. Smallfield and Karges (2009) found that 66% of interventions utilized with individuals recovering from a stroke focused on pre-functional skills and addressed body function and body structures but lacked meaningful occupation. Importantly, a study by Mulligan and colleagues (2014) identified that practitioners from different practice settings reported valuing concepts of being occupation-based, client-centered, and evidence-based however made daily practice decisions related to evaluation, goal setting, and intervention around performance skills and body functions instead of preferred occupations. Studies outside of the United States indicate similar findings regarding practitioners' use of occupation-centered theory in practice, in Australia (Towns & Ashby, 2014) and in South Africa (Vermaak & Nel, 2016) suggesting that a lack of occupation utilized in practice may be a global concern. With growing evidence to support the use of occupation in practice to promote client outcomes (e.g., Cahill & Beisbeir, 2020; Kaldenberg & Smallfield, 2020; Nilsen et al., 2015), it is imperative for students and practitioners to collaborate with their clients to develop and implement client-centered, ecologically valid, and occupation-focused interventions. To assess progress towards this goal requires a valid and reliable tool that can measure these changes. One such tool is the Occupation-Centered Intervention Assessment (OCIA; Jewell & Pickens, 2017; Jewell et al., 2021).

Occupation-Centered Intervention Assessment

The Occupation-Centered Intervention Assessment was developed to easily link the core theoretical construct of occupation into clinical practice for students and practitioners (Jewell, Wienkes, et al., 2021). The assessment tool was created to provide a framework to analyze occupation-centered interventions, and to improve students' and practitioners' ability to design and evaluate these interventions (Frigo et al., 2019; Main et al., 2021; Wienkes et al., 2021). Using the Occupational Therapy Intervention Process Model (Fisher, 2009) and the Occupational Therapy Practice Framework (AOTA, 2014) as a theoretical foundation, the OCIA includes three scales focused on client-centered, occupationally relevant, and ecologically valid intervention design and implementation. Visually illustrated as three continuum scales, the practitioner or student uses the OCIA to rate the intervention provided to a client to consider (1) personal relevance, identifying the meaning and or purpose the intervention activity held for the client; (2) contextual relevance, identifying how natural the context was for the activity, and (3) occupational relevance, identifying if the activity reflected exercise/rote practice or simulation of a real occupation. Each scale includes numeric ratings and examples to reflect the three continua (Jewell & Pickens, 2017; Jewell et al., 2021). When using the OCIA, the practitioner or student uses the provided examples and corresponding numeric ratings to evaluate the three variables and add these to indicate overall occupation-centeredness of the intervention.

Research on the OCIA provides evidence of its sound psychometric properties, including validity and reliability (Hinkley et al., 2021; Jewell & Pickens, 2017; Wienkes, et al., 2021) and a study with entry-level doctoral occupational therapy students as participants demonstrated inter-rater reliability (Jewell et al., 2021). The OCIA has been

used with practitioners to assess the occupation-centered nature of their practice (Jewell et al., 2016). Recognizing the important role that fieldwork education has on students' professional reasoning prompted the question of the use of the OCIA for students, to help them apply theoretical knowledge regarding occupation in their practice. Although preliminary studies have examined the use of the OCIA in Level I fieldwork settings (or a one-week observation-based fieldwork; Frigo et al., 2019) and Level II fieldwork rural settings (Main et al., 2021) in promoting student confidence, creativity, and communication, the utility of the OCIA to promote students' professional reasoning of their early practice during Level II fieldwork has not been explored. Specifically, the authors aimed to integrate the OCIA into a professional reasoning didactic course after the students completed Level II fieldwork to bridge the gap between the theoretical constructs of occupation and the realities of clinical practice.

The purpose of this study was to investigate the utility of the OCIA with master's level occupational therapy students as they transitioned from the academic setting to clinical practice while on fieldwork. The research questions were: How does the OCIA influence the development of professional reasoning in master's level students when used to support reflection on their practice during fieldwork? How does the OCIA influence the ability to apply the theoretical construct of occupation to implement an occupation-centered approach in practice?

Method

Design

Use of an inductive qualitative approach (Patton, 2015; Thomas, 2006) allowed for understanding of the effects of students' perspectives of using the OCIA on their professional reasoning, particularly on how the OCIA influenced their reasoning and future decision-making regarding occupation-centered interventions. Specifically, an inductive approach allows for systematic appraisal of large amounts of textual data into a summary of the findings, while allowing linkage to the study objectives (Patton, 2015; Thomas, 2006). The researchers initiated the study after approval from the appropriate institutional review boards and the students provided consent for utilization of their assignments.

Participants

A total of 61 out of 63 students from a master's level occupational therapy program agreed to have their assignment included in this study. The students were in their final semester in which they return to the university campus after fieldwork. The convenience sample comprised of 59 women (97%) and two men (3%). Most were 20-25 (93%) and 7% were 26-35 years of age. Half of the students (51%) completed fieldwork in acute care or inpatient rehabilitation settings (see Table 1).

