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OCCUPATIONAL THERAPY STUDENT PREPAREDNESS
FOR CLINICAL FIELDWORK

By

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A DISSERTATION

Presented to the Affiliated Faculty of

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ABSTRACT

Topic: Experiential learning and occupational therapy student preparedness

Problem and Purpose: Occupational therapy education programs must prepare occupational therapy students for practice. Traditional observational Level I Fieldwork presents challenges to achieve student-learning objectives and often places the burden of supervision on practicing therapist. The purpose of this study was to explore occupational therapy students' perceptions of preparedness for Level II Fieldwork following participation in a skill-based experiential learning opportunity as an alternative to traditional observational Level I Fieldwork.

Research Question and Sub-Questions: What is the graduate occupational therapy student's perception of preparedness for intensive Level II Fieldwork following a skill-based, experiential learning opportunity? **Sub-Question 1:** What is the occupational therapy student's perception of comfort level with skill performance when exposed to a learning experience within a clinical context? **Sub-Question 2:** What is the occupational therapy student's perception of comfort level with skill performance when interacting with client-participants within an experiential learning environment?

Participants: A retrospective desk review of pre-experience and post-experience surveys completed by 44 second-year graduate students from one Master of Science occupational therapy program.

Research Design: Retrospective formative program evaluation of de-identified program data pre-experience and post-experience student survey responses. In-depth analysis included descriptive statistical analyses of quantitative data, and qualitative analysis through coding of students' narrative responses.

Findings: All students perceived the experiential learning opportunity as relevant with 47.7% identifying the experience as critical in preparation for Level II Fieldwork. Students reported increased self-awareness of strengths (22 instances) and areas for growth (38 instances). Students noted the impact of interpersonal interactions on interprofessional collaboration and the development of therapeutic rapport with 43 students identifying communication as a necessary skill for Level II preparedness. Students identified an increased sense of professional identity visualizing themselves in the role of therapists with accountability for professional growth and development.

Recommendations: Findings support the use of experiential learning as a method to prepare students for Level II Fieldwork. Recommendations are to create experiential learning opportunities within supportive learning environments that challenge students to apply skills and knowledge in context.

Keywords: Experiential Learning, Fieldwork, Occupational Therapy, Occupational Therapy Education, Program Evaluation

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DEDICATION

To my dear husband, Arnie and my sweet daughter, Ava, thank you for all of the adventures, playdates, and ice creams that you shared in my absence. I am forever grateful for your love, encouragement, and your willingness to join me in this journey.

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CHAPTER 1

INTRODUCTION

Occupational therapy is a nationally certified healthcare profession that provides direct service to individuals and groups of all ages within a broad range of settings, including but not limited to hospitals, homes, schools, and community settings (American Occupational Therapy Association [AOTA], 2018a). Occupational therapy (OT) education programs have a responsibility to “develop competent, entry-level, generalist occupational therapists” (Accreditation Council for Occupational Therapy Education [ACOTE], 2018a, p. 35), and to ensure OT students are prepared to meet the challenges and demands of current practice. In preparation for practice, accreditation standards require experiential learning as an integral component of occupational therapy education (ACOTE, 2018a). Experiential learning opportunities embedded within the didactic portion of an OT program that are intended to introduce students to components of OT practice are termed Level I Fieldwork (ACOTE, 2018a). These experiences create vital scaffolding toward the development of higher-level skills and reasoning that require students to synthesize knowledge and apply an integrated set of skills to respond to the unique needs of clients toward the development and application of individualized evaluation and intervention plans. The application of these higher-level skills occurs in an intensive clinical experience at the end of the didactic portion of the program that is termed Level II Fieldwork in which the goal is to achieve entry-level competence (ACOTE, 2018a).

Fieldwork experiences require collaboration with clinical settings and a community of practicing occupational therapists. Due to its immersive design, Level II Fieldwork occurs exclusively beyond the institution walls within occupational therapy practice settings and has very specific requirements and guidelines within the accreditation standards (ACOTE, 2018a).

However, Level I Fieldwork varies in structure, design, and implementation that is reflective of each institution's curricular design and is intended to complement the didactic curriculum. The combination of didactic coursework and Level I Fieldwork experiences is intended to prepare students for Level II Fieldwork.

Traditional models of Level I Fieldwork have relied heavily upon clinical sites for in situ experiences (experiences within their naturally occurring settings) that are primarily short-duration and observational, and typically provide a supervision model with a one-to-one student to therapist ratio (Roberts, Hooper, Wood, & King, 2015). These observational experiences frequently occur in a broad range of settings for the same cohort of students; and the opportunity for students to participate in hands-on learning varies greatly as well (Barker, Lencucha, & Anderson, 2016; Johnson, Koenig, Piersol, Santalucia, & Wachter-Schutz, 2006). New national occupational therapy education accreditation standards that will become effective as of July 2020 will place greater restrictions on the variability in learning within Level I experiences (ACOTE, 2018b); and therefore, may require educational institutions to consider alternatives to traditional models of Level I Fieldwork.

The structure of these traditional Level I learning experiences can present challenges for practicing therapists who express concern about their ability to provide quality learning opportunities within the demands of their work environments (Brown, McKinstry, & Gustafsson, 2016; Evenson, Roberts, Kaldenberg, Barnes, & Ozelie, 2015; Ryan et al., 2018). Varland, Cardell, Koski, and McFadden (2017) surveyed practicing therapists and identified job expectations such as productivity demands and caseload requirements as some of the factors that negatively influence a therapist's willingness to supervise students within this traditional model. Additionally, Varland et al. (2017), indicate therapists identify job demands that require they

“simultaneously fulfill multiple roles in his/her practice setting” (p. 239) which further contributes to concerns about the ability to provide quality learning experiences.

Although traditional models of Level I fieldwork have emphasized observation of therapists in practice for a majority of the learning experiences, accreditation standards require fieldwork experiences be “implemented and evaluated for their effectiveness by the educational institution” (ACOTE, 2018, p. 39), and not the clinical site. Therefore, while collaboration with clinical partners is an important component, the onus of responsibility to create quality learning opportunities that meet course objectives is on the educational program, and not the responsibility of the practitioner or clinical site.

Several factors have led educational programs to consider alternative approaches to Level I Fieldwork experiences. Factors influencing the consideration of alternative approaches include the responsibility to provide quality Level I learning experiences, the challenges of the current healthcare environment, and the impending changes in accreditations standards. The changes in accreditation standards for Level I experiences promote and support alternatives to traditional models of Level I Fieldwork experiences to include the use of simulated environments and patient conditions, and the use of faculty-led learning experiences as part or all of a Level I experience (ACOTE, 2018b). This study explores the implementation process of an alternative approach to a traditional model of Level I Fieldwork at one institution and utilizes a formative program evaluation methodology to assess the effectiveness of these experiences on OT students’ perceptions of preparedness for Level II Fieldwork.