Table 1*Setting Type for Students' Fieldwork Experience*

Setting	n (%)
Early intervention (Pediatric)	4 (6.5)
School setting	4 (6.5)
Pediatric clinic	5 (8)
Acute care hospital	14 (23)
Inpatient rehabilitation	17 (28)
Outpatient rehabilitation	4 (6.5)
Upper-extremity rehabilitation	3 (5)
Mental health/behavioral health in-patient	5 (8)
Unique settings (Assistive technology, equine therapy, vision rehabilitation, community-based integration, cancer treatment)	5 (8)

Procedures

Level II fieldwork occurs as part of an educational program after students have completed required didactic coursework to support entry into supervised clinical practice (Amini & Gupta, 2012). As part of the occupational therapy curriculum, students in the occupational therapy program for this study engaged in a required online discussion with their peers while on Level II fieldwork. One discussion post prompt, in the last month of the 12-week fieldwork experience, asked students to describe one intervention they had recently had with one of their clients. Specific questions guided their discussion of their intervention, recognizing that the details provided would be helpful in the planned subsequent analysis of the intervention using the OCIA (see Appendix A).

After fieldwork, the students returned to campus and completed a course on professional reasoning involving reflection about their fieldwork experiences. The second author taught one of two sections of the course but was blind to the data collected for the study including the students' identity. One learning activity in the course was analysis of the reported intervention from their fieldwork experience using the OCIA. Students were introduced to the OCIA by the developer of the tool in a live, interactive format to both sections of students at one time. The training included the OCIA's purpose, administration, scoring, and interpretation. Students practiced scoring each OCIA continua to evaluate interventions for occupation-centeredness, using patient videos (International Clinical Educators, 2016) and were provided with verbal group feedback on scoring accuracy and reasoning to increase understanding of the tool.

Students used the OCIA as a guide to analyze the intervention session they had previously described in the online discussion post while on fieldwork, still available to them on the learning management system. Students were instructed to have a copy of the OCIA figure with labels indicating the continua of possible actions and descriptions to score their selected intervention to rate their level of occupation-centered practice. Students then answered questions prompting reflection on their analyzed intervention and the use of the OCIA as a tool to facilitate their reflection (see Appendix B). The course instructor compiled the de-identified submitted reflection assignment from the learning management system for all students who agreed to participate in the study.

Data Analysis

Using an inductive approach, researchers analyzed the students' submitted reflection assignments using HyperRESEARCH, a qualitative software program (Researchware, Inc., 2015), to label and organize the data. The researchers independently immersed themselves in the data by reading and re-reading the reflection assignment four to six times each (Thomas, 2006). After each researcher generated preliminary codes based on their interpretation of what the student was saying in relation to the research question, the authors then jointly coded line by line and developed 48 initial codes. The researchers discussed the frequent concepts and grouped the initial codes into three initial themes and 15 subthemes. The subthemes decreased as the researchers recognized redundancy in coded data. They reached consensus through weekly discussion of codes and themes and peer briefing when consensus was not reached and to finalize the three themes and four subthemes.

The researchers employed multiple strategies to establish trustworthiness of the data. The first and third authors completed the analysis independently before sharing findings to combat the single-researcher bias (Curtin & Fossey, 2007; Patton, 2015). The approach was especially critical as the second author taught one section of the course in which the study was conducted. The researchers employed reflexivity through discussion of and writing out potential biases, each keeping a journal during the coding process and utilized these reflections to identify and help decrease bias. Keeping an audit trail and a thick description allowed for further transparency of the research process. Specifically, the third author maintained detailed meeting notes to track the research process. Peer briefing with the second author, an experienced qualitative researcher, further confirmed the findings (Curtin & Fossey, 2007; Patton, 2015).

Findings

The findings represent the students' reflection about the OCIA and how it influenced their use of occupation as they prepared to transition from fieldwork to clinical practice. Specifically, three major themes emerged from the data: (1) promotion of reflection on practice; (2) support of the student's professional identity; and (3) ease of future use of the OCIA to continue reflecting on their practice.

Promotion of Reflection on Practice

Students reported on how the OCIA promoted reflection on their practice, based on their analysis and use of the OCIA regarding the reported intervention provided when on fieldwork. Students in this study were split in the outcome of their reflection of using the OCIA to consider their intervention. First, some students reported that analysis of their intervention session using the OCIA helped them increase awareness of the occupation-centered nature of their practice. A second group, comprising a second subtheme in the data, was from students who reported that the OCIA helped them identify changes they could make in practice to utilize a more occupation-centered approach. In either situation, students embraced the importance of occupation-centered practice and frequently referred to intervention components from the OCIA to support occupation-centered practice.