Statement of the Problem

According to the US Department of Labor (2019), the field of occupational therapy continues to demonstrate steady job growth with projections for 2016 – 2026 at a job growth rate

of 24%, compared to the overall 7% job growth rate projected for all other professions. This positive projection has generated an ongoing increase in the number of OT education programs and OT students across the United States with a nearly 75% increase in the number of occupational therapy students over the past ten years (AOTA, 2018b). As the number of OT students increases, so does the need for a greater number of fieldwork placements. The increased need for fieldwork placements has placed a greater demand on supervising therapists. Practicing therapists have expressed concerns regarding their ability to supervise student experiences and manage the rigors of job requirements that the current healthcare environment demands (Brown et al., 2016; Evenson et al., 2015; Ryan et al., 2018; Varland et al., 2017). Therefore, while OT educational program needs for fieldwork experiences have increased, the availability of practicing therapists to supervise students has decreased (AOTA, 2017). Yet, OT education programs have the responsibility to provide quality learning experiences for all of their students.

Occupational Therapy (OT) educational programs have been prompted to consider alternatives to traditional approaches to fieldwork due in part, to the imbalance of the number of available fieldwork placements and the increase in the number of students seeking fieldwork placements creating a problem of practice (AOTA, 2018b; Brown et al., 2016; Evenson et al., 2015; Ryan et al., 2018). This identified problem contributed to the decision of one occupational therapy education program located within a private, not-for-profit institution in the Northeastern United States to design a new and innovative pilot program as a potential alternative to traditional Level I Fieldwork. Program development included consideration of best practices that prepare students for clinical experiences and methods that decrease the burden of these experiences placed on therapists as they strive to meet current healthcare demands. The program design followed a logic model with goals to generate outputs that include increased community

engagement, expanded models of sustainable clinical fieldwork experiences, improved marketability to prospective students, and the promotion of clinical excellence.

The newly designed pilot program was a Fall Prevention Clinic offered to community members at an on-campus therapy clinic. Four faculty, who are also certified and licensed healthcare practitioners, and three clinicians employed by the on-campus therapy clinic led this learning experience that took place over the course of one semester. The learning opportunity, which was developed as part of an existing course, was structured to include one orientation session, five two-hour clinic sessions, and a reflective post-experience debriefing survey. Each of the students within the course participated in the initial orientation session and debriefing survey, and one of the two-hour clinic sessions. During each clinic session, students had the opportunity to interview client-participants, administer and interpret screenings and assessments, disseminate fall prevention education, manage client-participant safety, and participate in interprofessional collaborations. These activities were designed to address skills areas required for OT Level II Fieldwork as defined by seven performance categories assessed during Level II Fieldwork (AOTA, 2002). These performance areas include fundamentals of practice, basic tenets of occupational therapy, evaluation and screening, intervention, management of OT services, communication, and professional behaviors (AOTA, 2002). The focus of this study is to explore students' perceptions of preparedness for OT Level II Fieldwork and the impact of a skill-based experiential learning opportunity on students' perceptions of preparedness. As the program's intention was to improve student preparedness for Level II Fieldwork, a formative program evaluation was intentionally selected to explore the program's effectiveness in improving students' perception of preparedness. A formative program evaluation will be used to inform future program development (Patton, 2015) in consideration of best practices for implementing

Level I Fieldwork experiences within the demands and challenges of the current academic and healthcare environments.

Purpose of the Study

This study seeks to explore students' perceptions of preparedness for Level II Fieldwork through the use of a formative program evaluation of one institution's alternative approach to traditional Level I Fieldwork. The formative program evaluation will inform future program design and development to contribute to a goal to address a problem of practice identified as an imbalance of supply and demand of quality fieldwork experiences by creating effective methods to prepare students for Level II Fieldwork. While considering alternatives to traditional models of Level I Fieldwork, an imperative of the learning opportunity must be to remain consistent with the goals of Level I Fieldwork that effectively prepare students for the more intensive Level II Fieldwork experiences (ACOTE, 2018a). The purpose of this formative program evaluation is to explore students' perceptions of preparedness for intensive clinical Level II Fieldwork experiences for second-year, Master of Science occupational therapy students who participated in an experiential learning opportunity designed to allow contextual application of skills necessary for OT Level II Fieldwork. The study will focus a lens on one Master of Science occupational therapy educational program in the Northeast region of the United States that with respect to the institution's confidentiality will be identified throughout the study as OTPX. This formative program evaluation will seek to inform future program development and improvements (Patton, 2015).

Research Questions

Level I fieldwork is intended to create the scaffolding toward the development of skills and knowledge that prepare students for Level II Fieldwork. Educational programs question their

effectiveness due to inconsistencies in student experiences common to traditional Level I Fieldwork that are more observational than hands-on learning opportunities (Barker et al., 2016; Johnson et al., 2006; Roberts et al., 2015). Additionally, therapists express concerns about the effectiveness of traditional Level I experiences within the time constraints of current practice (Brown et al., 2016; Evenson et al., 2015; Ryan et al., 2018; Varland et al., 2107). This study seeks to address the identified problem of practice by examining the effectiveness of one program's alternative approach to Level I Fieldwork through an exploration of student perceptions of preparedness for intensive Level II Fieldwork. The central research question and sub-questions are designed to facilitate an in-depth exploration into these perceptions. These questions consider the impact of a hands-on experiential learning opportunity on student perceptions of preparedness for intensive clinical Level II Fieldwork.

The research question that is central to this study is:

RQ: What is the graduate occupational therapy student's perception of preparedness for intensive Level II Fieldwork following a skill-based, experiential learning opportunity?

Sub-questions derived from the central question consider component parts of student preparedness for Level II Fieldwork in the development of base occupational therapy skill performance, and the application of these skills with client-participants in a clinical context.

The sub-questions are as follows:

RQ₁: What is the occupational therapy student's perception of comfort level with skill performance when exposed to a learning experience within a clinical context?

RQ₂: What is the occupational therapy student's perception of comfort level with skill performance when interacting with client-participants within an experiential learning environment?

Conceptual Framework

To address the research questions and achieve the overall goals of this study, a conceptual framework that combines theory, application to current research, and the researcher's personal investment in the exploration of the problem of practice will be applied throughout the study (Ravitch & Riggan, 2017). The overarching theoretical framework that will be applied throughout the study is Experiential Learning Theory (Kolb, 1984). This theoretical framework of Experiential Learning Theory (ELT) centers around learning through authentic lived experiences that require an individual to adapt to situational needs, and then reflect on those interactions in context to allow a deeper understanding of the experience (Kolb, 1984; Kolb, 2015). Within this theory, Kolb (2015) defines learning as "the process whereby knowledge is created through the transformation of experience" (p. 49). Transformative learning experiences that occur in context are consistent with the structure and goals of the experiential learning opportunity that is the major component of this program evaluation. The Fall Prevention Clinic at OTPX was designed to allow students hands-on practical experience within a clinical context that requires that student-participants adapt to the needs of the client-participants in the moment and was structured to include self-reflection by the student-participant post-experience. This approach to learning is supported by current literature specific to occupational therapy education and to healthcare education in general, as practical application and hands-on learning is a component of most healthcare education programs (Barker et al., 2016; Bennett, Rodger,

Fitzgerald, & Gibson, 2017; Boardman Lawrence, & Polacsek, 2019; Flott & Linden, 2016; Knecht-Sabres, 2013; Kruger et al., 2015; Myers & Schenkman, 2017).

Experiential learning based in Experiential Learning Theory (Kolb, 1984, 2015) is not only a component of occupational therapy education, but also a mandatory requirement to comply with OT accreditation standards (ACOTE, 2018a). Numerous research studies (Brown et al., 2016; Knecht-Sabres, 2013; Precin et al., 2018; Ryan et al., 2018; Wallingford, Knecht-Sabres, & St. Amand, 2016; Yu, Brown, & Etherington, 2017) have focused on the benefits and challenges of design and implementation of experiential learning opportunities, and continued exploration of best practices that prepare students for practice. This study explores a line of reasoning that is both consistent with current literature, and addresses identified gaps in the literature to deepen the understanding of practical application skill development and student perceptions of preparedness for higher-level skills and performance within a clinical environment.

The final component that completes the development of the conceptual framework for this study is this researcher's personal connection to the topic. As an occupational therapy professional for more than 30 years, I have held positions as direct care provider, manager, consultant, and faculty within academia. This connection to the profession and to the subject of this study is further emphasized by my dual role of researcher and as a faculty member at OTPX, the site of this study. In my faculty role, serving as the Academic Fieldwork Coordinator at OTPX, I have a primary responsibility for the design, development, and implementation of all fieldwork experiences, and am "responsible for the program's compliance with fieldwork education requirements" (ACOTE, 2018a, p. 33). My current role and responsibilities as faculty,

coupled with a lifelong investment in the profession have solidified my connection to the topic of student preparedness.

The dual role of faculty member and researcher has the potential to contribute to researcher bias within this study. This potential for bias contributes to the intentional selection of a retrospective study design. Furthermore, data regarding student-participants' perceptions was obtained within the course and administered by faculty, and not through the use of researcher interviews or focus groups. This retrospective data review is to intentionally limit researcher influence and bias, and provide a clear delineation between the role of faculty member and that of the researcher (Coghlan & Brannick, 2010) by not allowing the two roles to occur concurrently.

Assumptions, Limitations, and Scope

The dual role of faculty member and researcher also contributes to assumptions regarding the program to be evaluated within this study. Acting in the role of faculty member, this researcher collaborated with other faculty at OTPX to design the program that is the focus of this study. Therefore, as a proponent of the experiential learning opportunity of the implementation of a Fall Prevention Clinic, there is an inherent assumption that experiential learning applied in a skill-based intervention is beneficial and will contribute to student preparedness for practice. The research design accounts for these assumptions and biases in an effort to decrease their effect to “reflect on, deal with, and report potential sources of bias” (Patton, 2015, p.58). A retrospective study design will be intentionally utilized to limit the potential influence that this researcher-faculty member might have on the responses from students. The use of a survey versus interview or focus group is an additional measure to counteract any potential influence that the dual role of this researcher might have on student-participants (Coghlan & Brannick, 2010).

The benefit of a program evaluation allows for thorough analysis of data with a greater potential for objectivity in representing the benefits and challenges of a program, and the potential to offer suggestions for future improvements (Patton, 2015). The program designed by OTPX is multi-faceted and was created using a logic model that incorporates several outputs. This formative program evaluation will focus on students' perceptions of preparedness for OT Level II Fieldwork following participation in this skill-based, experiential learning opportunity. While the strength of this program evaluation design is the intent to "make judgements about the program, improve or further develop program effectiveness, inform decisions about future programming and/or increase understanding" (Patton, 2015, p. 18), the purpose is not to generalize, representing a limitation in the research design. Consistent with limitations of a program evaluation design, this formative program evaluation is based on one institution's program implemented in one semester with one group of student-participants. Additionally, the program evaluated is the institution's first application of this new program as a Pilot Level I Fieldwork program; and therefore, the lack of longitudinal data is an additional limitation.

Outlined by the parameters of the assumptions and limitations, the scope of this study is to explore students' perceptions of preparedness for OT Level II Fieldwork following participation in an experiential Pilot Level I program at OTPX. The results of the formative program evaluation will be used to inform OTPX's future program development and improvement (Patton, 2015). The research questions are intended to explore data from the OTPX program to gain a more in-depth understanding of the program participants' experience to "ask not only what has occurred and what was accomplished, but why" (Patton, 2015, p.179). The research design is consistent with the scope and purpose of this study to address the effectiveness of the program as it relates to students' perceptions of preparedness for OT Level II Fieldwork

following participation in an alternative approach to traditional OT Level I Fieldwork implemented at OTPX.

Rationale and Significance

The goal of this formative program evaluation is to explore students' perceptions of preparedness for OT Level II Fieldwork following participation in a Pilot Level I Fieldwork program. The rationale in support of this goal combines a conceptual framework that applies Experiential Learning Theory (Kolb, 1984, 2015), current literature, and the researcher's personal life experience to explore a problem of practice that outlines identified challenges of adequately preparing students for occupational therapy practice. The research design uses a formative program evaluation methodology to explore students' perceptions of preparedness OT Level II Fieldwork to gain insight into one institution's approach to the challenges of providing quality learning experiences within the current healthcare education environment. Challenges to providing quality OT Fieldwork learning experiences include increased constraints on therapists' time which limit their ability to devote time to the supervision of students, increased job demands of practice that impact therapists' availability, and an increased demand for students to demonstrate a higher level of competency for base OT skills earlier in their educational process (Evenson et al., 2015; Knecht-Sabres, 2013; Ryan et al., 2018; Wallingford et al., 2016; Yu et al., 2017). The program to be evaluated in this study was an alternative approach to traditional OT Level I Fieldwork designed to address these identified challenges and to achieve the goal of maximizing student preparedness for Level II Fieldwork.

The significance of this study is seen in a line of inquiry to address a current and relevant problem of practice concerned with the growing number of occupational therapy students and its impact on the availability of quality fieldwork learning experiences. Additionally, identified gaps

in the literature include limited available data to connect experiential learning with specific skill development, and a lack of available evidence that details of the contextual elements of effective experiential learning activities (Brown et al., 2016; Roberts et al., 2015; Ryan et al., 2018). The significance and intent of this study is to evaluate one institution's alternative approach to Level I Fieldwork and consider the effectiveness of the program by uncovering students' perceptions of the experience. This study explores students' perspectives of their learning experience by evaluating a program's use of skill-based, experiential learning opportunities. The study will detail specific contextual elements of the learning experience and analyze retrospective program data to gain a deeper understanding of student experiences and their perceptions of preparedness for Level II Fieldwork.

Definition of Terms

The study will explore student perceptions of skill development, and their perspectives of how the application of these skills in context affect their perception of preparedness. To accurately illustrate and define the problem statement, purpose, and research questions, this study will incorporate language and terminology of the profession of occupational therapy. The definitions of these industry-specific terms are outlined within this section.

- **Accreditation Council for Occupational Therapy Education [ACOTE ®]:** “ACOTE consists of 24 members (occupational therapists, occupational therapy assistants, and public members) who represent both academia and practice. ACOTE develops and implements accreditation standards to ensure quality occupational therapy education, thereby supporting the preparation of competent occupational therapists and occupational therapy assistants” (ACOTE, 2018c, para. 1).