OCIA Confirmed Occupation-Centered Perspective

Approximately half of students reported that the OCIA helped them recognize that they embraced an occupation-centered perspective. For example, student #52 clearly reported this, “Upon using the OCIA to reflect on the intervention session ... I found that my practice aligned quite well with the goals of the OCIA with regard to personal relevance, contextual relevance and occupational relevance.” Similarly, student #23 found that her analysis of the intervention she had provided was occupation-centered. She expanded on her analysis and articulated that her intervention addressed what was important to her client.

After really analyzing how each intervention I did with this patient was occupation-based and worked towards goals that were important to the client, and not just the doctor and medical team, I have a more positive outlook on how my role as an occupational therapy student impacted my patients! I recognize that I did carry out occupation-based interventions and kept the theory and foundations of OT with me throughout my fieldwork. Although as a student, there is always doubts of whether or not you are doing the best possible interventions, this analysis has made me recognize that I can incorporate occupation wherever I go.

Student #23 acknowledged occupation as the foundation of the profession and how her analysis helped her feel better about her role in her client’s care. Furthermore, this student reported that her analysis using the OCIA reassured her about using occupation in her future practice.

OCIA Helped Students Consider Changes in Practice

Approximately half of students reported how the OCIA helped them recognize that they could make changes to use a more occupation-centered approach. This became a second subtheme in the data. For example, student #5 reported:

Considering the OCIA, I learned that my scope of thinking while planning intervention sessions has been limited. Although I believe I was considering all factors to create a client-centered and occupation-centered intervention plan, I

was still being narrow and not specifically targeting all aspects that could make the client more motivated and successful. In a sense, I was not “taking the next step.” Using the scales from the OCIA assisted me in gaining insight to what more I could have done for this client when considering personal relevance, the context and the environment and the occupation being addressed, as three different parts.

Again, student #5 reported that the three components of the OCIA guided her reflection on her practice, just as those students who had reported that the OCIA confirmed their reasoning. Many students provided specific examples of how they would change their intervention based on their analysis using the OCIA. Student #18 gave the following specific example:

One activity I tried with this client was to roll out “dough” (putty) with a rolling pin, as it was a tool many people used in the kitchen and was available in our clinic. The key part I forgot was that this was not a meaningful occupation for this client, her culture did not use rolling pins and she was completely unfamiliar with this tool.

In summary, whether the students reported that the OCIA helped them to confirm their occupation-centered thinking or to consider changes they might have made to increase occupation-centered thinking, all noted the reflection promoted by using the OCIA.

Supported the Student’s Developing Professional Identity

Although not specifically asked as a question, the students discussed how the OCIA supported their identity as emerging practitioners, particularly as they began to see themselves as occupational therapists, with a focus on occupation. Student #24 considered practice that she had witnessed on her fieldwork that did not include occupation and compared that to what she was discussing in her occupational therapy courses, including learning about the OCIA.

The OCIA helped me think more critically about my practice as an occupational therapist. As we have read throughout this semester, the factor that separates our profession from others is our focus on occupation. After witnessing countless interventions on fieldwork that were not occupation-focused or based, I realized the importance of keeping those ideals in the forefront of my mind while practicing. The OCIA helps keep the ethos of OT [occupational therapy] always running through my brain when planning an intervention.

While student #24 referred to what she had seen other practitioners doing, others more pointedly considered what their immediate fieldwork supervisor was modeling for them during fieldwork. Student #46 clearly stated that she modeled her practice after her fieldwork supervisor:

As a fieldwork student in the inpatient behavioral health setting, I felt somewhat confined to the approaches and resources that my fieldwork supervisors used. I also found myself questioning if the clients would carry over any of the information from the interventions after discharge. Initially, I modeled my groups after my supervisors, who I realized had been using the same groups for several years and often accepted the way things were.

While student #46 reported she followed her supervisors' lead, she further explained that she had begun to explore different approaches for intervention that included all three "avenues" or OCIA continua (i.e., occupational, contextual, and personal relevance). Furthermore, she reported that the OCIA helped her continue to develop as a professional as she considered her future practice. Student #46 continued:

I branched out from their style, as I became more comfortable in the setting, but I did not recognize the opportunities for growth that was [sic] available to me. I think the OCIA has helped me to think more creatively about my interventions, instead of being guided by time constraints, habits, or convenience. With three avenues to improve the occupation-centeredness, I am less likely to accept the easy or typical route. Looking at the intervention from a personal, contextual, and occupational relevance perspective makes occupation-centered services seem more achievable and tangible.