- **American Occupational Therapy Association (AOTA):** “a national professional association established in 1917 to represent the interests and concerns of occupational therapy practitioners and students of occupational therapy and to improve the quality of occupational therapy services” (AOTA, 2018c, para. 1).
- **Level I Fieldwork:** is part of the accreditation standards for occupational therapy education programs (ACOTE, 2018a). The “goal of Level I fieldwork is to introduce students to the fieldwork experience, to apply knowledge to practice, and to develop understanding of the needs of clients” (p.35). Level I Fieldwork may be incorporated throughout the academic portion of the program and may vary in duration and intensity to meet the goals of the curriculum.
- **Level II Fieldwork:** is part of the accreditation standards for occupational therapy education programs (ACOTE, 2018a). It “must be integral to the program’s curriculum design and must include an in-depth experience in delivering occupational therapy services to clients, focusing on the application of purposeful and meaningful occupation and research, administration, and management of occupational therapy services” (p.35). Level II fieldwork “require[s] a minimum of 24 weeks of a full-time” (p. 36) clinical experience, and generally occurs after the completion of the didactic portion of the program.
- **Occupational Therapy:** “is the only profession that helps people across the lifespan to do the things they want and need to do through the therapeutic use of daily activities (occupations). Occupational therapy practitioners enable people of all ages to live life to its fullest by helping them promote health, and prevent—or live better with—injury, illness, or disability” (AOTA, 2018a, para. 2).

- **Occupational Therapist - Educational Requirements for Entry-level:** to become an occupational therapist “both degree levels [Master’s and Doctoral] are currently routes of entry to the profession [of occupational therapy] and are accredited by the Accreditation Council for Occupational Therapy Education (ACOTE)” (AOTA, 2018d, para. 1).

Conclusion

Current trends in occupational therapy education have created an increased demand for clinical fieldwork experiences, yet current health care trends may limit therapists’ ability to provide these experiences (AOTA, 2018a; Brown et al., 2016; Evenson et al., 2015; Ryan et al., 2018; Varland et al., 2017). The limited availability of quality fieldwork experiences has created a problem of practice in the imbalance in supply and demand of available clinical fieldwork experiences. Challenges identified within traditional models of short-term clinical fieldwork experiences, defined as Level I Fieldwork (ACOTE, 2018a) have led occupational therapy educational programs to consider alternatives to traditional models (Barker et al., 2016; Brown et al., 2016; Evenson et al., 2015; Johnson et al., 2006; Roberts et al., 2015; Ryan et al., 2018). The purpose of this retrospective formative program evaluation is to assess the effectiveness of a new programmatic approach to Level I Fieldwork that intended to address this problem of practice.

The use of a program evaluation methodology is to allow the program to “deepen the understanding and inform decision making” (Patton, 2015, p.18) in the structure, design, and implementation of Level I Fieldwork experiences. The formative program evaluation design and research questions direct a focused lens on the exploration of student perceptions of preparedness for OT Level II Fieldwork within a clinical context. This study incorporates a comprehensive conceptual framework and applies it in the exploration of a current, relevant, and significant

problem of practice exacerbated by the challenges associated with traditional models of Level I Fieldwork

The formative program evaluation research design takes into consideration researcher biases and assumptions; and, addresses the limitations to maximize the trustworthiness of the study (Patton, 2015). The research design utilizes a conceptual framework that incorporates current literature, a theoretical framework based in Experiential Learning Theory (Kolb, 1984), and the researcher's personal experience. The following chapters will provide a review of current literature, detail the methodology, and provide in-depth analysis and discussion of the findings. The Literature Review in Chapter 2 will provide the conceptual framework and explore the use of experiential learning in occupational therapy and healthcare education. Chapter 3 will detail the research design, identify limitations of the study, and describe methods of data analysis, to support the credibility of the results and conclusions in the final chapters. When combined, these chapters will outline the scope of this study, intended to inform future program development and process improvement at OTPX, and contribute to the body of existing research in the exploration of effective methods that prepare occupational therapy students for practice.

CHAPTER 2

LITERATURE REVIEW

Healthcare education must prepare students to meet the needs and demands of current practice. Occupational therapy programs, like many healthcare professions, combine both didactic and hands-on experiential learning to meet student-learning needs, and to adhere to accreditation standards (ACOTE, 2018a). The purpose of this literature review is to explore and analyze the body of evidence that outlines methods for achieving student-learning objectives, and specifically, to synthesize the findings within current literature that address the effectiveness of experiential learning in preparing students for practice in healthcare education fields.

Experiential learning theory, based on the work of Kolb (1984), explores the relationship between the individual and the environment on learning. Occupational therapy education, as with many healthcare education programs, incorporates experiential learning, termed fieldwork (ACOTE, 2018a), as a required component in preparation for practice. Traditional fieldwork models using one-to-one supervisor-to-student ratios within individual healthcare facilities, demonstrates variability in student learning experiences and student participation (Barker et al., 2016; Johnson et al., 2006). Additionally, practitioners question the effectiveness of traditional models of Level I fieldwork in adequately addressing learning objectives based their perceived ability to provide adequate supervision within the time constraints of their job roles (Brown et al., 2016; Evenson et al., 2015; Ryan et al., 2018; Varland et al., 2017). Increased enrollment in occupational therapy education programs nationwide (AOTA, 2018b), has further complicated the issue by increasing the demand for fieldwork experiences. The increasing number of OT student in need of fieldwork experiences has placed a greater burden on therapists attempting to balance student needs with workplace requirements (Evenson et al., 2015; Ozelie, Hansen,

Liguzinski, Saylor, & Woodcock, 2018; Roberts, Hooper, Wood, & King, 2015; Ryan et al., 2018; Varland et al., 2017).

Healthcare education must provide opportunities to meet student-learning objectives to achieve entry-level competence, while also addressing the challenges of healthcare practice and the needs identified by practitioners acting as preceptors (Barker et al., 2016; Bell et al., 2015; Boardman et al., 2019; Roberts, Daly, Held, & Lyle, 2017; Schreiber et al., 2015). Educational researchers must inform healthcare education through evidence-based methods that outline effective ways to prepare students for practice. This study will examine one institution's response to the needs of OT education within the current healthcare environment in order to address strategies that prepare healthcare students for practice. Through a comprehensive review of current literature, experiential learning methods for occupational therapy and related healthcare education professions will be explored to inform the evaluation of how institutions provide high quality, meaningful occupational therapy fieldwork experiences. Furthermore, this literature review will explore identified challenges of providing experiential learning experiences within the current healthcare environment, as well as to identify any gaps in the literature that outline the need for further exploration.

This literature review examines current findings related to preparing occupational therapy students for practice. It explores evidence indicating the benefits of providing experiential learning opportunities utilizing research available in occupational therapy education literature, and in similar healthcare education fields such as physical therapy, nursing and medical education. This review also explores some of the identified challenges of providing experiential learning, and how these challenges are addressed. Finally, this review identifies gaps in the

literature that informs the line of inquiry for this study in an effort to contribute to the existing body of knowledge.

The methods utilized in this chapter are based on Callahan's (2014) recommendation for both conducting and recording a literature review, and incorporate the "Six W's...[that include] Who, When, Where, hoW, What, and Why" (p. 273). Sixty-seven resources were utilized for this review, a majority of which (44 of 67) were scholarly journals, along with books and dissertations. Current topical literature was identified using key word searches including words such as experiential learning, clinical education, fieldwork, occupational therapy, occupational therapy education, healthcare education, preparedness, clinical competence, clinical reasoning, and reflective practice. Sources were also identified utilizing reference lists and citations from studies identified in this literature review.

Selection criteria maintained inclusion of scholarly and peer-reviewed work from a variety of professional journals and on-line publication sources including: the American Occupational Therapy Association: American Journal of Occupational Therapy, Directory of Open Access Journals, Dove Press, EBSCO, Elsevier, Gale Group, JStor, ProQuest, Pub Med, Sage Publications, Scholar Works, Taylor & Francis Online, and the Wiley Online Library. Selection criteria also included relevance to key words with particular attention given to fields of practice within healthcare education, and specifically to occupational therapy. Current articles were given higher priority for inclusion with thirty-nine of forty-three topical articles published within the last five years. Exclusionary criteria included articles outside of an acceptable date range of greater than 10 years with the exception of one article that was included for its topical relevance with key points that were reinforced in subsequent literature identified within the last five years. Additional exclusions included articles that presented information that was too broad,

or the topic only tangentially related to experiential learning in occupational therapy education. Inclusion and exclusionary criteria were intended to identify current evidence and gaps within the literature in support of the overall research design.

Conceptual Framework

A conceptual framework as defined by Ravitch and Riggan (2017) combines personal interests, topical research, and theoretical frameworks. This conceptual framework will demonstrate the depth of this researcher's connection to the topic, the empirical evidence supporting the need for this study, and a theoretical framework that describes a process of learning that sets the stage for understanding and exploring the research questions. The interplay between these components combine to create the conceptual framework for the study and guides the research question and overall research design. The methodology and analysis of findings to take shape as informed by this conceptual framework.

Personal Interests

The goal of occupational therapy education programs in the United States is to provide the foundational knowledge and abilities to facilitate the development of occupational therapists who “possess basic skills as a direct care provider”(ACOTE, 2018a, p. 1). Clinical fieldwork that incorporates hands-on practical skill application is a critical and required component of that educational process (ACOTE, 2018a). The specific goal of clinical fieldwork is to “develop competent, entry-level, generalist occupational therapists” (p. 35). As an Academic Fieldwork Coordinator, my primary role is to oversee the clinical fieldwork component of the occupational therapy program within my institution. With over 25 years of clinical experience and approximately 10 years of experience within academia, my investment in the profession of occupational therapy, and dedication to occupational therapy service provision by competent,

ethical, and quality practitioners has been a career-long endeavor. Therefore, preparing occupational therapy students for the challenges of clinical practice is both a personal and professional goal.

Topical Research

Experiential learning in the form of clinical fieldwork education as outlined by accreditation standards is an essential component of occupational therapy education (ACOTE, 2018a). The challenges of providing quality learning experiences through fieldwork education are numerous and well documented throughout the literature (Barker et al., 2016; Bell, Tanner, Rutty, Astley-Pepper, & Hall, 2015; Boardman et al., 2019; Brown, et al., 2016; Coker, 2010; Evenson et al., 2015; Roberts et al., 2017; Schreiber et al., 2015; Ryan et al., 2018). Traditional models of fieldwork education place students in clinical sites under the supervision of a practicing occupational therapist. The growing number of occupational therapy students nationally as seen by nearly a 75% increase over the past ten years (AOTA, 2018b), and the ever-increasing demands of the healthcare environment of increased workload and productivity requirements, combine to place an undue burden on practicing therapists' time and their perceived ability to provide quality supervision to students during fieldwork (Brown et al., 2016; Evenson et al., 2015; Ozelie et al., 2018; Ryan et al., 2018; Varland et al., 2017). Additionally, research has raised questions about the effectiveness of traditional models of OT Level I Fieldwork (Brown et al., 2016; Ozelie et al., 2018; Roberts et al., 2015; Ryan et al., 2018) indicated broad variability in relation to exposure to client populations and intervention strategies, and limited opportunities for students to practice hands-on skills. The growing number of students and the perceived challenges of traditional models of OT Level I Fieldwork (Brown et al., 2016; Evenson et al., 2015; Ozelie et al., 2018; Roberts et al., 2015; Ryan et al., 2018;

Varland et al., 2017 indicate a need for occupational therapy education programs to explore alternative methods of providing experiential learning that are both efficient and effective. In an attempt to address this issue, This study will explore student perspectives of preparedness for OT Level II Fieldwork following participation in a pilot program designed as an alternative to traditional models of OT Level I Fieldwork within one occupational therapy education program.

To achieve program objectives, and to address the current demands of the healthcare environment, occupational therapy educational programs are tasked with the responsibility to assess the effectiveness of fieldwork education (ACOTE, 2018a), and to ensure the development of sustainable models of experiences. To understand how students are best prepared for practice, researchers have primarily focused on the perceptions of students, faculty, and practitioners who supervise students during clinical experiences (Knecht-Sabres, 2013; Precin et al., 2018; Ryan et al., 2018; Wallingford, Knecht-Sabres, & St. Amand, 2016; Yu, Brown, & Etherington, 2017). Although results of these studies advocate for the use of experiential learning, the assessment of effective and efficient models of fieldwork education that prepare students for practice has revealed gaps in the literature. Specifically, the identified gaps include defining the specific contexts that promote success, and the assessment of specific skills gained during experiential learning (Roberts et al., 2015; Schreiber, et al., 2015).

Occupational therapists have also identified challenges in providing fieldwork education within the current healthcare environment (Brown et al., 2016; Evenson et al., 2015; Ozelie et al., 2018; Ryan et al., 2018). One major factor identified as a significant barrier to fieldwork education is therapists' time constraints. Studies indicated traditional models of short-term fieldwork experiences were perceived as time-consuming by therapists and demonstrated inconsistencies in student experiences (Evenson et al., 2015; Ozelie et al., 2018; Ryan et al.,

2018). This indicates both a need for further research to identify effective and efficient models for experiential learning, as well as the need to assess alternative approaches to fieldwork educational models.

The demands of the profession, requirements of occupational therapy education programs, and this researcher's internal motivation to promote the development of competent practitioners, culminate in the need to identify best practices for effective and efficient methods to prepare occupational therapy students for practice. The need to prepare OT students for practice is a requirement of OT education standards (ACOTE, 2018a). Experiential learning in the form of fieldwork education is a vital and necessary component of occupational therapy education (ACOTE, 2018a). Further exploration of the specific contextual elements and assessment of the effectiveness of practical, hands-on experiential learning opportunities can address identified gaps in the literature.

Theoretical Framework

Experiential learning, as defined by Kolb (1984), is knowledge “created through the transformation of experience” (p. 38). This transformation, as outlined by Experiential Learning Theory (D. Kolb, 1984; A. Kolb & D. Kolb, 2005) is an ongoing process by which the learner acquires knowledge through a lived experience. Kolb (1984) defined learning as “the major process of human adaptation” (p. 33) and outlined a four-phased cycle of abilities that encompass effective learning. These four phases are identified as “Concrete Experience abilities (CE), Reflective Observation abilities (RO), Abstract Conceptualization abilities (AC), and Active Experimentation abilities (AE)” (p. 30). Through this learning process, the individual gains and applies knowledge within context. Kolb (1984) posited that the learner begins the process with established knowledge, perceptions, and beliefs; and through new experiences

within context (CE) apply their existing beliefs to the new experience. The individual must then consider or “reflect” on the experience (RO), integrate this information into a new or expanded understanding (AC); and then apply this new understanding to assess the effectiveness of their actions (AE) or the need for further adaptation to the experience (Kolb, 1984). In this model of learning theory, learning is a constant state of reassessment and re-formulation of concepts in the process of learning and adapting within the context of the environment.