Fieldwork and the opportunity for reflection on the fieldwork experience provides a critical time in students' professional development in which they take on the practitioner role as a new identity. Student #35 highlighted the change in her thinking as a result of analyzing an intervention she provided during fieldwork using the OCIA:

As a future occupational therapist, I believe that it is my responsibility to emphasize the use of occupation in my treatment sessions. The emphasis on occupations in my practice will allow me to be true to the roots of occupational therapy. The use of occupations during interventions will also allow other disciplines to value the role of OT as part of a multidisciplinary team. The OCIA training helped me to realize that I should not lose sight of what makes occupational therapy unique. Occupational therapists help clients bring meaning back into their lives in a way that differs from any other discipline. The OCIA training helped me to reflect on how I used occupation during my fieldwork, as well as how I can make occupation the main focus of all my future interventions.

Student #35's reflection on using the OCIA reflects the profession's values and confirmed her own professional identity.

Ease of Use of the OCIA to Continue Reflecting on Practice

After using the OCIA to analyze just one intervention the students had described providing while on fieldwork and reflecting on their analysis, the students reported on their plan to use the OCIA as they entered practice. Although not prompted to discuss the format of the OCIA, students' comments supported two sub-themes regarding the ease of utility of the tool: the visual layout of the OCIA and the quick scoring to promote easy and creative modifications in future interventions.

Visual Layout

Many of the students noted that the visual graphics depicting the three continua would help them to use the OCIA in the future. Student #57 succinctly identified the visual prompts in helping her consider aspects of intervention stating that the "OCIA is helpful in that it is a guided conceptual process with written prompts and visual graphics that clarify the intangible aspects of intervention planning." Student #31 elaborated on the visual layout of the OCIA with each of the three areas to consider and related these to retrospectively scoring interventions she had observed using the OCIA.

I think about the range of OT sessions I have observed, in various practice settings, and can pick out where each session would have scored, both high and low. I found it very helpful to have the three areas to focus on laid out in the picture with the arrows: personal relevance, contextual relevance, and occupational relevance.

Quick Scoring to Promote Easy and Creative Modifications for Interventions

Building on the first theme but clearly distinct, data from the students supported the second theme. The students expressed how easy the OCIA was to evaluate intervention and help them consider how to modify aspects of it to support occupation-centered practice. Student # 43 explained,

The OCIA helped me because it is simple to understand and when reflecting on practice, gives me a clear guideline of what is truly OT. Analyzing treatment sessions doesn't have to take long and the analysis can even take place when writing notes about the session. This tool will absolutely be useful when deciding what interventions to use and how to use them.

Similarly, student #21 noted,

I liked how straightforward the assessment was, and easy to follow. I felt the OCIA was easy to understand yet consisted of specific enough criteria under each continuum, allowing the practitioner to be flexible and creative with intervention planning while including all of the necessary components to be categorized as occupation centered.

Discussion

Master's level students who participated in this study identified the OCIA as a practical tool to guide their reflection on intervention and support their future design and implementation of occupation-centered interventions. They reported that the tool assisted them in their understanding of interventions that were more consistent with an occupation-centered approach, further developing their professional reasoning skills and identity as an occupational therapist. The research supports previous studies that reported that use of a systematic, reflection process, such as the OCIA, guides critical thinking and reflection and can prompt change in practice (Frigo et al., 2019; Main et al., 2021; Matthews, 2017; Wienkes et al., 2021). Professional reasoning develops over time as practitioners develop clinical experience, therefore students and novice practitioners with less than 10 years of experience are more likely to report a desire to use a formal tool to support their professional reasoning (Knightbridge, 2019; Wienkes, et al., 2021). Evidence supports that the ability to compare and contrast clinical reasoning between an experienced practitioner and student promotes the professional development of healthcare practitioners (Roland, 2017). Furthermore, the ability to ground the development of decision-making skills within the context in which they occur (e.g., clinic settings) can further solidify the development of sound professional reasoning skills (Koufidis et al., 2020). The OCIA can serve as a communication tool between practitioner and student to further promote reflection and clinician reasoning development while grounding the occupational therapy process within context (Main et al., 2021). This study provides evidence to support the use of the OCIA as a concrete method for developing students' professional reasoning skills.

The students described how their reflection using the OCIA helped them be more aware of what they can do during intervention to reinforce their professional identity as occupational therapists. The findings align with Schell's application of the stages conceptualized by Dreyfus and Dreyfus (1986) that practitioners progress through as they develop professional reasoning and clinical expertise: novice, advanced beginner, competent, proficient, and expert. Understanding the value of the core tenets of occupation-centered practice differentiates the transition of a novice to advanced beginner practitioner. Recognizing and consolidating one's professional reasoning through acknowledgement of current clinical knowledge and limitations and gathering and appraising clinical information is critical for the progression toward proficient and expert practice (Murray et al., 2020). The OCIA assisted students in increasing their ease with understanding three components of practice and provided a tool that allowed them increased independence with the ability to evaluate interventions. The tool provided a structure to promote reflection, which allowed students to foster their own style for implementing interventions and sense of competence, a learning threshold identified by Murray and colleagues (2020) that leads to professional identity development.