Learning within a “real” context is common within healthcare education, and a requirement of occupational therapy education through fieldwork experience (ACOTE, 2018a). An occupational therapy education program must provide experiential learning opportunities that allow students to apply knowledge within context and adapt to the demands of direct service provision in the development of critical thinking and clinical reasoning skills. In efforts to develop these necessary skills, healthcare education programs within fields such as medicine, nursing, physical therapy, and occupational therapy have focused on Reflective Observation (RO) and reflective practice (Comer, 2016; Craig-Duchesne, Rochette, Scurti, Beaulieu, & Vachon, 2018; Greenfield et al., 2017; Mann, Gordon, & MacLeod, 2009; Mickleborough, 2015; Smith, 2011). Reflective practice outlines the development of self-assessment as a necessary skill for healthcare providers (Craig-Duchesne, et al., 2018; Greenfield et al., 2017; Mickleborough, 2015). Several researchers have examined reflective practice and self-reflection in relation to the development of critical thinking skills (Coker, 2010; Eng & Pai, 2015; Pai, 2016; Seif et al., 2014) using pre-experience and post-experience self-assessment tools including the Self-Assessment of Clinical Reflection and Reasoning (SACRR) and the Self Reflections and Insight Scale (SRIS). Although these studies advocated for the benefits of experiential learning, further investigation is warranted to detail the specific contextual elements of experiential learning

opportunities and their impact on student perceptions of the development of necessary skills that prepare students for more intensive clinical experiences. This study will evaluate a program designed to prepare occupational therapy students for intensive clinical experiences and will utilize a formative program evaluation methodology that incorporates quantitative survey methods and qualitative inquiry to explore student perceptions of preparedness for OT Level II Fieldwork.

Experiential Learning within Healthcare Education

Healthcare education within many professions faces the challenge of identifying best practices to prepare students to meet the demands of clinical practice. Professional education programs such as nursing, physical therapy, and occupational therapy have incorporated some form of hands-on practical learning experiences within their curriculum. Flott and Linden (2016) outline a general definition for healthcare education through the use of the term “Clinical Learning Environments (CLEs)...where students in healthcare education fields apply knowledge and skills while caring for patients, [with the goal of] preparing students for professional practice” (p. 503). Although the overarching goal of preparing students for practice by utilizing some form of experiential learning is similar across programs, the specific details and accreditation requirements surrounding the provision of these experiences, as well as the terminology applied, varies from profession to profession. In an example from one profession, Myers and Schenkman (2017) describe experiential learning opportunities for students within the profession of physical therapy, and relate these experiences to curriculum design and timing of the experiences within a developmental learning sequence. This terminology from the American Council on Academic Physical Therapy as cited by Myers and Schenkman (2017) defines the learning experience as “integrated clinical experiences (ICE)...[which are] embedded within the

didactic curriculum, [and are] developed in collaboration with multiple stakeholders” (p. 71). These experiences are meant to enhance the classroom by allowing application of learning at various points throughout the didactic portion of the curriculum.

Similar to physical therapy (PT), occupational therapy (OT) defines clinical experiential learning in relation to the curriculum design and timing of the experience by outlining two distinct types of clinical experiences required to meet accreditation standards. These experiences as defined by the Accreditation Council for Occupational Therapy Education [ACOTE®] (2018a) for graduate occupational therapy programs utilize the terminology of Level I and Level II Fieldwork. OT Level I Fieldwork occurs within the didactic portion of the program and is interwoven with the curricular design similar in concept to the “integrated clinical experiences” (Myers & Schenkman, 2017, p. 71) integrated within the physical therapy curriculum. Whereas, OT Level II Fieldwork is an in-depth practical experience that occurs upon completion of the didactic portion of the OT educational program (ACOTE, 2018a). The goal of Level I Fieldwork is to incorporate classroom knowledge and introduce students to practice in preparation for Level II fieldwork. The goal of Level II Fieldwork is to attain entry-level competence for practice (ACOTE, 2018a).

Within each profession, the extent to which students participate in experiential learning including the frequency, duration, and level of individual student participation may vary based on accreditation standards; and the timing of the experience along with the expected outcomes may vary based on a program’s individualized curricular design (ACOTE, 2018a; Barker et al., 2016; Myers & Schenkman, 2017). However; the concept of combining academic coursework with hands-on, practical application of skills, as part of a curricular design is noted consistently throughout healthcare education literature (Barker et al., 2016; Boardman et al., 2019; Flott &

Linden, 2016; Knecht-Sabres, 2013; Kruger, Kruger, & Suzuki, 2015; Myers & Schenkman, 2017).

Types of hands-on learning experiences. Accreditation standards and requirements account for some of the variability in the particular type of hands-on learning experiences utilized within healthcare education programs. However, the literature indicates that most programs use one, or a combination of hands-on learning experiences incorporated throughout their curricula (Barker et al., 2016; Bennett, Rodger, Fitzgerald, & Gibson, 2017; Boardman et al., 2019; Flott & Linden, 2016; Knecht-Sabres, 2013; Kruger et al., 2015; Myers & Schenkman, 2017). Smith and Crocker (2017) outline several types of experiential learning in physical therapy education that are also found within other health professions. These include simulation, integrated clinical experiences, service learning, community patient resource groups, and professional practice opportunities (Smith & Crocker, 2017). Descriptions and examples of these experiences within health professions are provided in the following sections.

Simulation. Simulated learning experiences can come in many forms. The range of simulation experiences may be incorporated throughout the curriculum to allow students to practice skills and achieve success, or failure, within the safety of the classroom or laboratory environment. Bennett, Rodger, Fitzgerald, and Gibson (2017) summarized several methods of simulation including the use of written or video-based case studies, role-plays, computer-based simulation experiences, and the use of high fidelity simulation mannequins. Another form of simulation noted frequently within the literature is the use of standardized patients who as described by Giles, Carson, Breland, Coker-Bolt, & Bowman (2014), is a “healthy person[s] who is[are] trained to play the part of a patient in a standardized way for educational purposes” (p.

S58). Using this form of simulated learning, the student is able to practice simulated conditions, and has the additional opportunity to do so with “real” and interactive people.

The objectives of simulation experiences may address a variety of goals and purposes within healthcare education. Specific to occupational therapy education, Bennett et al. (2017) note that current trends are to utilize simulation to prepare students for the more traditional Level I and/or Level II clinical fieldwork experiences, and thereby use simulation to supplement learning opportunities versus replace more traditional models. New accreditation standards for occupational therapy education that are scheduled to go into effect in July of 2020 (ACOTE, 2018b) may have an impact on the use of simulation. These new standards identify “simulated environments” (p. 41) as one of several acceptable learning methods that can be utilized as part or all of a Level I experience in preparation for Level II fieldwork.

Community-based client populations. Another form of experiential learning opportunities is a variety of experiences that are either located within the community or occur at the institution and allow for collaboration with various groups from the community (Bell et al., 2015; Fink, 2013; Smith & Crocker, 2017). This includes service-learning experiences in which students, at the direction of faculty, provide a volunteer service to community members while applying classroom skills and knowledge (Fink, 2013; Smith & Crocker, 2017). In an alternative to traditional service learning models, Smith and Crocker (2017) outlined using a “community patient resource group (CPRG)... [which] consists of a group of individuals in the community who have various diagnoses and have agreed to partner with the university to volunteer as ‘patients’ for students” (p. 429) with services provided under the supervision of a faculty member. In community-based client populations, the community participants are “real people” with “real” conditions, unlike the simulation mannequins or standardized patients trained to play

a role and mimic a client condition. The environmental context in which students interact with these community-based clients are not commonly laboratory based; however, they are environments created specifically for the learning experience, and not authentic environments for healthcare delivery.