Many students reported they planned to use the OCIA to plan future interventions, as they enter practice, to make their interventions more occupation-centered. It was somewhat unexpected that the students reported a desire to use the reflection tool in future practice. Despite development of tools and models to promote occupation-

centered and evidence-informed practice (Benfield & Johnston, 2020; Matthews et al., 2017), limited follow up and implementation has occurred (Gillen, 2013; Ikiugu et al., 2009). Students' report of the simplicity of the visual layout of the OCIA and the quick scoring using the three continua facilitated its use for reflection as well as future intervention planning. This finding is critical as previous studies indicated that adoption of assessments and occupation-based interventions are rarely utilized if common barriers to practice, such as time, lack of equipment, and productivity standards, are not easily overcome (Bennett et al., 2019; Hinkley et al., 2021; Wienkes et al., 2021). The ease of use, quick scoring, and the simple visual layout of the OCIA promotes its potential future use as well as reflection for future intervention planning. A follow-up study on the participants' use of the OCIA and how it shaped their professional reasoning and intervention as they enter practice would be valuable.

Bridging the theory-practice gap between academic education, where theoretical constructs are learned, and clinical practice is a primary intention of the OCIA. The results of this study demonstrate that the OCIA has the potential to assist in bridging the gap identified between the theories learned through didactic course work and the implementation of occupation-centered interventions in fieldwork settings. Specifically, the OCIA has the potential to provide a common language to facilitate conversations around the essential components of occupation-centered practice, a need identified by Towns and Ashby (2014) and Unsworth and Baker (2016) and similarly confirmed by Main and colleagues (2021).

Limitations and Future Research

This study used a retrospective review of a reflective class assignment using a previously documented intervention from fieldwork. This design did not allow for any interaction with students to clarify or expand upon information used for data analysis. Additionally, the sample only included students from one cohort of a master's degree program in the Northeastern United States, primarily composed of female students, limiting transferability of results. Furthermore, the students only used the OCIA for reflection and did not implement use of the tool into clinical practice. To address these limitations, future studies could utilize interviews to further delve into students' experiences with using the OCIA during fieldwork and in various geographic locations. Also, a future study could be completed with other levels of occupational therapy education such as an occupational therapy assistant program or entry-level doctoral occupational therapy students to explore how the OCIA supports students' ability to design and implement occupation-centered interventions.

All students in the study had been in the same educational program and taken the same courses together. Yet student reports of occupation-centered intervention use varied, with some students reporting confirmation of occupation-centered practice and others reporting new insight that their intervention approach lacked a focus on occupation. The students analyzed interventions in a variety of Level II fieldwork practice settings. They did not indicate what influenced their intervention plans which might have included the pragmatics of the setting and health care delivery system, role models by other practitioners, or the focus of conversations with their fieldwork supervisor as they honed

professional reasoning skills. Exploring the reasoning behind their intervention plans would be worthy of future study to better understand the complexity of professional reasoning early in one's professional career. Additionally, a future study could explore if using the OCIA provides a common language to promote communication between occupational therapy students and fieldwork supervisors thereby promoting occupation-centered reasoning. Finally, a longitudinal study examining how students' use of the OCIA early in their fieldwork experience influences their occupation-centered reasoning as they become practitioners and enhances their developing professional reasoning skills would be beneficial.

The students in this study were assigned to a range of practice settings during fieldwork, but predominately in rehabilitation or acute care (51%) and another 19.5% likely working with adults in out-patient rehabilitation, upper-extremity rehabilitation, or mental health. Data from all students was analyzed as one data set for this analysis. Comparing the occupation-centeredness of practice in different settings and exploring the influences on practice would be useful for educators to better prepare students for all practice settings.

Implications for Occupational Therapy Education

Through a qualitative inquiry, this study identified themes that support the OCIA as a useful tool to assist students in designing and implementing interventions using an occupation-centered approach. Additionally, the tool assists with the development of professional reasoning and confidence, which may aid students' establishment of their professional identity as an occupational therapist and provide rationale for intervention approach selection. Occupational therapy educators may embed the OCIA into curricula to promote the development of students' professional reasoning, reflection, and development of occupation-centered care plans. The increased confidence with occupation-centered intervention planning and implementation allows the student to demonstrate occupational therapy's unique contribution to the rehabilitation and habilitation process. Since there are no other published tools of this nature, the OCIA can serve as a tool to assist with development of professional reasoning using an occupation-centered lens.

References

- American Occupational Therapy Association. (2014). Occupational therapy practice framework: Domain and process (3rd ed.). *American Journal of Occupational Therapy*, 68 (Suppl. 1), S1–S48. <https://doi.org/10.5014/ajot.2014.682006>
- American Occupational Therapy Association. (2017). Philosophical base of occupational therapy. *American Journal of Occupational Therapy*, 71(Suppl. 2), 7112410045. <https://doi.org/10.5014/ajot.716S06>
- Amini, D., & Gupta, J. (2012). Fieldwork level II and occupational therapy students: A position paper. *American Journal of Occupational Therapy*, 66(Suppl.), S75-S77. <https://doi.org/10.5014/ajot.2012.66S75>

- Belarmino, J., Smith, S., & Jewell, V.D. (2020). Exploring the usage of the International Classification of Functioning, Disability, and Health in pediatric occupational therapy. *Annals of International Occupational Therapy*, 3(2), 69-77. <https://doi.org/10.3928/24761222-20191125-01>
- Benfield, A.M., & Johnston, M.V. (2020). Initial development of a measure of evidence-informed professional thinking. *Australian Occupational Therapy Journal*, 67, 309-319. <https://doi.org/10.1111/1440-1630.12655>
- Bennett, L., Jewell, V.D., Scheirton, L., McCarthy, M., & Muir, B.C. (2019). Productivity standards and the impact on quality of care in inpatient rehabilitation hospitals. *Open Journal of Occupational Therapy*, 7(4), 1-11. <https://doi.org/10.15453/2168-64008.1598>
- Cahill, S. M., & Beisbeir, S. (2020). Practice Guidelines—Occupational therapy practice guidelines for children and youth ages 5–21 years. *American Journal of Occupational Therapy*, 74, 7404397010. <https://doi.org/10.5014/ajot.2020.744001>
- Christiansen, C. H., & Haertl, K. (2009). A contextual history of occupational therapy. In E. B. Crepeau, E.S. Cohn, & B. A. B. Schell (Eds.), *Willard & Spackman's occupational therapy* (11th ed., pp. 9–34). Lippincott Williams & Wilkins.
- Curtin, M., & Fossey, E. (2007). Appraising the trustworthiness of qualitative studies: Guidelines for occupational therapists. *Australian Occupational Therapy Journal*, 54(2), 88–94. <https://doi.org/10.1111/j.1440-1630.2007.00661.x>
- Dreyfus, H., & Dreyfus, S. (1986). *Mind over machine: The power of human intuitive expertise in the era of the computer*. Free Press.
- Duncan, E. A. S. (2021). *Foundations for practice in occupational therapy* (6th ed.). Elsevier.
- Elliott, S. J., Velde, B. P., & Wittman, P. P. (2002). The use of theory in everyday practice: An exploratory study. *Occupational Therapy in Health Care*, 16(1), 45-62. https://doi.org/10.1080/J003v16n01_04
- Fisher, A. G. (2009). *Occupational Therapy Intervention Process Model: A model for planning and implementing top-down, client-centered, and occupation-based interventions*. Three Star Press.
- Frigo, N., Hanneman, E., Kashale, A., Sutton, M., Wright, E., & Jewell, V.D. (2019). Utility of the Occupation-Centered Intervention Assessment for occupational therapy level I fieldwork. *International Journal of Practice-based Learning in Health and Social Care*, 7(1), 64–74. <https://doi.org/10.18552/ijpbhsc.v7i1.510>
- Gillen, G. (2013). A fork in the road: An occupational hazard? *American Journal of Occupational Therapy*, 67, 641–652. <https://www.doi.org/10.5014/ajot.2013.676002>
- Hinkley, E., Leach, C., Wienkes, T., & Jewell, V.D. (2021). Utility of the Occupation-Centered Intervention Assessment in pediatric occupational therapy practice. [Manuscript submitted for publication]. Occupational Therapy Department, Creighton University. <https://doi.org/10.1080/19411243.2021.1975603>
- Hooper, B., Molineux, M., & Wood, W. (2020). The Subject-centered Integrative learning model: A new model for teaching occupational therapy's distinct value. *Journal of Occupational Therapy Education*, 4(2). <https://doi.org/10.26681/jote.2020.040201>