Professional practice/clinical/in situ learning experiences. Many healthcare organizations and providers collaborate with healthcare education programs to develop experiential learning opportunities that incorporate “real clients” within “real environments” under the supervision of a healthcare provider. Although descriptions and terminology applied to these types of experiential learning opportunities vary greatly and may incorporate a variety of instructional models and methods, each of these experiences occurs on-site within clinical settings, and incorporates “real” client populations served within an authentic context. The discipline-specific terminology applied to these experiential learning methods include terms such as clinical learning environments, in situ learning experiences, integrated clinical experiences, and Level I and Level II Fieldwork (ACOTE, 2018a; Flott & Linden, 2016; Myers & Schenkman, 2017). In each of these examples, the timing of the experience within the curriculum, the frequency and duration of the experience, and the intended goals and outcomes vary based on the profession and their associated accreditation standards (ACOTE, 2018a; Boardman et al., 2019; Brown et al., 2016; Myers & Schenkman, 2017; Roberts et al., 2015). In occupational therapy education, fieldwork is a “crucial part of professional preparation and is best integrated as a component of the curriculum design” (ACOTE, 2018a, p.39). The accreditation standards dictate the institution’s responsibility to explore and evaluate the effectiveness of fieldwork experiences within their curriculum.

The Benefits of Participating in Experiential Learning Opportunities

The concepts and application of experiential learning have been the subject of research for decades. Kolb (1984) described components of experiential learning theory (ELT) as a complex process that includes the unique and significant interaction between an individual and the environment in which “knowledge results from the transaction between these objective and subjective experiences in a process called learning” (p. 37). Recent literature supports the benefits of practical, hands-on experiences in educational programs in a variety of arenas, and in particular in healthcare education (Bell et al., 2015; Kruger et al., 2015; Roberts et al., 2017; Sorensen et al., 2015; Yu et al., 2017). Based on Kolb’s (1984) theoretical model, learning that occurs through experiential opportunities is largely individualized. This may be one reason that healthcare education research on this topic often utilizes qualitative, quantitative, or mixed method designs to measure the effectiveness of experiential learning based on the learner’s or instructor’s perceptions of the experience. An analysis of current research, especially as it applies to occupational therapy education, is explored in the remainder of this literature review.

Student perceptions. In one example of a study that considered individualized learning, Knecht-Sabres (2013) employed a mixed method approach utilizing pre-test and post-test measures of occupational therapy students’ perceptions of experiential learning. Knecht-Sabres (2013) found that students perceived an expressed impact on practical skill development, the understanding of professional behavior and attributes, and on clinical reasoning. Using similar methodology of a post-test survey of physical therapy students who engaged in an experiential learning opportunity, Kruger et al. (2015) identified student-expressed benefits to include increased practical knowledge and skill development. Consistent with findings of previous studies, Myers and Schenkman (2017) found that of the physical therapy students surveyed

following their practical learning experience, ninety-eight percent agreed or strongly agreed that experiential learning was an essential component of their learning experience.

Studies in the fields of nursing and physical therapy, utilizing similar methodology of case studies, interviews, and/or post-survey findings of students' perceptions of experiential learning, identified an increased comfort level in working with various client populations to which they had not previously been exposed (Boardman et al., 2019; Reneker, Weems, & Scaia, 2016; Schreiber et al., 2015). Beyond an increased comfort level with specific client populations, Tovin, Fernandez-Fernandez, and Smith (2017) identified that students expressed an increased confidence in their ability to interact within an interprofessional healthcare environment. This finding was consistent with previous studies that indicate a relationship between experiential learning and expressed level of confidence (Fink, 2013; Holly, 2014). Additionally, Pai (2016) noted students reported a progressive decrease in level of anxiety associated with clinical experiences following repeated exposure to experiential learning opportunities. These examples demonstrate consistent support for the use of experiential learning within healthcare education programs.

Skill acquisition. As noted above, research studies that have explored the perceived impact of experiential learning on participants demonstrated consistent support for its use and effectiveness. However, there is limited research available within healthcare education that has demonstrated the effectiveness of experiential learning on specific skill acquisition, including practical hands-on skills and higher-level cognitive and meta-cognitive skills such as clinical decision-making and clinical reasoning. In an exploration of the limited amount of available outcome-based evidence, Jessee (2018) posited that the lack of a theoretical framework in the

development of clinical reasoning skills using experiential learning may be one possible reason for this deficit of research within nursing education.

To address this deficit in the literature, Coker (2010) utilized a quasi-experimental design to assess the benefits and effectiveness of experiential learning on skill development. By incorporating two formalized assessment tools administered both pre-experience and post-experience, Coker (2010) found a statistically significant impact of experiential learning on the clinical reasoning and critical thinking of Master's level OT students. Although Coker's (2010) results support the use of experiential learning in the development of clinical reasoning skills for students, the study utilized a relatively small sample size and identified a convenience sample of participants which is demonstrated in many examinations of experiential learning in healthcare education.

Although few studies within this review apply formal experimental design, one proposed study within occupational therapy education research was identified that outlined a research design using randomized control testing to measure the effectiveness of experiential learning methods (Imms et al., 2017). At the time of this writing, results of the proposed study were unavailable as the study is ongoing, thus further emphasizing the need for research in this area. This sparsity of literature illustrates the gaps identified within the literature and indicates a need for evidence of the contextual elements that best prepare students for practice.

The Challenges of Providing Experiential Learning Opportunities

Although experiential learning is a requirement of most healthcare education accreditation standards, the challenges of providing experiential learning opportunities is evidenced throughout healthcare education literature (Barker et al., 2016; Bell et al., 2015; Boardman et al., 2019; Brown et al., 2016; Coker, 2010; Evenson et al., 2015; Roberts et al.,

2017; Schreiber et al., 2015; Ryan et al., 2018). Similar to other healthcare fields, the challenges of providing experiential learning within occupational therapy education (Brown et al., 2016; Roberts et al., 2015) have been identified on both a national and international level. Themes such as the availability of clinical placements, the ability to provide students with consistent learning experiences, and the challenge of measuring the effectiveness of the learning experience in relation to the financial costs and logistical challenges, are common barriers identified by educational programs (Barker et al., 2016; Brown et al., 2016; Coker, 2010; Imms et al., 2017; Knecht-Sabres, 2013). Clinicians also identify challenges in their ability to provide quality, learning experiences while still meeting all job demands and requirements within the current healthcare environment (Brown et al., 2016; Evenson et al., 2015; Ryan et al., 2018). This has manifested in resistance from sites and supervisors to accept students for clinical experiences, which is one factor contributing to the limited availability of placements (Brown et al., 2016; Evenson et al., 2015).