- HyperRESEARCH 3.7.3. (2015). Computer Software, Researchware, Inc. Retrieved from <http://www.researchware.com/>
- Ikiugu, M. N., Smallfield, S., & Condit, C. (2009). A framework for combining theoretical conceptual practice models in occupational therapy practice. *Canadian Journal of Occupational Therapy, 76*(3), 162-170.
<https://doi.org/10.1177/000841740907600305>
- International Clinical Educators. (2016). *ICE Learning Center*. Retrieved from <http://www.icelearningcenter.com>
- Jewell, V.D., Burkley, J., Wienkes, T. & Kaufman, T. (2021). Establishing inter-rater reliability of the Occupation-Centered Intervention Assessment for student observation of rehabilitation interventions. *Journal of Occupational Therapy Education, 5*(4).
- Jewell, V. D., Grajo, L., Misciagno, S., & Okorafor, C. (2021). Internal validity of the Occupation-Centered Intervention Assessment: A Rasch analysis pilot study [Manuscript submitted for publication]. Occupational Therapy Department, Creighton University.
- Jewell, V. D., & Pickens, N. D. (2017). Psychometric evaluation of the Occupation-Centered Intervention Assessment. *Occupational Therapy Journal of Research: Occupation, Participation, and Health, 37*(2), 82-88.
<https://doi.org/10.1177/1539449216688619>
- Jewell, V.D., Pickens, N., & Burns, S. (2019). Identification and effectiveness of occupational therapy interventions in skilled nursing facilities: A scoping review. *Annals of International Occupational Therapy, 2*(2), 79-90.
<https://doi.org/10.3928/24761222-20190218-03>
- Jewell, V. D., Pickens, N. D., Hersch, G., & Jensen, G. (2016). An exploration into occupation-centered practice in skilled nursing facilities. *Physical & Occupational Therapy in Geriatrics, 34*(1), 43-56.
<https://doi.org/10.3109/02703181.2015.1114062>
- Jewell, V. D., Wienkes, T., & Pickens, N. (2021). *The Occupation-Centered Intervention Assessment: A tool to measure occupation-centered practice*. American Occupational Therapy Association Press. [Book accepted for publication]. Occupational Therapy Department, Creighton University.
- Kaldenberg, J., & Smallfield, S. (2020). Practice Guidelines—Occupational therapy practice guidelines for older adults with low vision. *American Journal of Occupational Therapy, 74*, 7402397010.
<https://doi.org/10.5014/ajot.2020.742003>
- Knightbridge, L. (2019). Reflection-in-practice: A survey of Australian occupational therapists. *Australian Occupational Therapy Journal, 66*(3), 337-346.
<https://doi.org/10.1111/1440-1630.12559>
- Koenig, K., & Farber, R. S. (2008). Facilitating clinical reasoning in fieldwork: The relational context of the supervisor and student. In *Clinical reasoning in occupational therapy*. Lippincott Williams & Wilkins.
- Koufidis, C., Manninen, K., Nieminen, J., Wohlin, M., & Silen, C. (2020). Grounding judgement in context: A conceptual model of clinical reasoning. *Medical Education, 54*, 1019-1028. <https://doi.org/10.1111/medu.14222>

- Kramer, P., Hinjosa, J., & Howe, Tsu-Hsin (2018). *Frames of reference for pediatric occupational therapy* (4th ed.). Alphen aan den Rijn. Wolters Kluwer.
- Leclair, L. L., Ripat, J. D., Wener, P. F., Cooper, J. E., Johnson, L. A., Davis, E. L. O., & Campbell-Rempel, M. A. (2013). Advancing the use of theory in occupational therapy: A collaborative process. *Canadian Journal of Occupational Therapy*, 80(3), 181-193. <https://doi.org/10.1177/0008417413495182>
- Main, E., Michaud, C., Kellar, A., Wondra, K., Jewell, V. D., Wienkes, T., & Coppard, B. M. (2021). The Occupation-Centered Intervention Assessment: Bridging theory and practice in fieldwork education. *Journal of Occupational Therapy Education*, 5(1). <https://doi.org/10.26681/jote.2021.050110>
- Matthews, L.K., Mulry, C.M., & Richard, L. (2017). Matthews model of clinical reasoning: A systematic approach to conceptualize evaluation and intervention. *Occupational Therapy in Mental Health*, 33(4), 360-373. <https://doi.org/10.1080/0164212X.2017.1303658>
- Meyer, A. (1922). The philosophy of occupational therapy. *Archives of Occupational Therapy*, 1(1), 1–10.
- Mulligan, S., White, B. P., & Arthanat, S. (2014). An examination of occupation-based, client-centered, evidence-based occupational therapy practices in New Hampshire. *OTJR: Occupation, Participation and Health*, 34(2), 106–116. <https://doi.org/10.3928/15394492-20140226-01>
- Murray, C.M., Edwards, I., Jones, M., & Turpin, M. (2020). Learning thresholds for early career occupational therapists: A grounded theory of learning-to-practise. *British Journal of Occupational Therapy*, 83(7), 469-482. <https://doi.org/10.1177/0308022619876842>
- Nilsen, D., Gillen, G., Arbesman, M., & Lieberman, D. (2015). Evidence Connection—Occupational therapy interventions for adults with stroke. *American Journal of Occupational Therapy*, 69, 6905395010. <https://doi.org/10.5014/ajot.2015.695002>
- Patton, M.Q. (2015). *Qualitative research and evaluation methods* (4th ed.). SAGE.
- Roland, D. (2017). Have we forgotten to teach how to think? *Emergency Medicine*, 34, 68–69. <https://doi.org/10.1136/emered-2016-206211>
- Schell, B. A. B. (2019). Professional reasoning in practice. In B. A. B Schell & G. Gillen (Eds.), *Willard & Spackman's occupational therapy* (13th ed., pp. 482-497). Wolters Kluwer.
- Schell, B. A. B., & Schell, J. W. (2008). *Clinical and professional reasoning in occupational therapy*. Wolters Kluwer Lippincott Williams and Wilkins.
- Schell, B.A.B & Gillen, G. (Eds.). (2019). *Willard and Spackman's occupational therapy* (13th ed.). Lippincott, Williams & Williams.
- Smallfield, S., & Karges, J. (2009). Classification of occupational therapy intervention for inpatient stroke rehabilitation. *American Journal of Occupational Therapy*, 63(4), 408–413. <https://www.doi.org/10.5014/ajot.63.4.408>
- Thomas, D. R. (2006). A general inductive approach for analyzing qualitative evaluation data. *American Journal of Evaluation*, 72(2), 237–246. <https://www.doi.org/10.1177/1098214005283748>

- Towns, E., & Ashby, S. (2014). The influence of practice educators on occupational therapy students' understanding of practical application of theoretical knowledge: A phenomenological study into student experiences of practice education. *Australian Journal of Occupational Therapy*, 61(5), 344–352. <https://www.doi.org/10.1111/1440-1630.12134>
- Unsworth, C., & Baker, A. (2016). A systematic review of professional reasoning literature in occupational therapy. *British Journal of Occupational Therapy*, 79(1), 5–16. <https://www.doi.org/10.1177/0308022615599994>
- Vermaak, M. R., & Nel, M. (2016). From paper to practice—academics and practitioners working together in enhancing the use of occupational therapy conceptual models. *South African Journal of Occupational Therapy*, 46(3), 35-40. <https://www.doi.org/10.17159/2310-3833/2016/v46n3a7>
- Vroman, K., Simmons, C. D., & Knight, J. (2010). Service learning can make occupation-based practice a reality: A single case study. *Occupational Therapy in Health Care*, 24(3), 249–265. <https://www.doi.org/10.3109/07380571003706058>
- Wienkes, T., Jewell, V.D., Chang, I., Quaid, S., & Watson, C. (2021). Clinical utility and validity of the Occupation-Centered Intervention Assessment for occupational therapy mental health practice. *Annals of International Occupational Therapy*. <https://doi.org/10.3928/24761222-20210601-04>

Appendix A

Student Posting During Last Month of Fieldwork Level II-B

In this posting, I would like for you to describe an intervention session that you have recently implemented on your own with a client. (Client may mean the patient or may mean a parent, teacher, spouse, or caregiver.) You will need to refer to the Occupational Therapy Practice Framework, 3rd edition (OTPF) to do this posting (I have posted it under Resources on Bb). We will use this description when you return to campus in your Professional Reasoning course. You do not need to respond to other students' posting.

Please answer the following questions/writing prompts:

Set the stage: identify the setting type, client's age and gender, and primary goals

What does the client want to be able to do? What are the client's goals?

Consider the client's occupational therapy evaluation, which of the goals set during evaluation are you working toward in this session?

List the specific goals of the session

Describe *what* you did in your intervention session and *why*. Use OTPF, Tables 1, 2, & 3, beginning on page S19-S26 to help you with this if needed. Here are examples:

- We worked on dressing so the person could get dressed independently
- We worked on dressing with clothes on the left side of the person to remediate left neglect
- We talked about using adaptive equipment for the person to use later when dressing
- The person practiced bending and reaching so that he/she can put shoes on again
- The person stood to improve balance
- The person did ROM to increase flexibility and to decrease tone to put arm into shirt

Describe the session: Specifically, what did *you* do and what did the *client* do? Table 6 in the OTPF (pages S29-S31) will help you with this discussion.

What did you consider when planning your intervention session?

Describe how you addressed the context/environment during the session. Use Table 5 (page S 28) in the OTPF for the different categories of context.

Describe how you included occupation in your intervention session.

Describe how your session reflected client-centered practice.

Appendix B

Analysis of Intervention During Fieldwork Using OCIA

Select one intervention that you described in your intervention session, submitted on the Bb discussion during fieldwork.

Analyze that intervention using the OCIA.

Then answer the following questions.

1. What did you learn about your practice from using the OCIA to reflect on the intervention session?
2. Consider the intervention and the client's goals. Describe how the intervention supported the client's goals. How could you modify the intervention to reflect more personal relevance for the client?
3. When thinking of the environment, describe what features made it contextually relevant. Describe how the environment could be modified to make it more naturalistic.
4. How would you classify your intervention on the occupational relevance scale (passive, exercise/rote practice, contrived, or occupation)? If your intervention is not classified as occupation, how could it be changed to increase its occupational relevance?
5. How do you think using the OCIA would be helpful when developing future interventions?
6. When considering intervention planning in general, what ways has your thinking changed when developing an intervention? (Think broadly, not just related to the specific intervention discussed above.)
7. How did the OCIA help you with your analysis and reflection on practice?