Challenges identified by educational programs. Brown et al. (2016) indicate the significantly limited number of fieldwork placements for occupational therapy education programs in Australia; and this sentiment is consistent with challenges voiced by educational institutions throughout the United States as summarized by Roberts et al. (2015). Contributing factors to this challenge are identified as the growing number of occupational therapy programs and students, and the challenges faced by supervising practitioners in meeting the demands of current healthcare practice (AOTA, 2018b; Brown et al., 2016; Evenson et al., 2015; Ozelie et al., 2018; Roberts et al., 2015; Ryan et al., 2018; Varland et al., 2017). The limited number of fieldwork placements relative to the number of occupational therapy students creates a pressing issue for educational institutions (AOTA, 2017; Brown et al., 2016; Roberts et al., 2015; Ryan et

al., 2018; Varland et al., 2017), as fieldwork education is a requirement of occupational therapy education (ACOTE, 2018a).

The variability in learning experiences within traditional models of Level I Fieldwork is another identified challenge in preparing students for practice within occupational therapy education, as well as other healthcare professions. To provide students with the opportunity for exposure to consistent learning experiences within clinical practice settings can be logistically challenging. Johnson, Koenig, Piersol, Santalucia, and Wachter-Schutz (2006) illustrated this point through a retrospective study of several occupational therapy programs that utilized the traditional model of Level I Fieldwork that incorporates a one-to-one ratio of student to supervisor, and places students within the same cohort within a broad range of practice settings. Through this study, Johnson, Koenig, Piersol, Santalucia, and Wachter-Schutz (2006) noted a significant amount of variability of experiences, particularly in the areas of students' level of hands-on participation. Barker et al. (2016) confirmed these findings in their study, noting a similar level of variability in student participation using the traditional model of Level I Fieldwork. The occupational therapy accrediting agency has recognized the variability in these experiences and with the impending accreditation standards for 2020, educational institutions will be held accountable for the development of consistent learning experiences as demonstrated by the statement "all Level I fieldwork must be comparable in rigor" (ACOTE, 2018b, p. 41). As this new standard goes into effect, occupational therapy institutions' ability to address this requirement and the methods in which they do so, will be an area for further study.

Within the field of physical therapy education, several authors identified and addressed the issue of consistency through the development of goal-specific experiential learning opportunities within a curriculum that require each student to demonstrate a set of identified

practical skills (Myers & Schenkman, 2017; Tovin et al., 2017). However, even with attention to consistency, Schreiber et al. (2015) noted that although experiential learning may incorporate the application of similar skills within a curriculum, inconsistencies exist in student access to experiences across client populations. Specifically, Schreiber et al. (2015) indicated a deficit in experiential learning opportunities with pediatric clients, and advocate not only for comparable experiences in the application of skills, but also for increased consistency of learning opportunities inclusive of a variety of client populations.

Challenges identified by clinicians in practice. Students in professional healthcare education programs such as nursing, physical therapy, and occupational therapy are required to have field experience as part of program accreditation standards (ACOTE, 2018a; Boardman et al., 2019; Myers & Schenkman, 2017). As demonstrated within the literature (Boardman et al., 2019; Coker, 2010; Kruger et al., 2015; Reneker et al., 2016; Tovin et al., 2017) there is a broad range of targeted learning objectives for students from skill development to clinical reasoning, to students' perceived level of preparedness for practice, and increased confidence and comfort within particular settings and populations. Traditionally, a majority of these learning experiences occurred at fieldwork sites. Therefore, when considering the challenges of creating and implementing experiential learning opportunities, it is of equal importance to consider the impact these experiences have on clinical fieldwork sites and practitioners (Brown et al., 2016; Evenson et al., 2015; Ryan et al. 2018).

All occupational therapy Level II fieldwork must be supervised by a practicing occupational therapist (ACOTE, 2018a), and many traditional Level I fieldwork experiences occur within direct service practice settings. This traditional model places the burden of providing experiential learning opportunities on clinical fieldwork sites and practitioners.

Complicating the issue further, the number of occupational therapy students in the United States has shown a nearly 75% increase over the last ten years, as existing OT programs expand and new programs open their doors throughout the nation (AOTA, 2018b; Brown et al., 2016; Roberts et al., 2015). This increased student volume creates a greater demand for clinical placements, and a greater burden on practitioners (AOTA, 2018b; Brown et al., 2016; Evenson et al., 2015; Ryan et al. 2018).

Coupled with the challenges of the growing number of occupational therapy students requiring fieldwork experiences, sites and supervisors indicate additional challenges based on the workplace demands of current practice (Brown et al., 2016; Evenson et al., 2015; Ozelie et al., 2018; Ryan et al., 2018). Several studies obtained similar results when focusing their research efforts on understanding the perspectives of supervising therapists. In two different studies, Evenson et al. (2015) and Ryan et al. (2018) found that although practicing occupational therapists perceived a value in field experiences for the student and for the supervisor, each study indicated that supervisors perceived a lack of time and resources that would allow them to be effective in sharing their knowledge with students. Ozelie et al. (2018) further explored this issue by completing a time log study, the results of which demonstrated that therapists spent more hours at work when supervising a student, compared to the time spent at work when they did not have a student.

The logistical and practical aspects of experiential learning opportunities present challenges for students, educators, and practitioners throughout healthcare education literature. Additionally, these challenges combined with a community's need to address underserved populations (Bell et al., 2015; Precin et al., 2018; Yu et al., 2017) prompted consideration of alternative models of experiential learning (Barker et al., 2016; Bell et al., 2015; Boardman et al.,

2019; Roberts et al., 2017; Schreiber et al., 2015). The culmination of these issues presents the challenge of finding the best approach to prepare students for practice, and to create sustainable, quality learning experiences that meet the needs of all stakeholders in new and innovative ways.

Alternative Approaches to Clinical Experiences

With the identified need to consider alternative methods of experiential learning, educational institutions are considering a variety of approaches to meet this challenge (AOTA, 2017; Barker et al., 2016; Bell et al., 2015; Boardman et al., 2019; Brown et al., 2016; Roberts et al., 2015; Ryan et al., 2018; Varland et al., 2017). Some examples include the work by Boardman et al. (2019), in which nursing students were placed in a facility for shorter weekly durations, and then extended for a greater number of weeks to meet the accreditation requirement for number of hours on site, while decreasing the burden that more intensive full-time experiences can place on facilities and supervisors. Roberts et al. (2017) utilized a similar approach with medical students and found that the increased duration of the experience improved the quality of client interactions, due to the frequency of contact extended over a longer period. In each case, the experiential learning incorporated work with underserved populations, and thereby addressed not only student goals and objectives, but also an identified need within the community.

To reduce overutilization of clinical sites by educational programs, another alternative approach to tradition learning experiences identified within the literature (Bell et al., 2015; Precin et al., 2018; Yu et al., 2017) was work with underserved populations in settings in which no occupational therapist exists. Several researchers (Bell et al., 2015; Precin et al., 2018; Yu et al., 2017) viewed work with these populations as an opportunity to identify an emerging practice area for occupational therapy by having students participate in fieldwork experiences in a

practice setting in which no occupational therapists. In each of these examples of work with underserved populations (Bell et al., 2015; Precin et al., 2018; Yu et al., 2017), OT faculty provided direct service to individuals in need, and provided student supervision that incorporated student-learning objectives generated within the curricular design. This dual role of practitioner and educator created the opportunity to benefit the community and the population served, meet students' educational objectives, and decrease the burden on practicing therapists within traditional clinical settings (Bell et al., 2015; Precin et al., 2018; Yu et al., 2017).

Alternative and innovative approaches to experiential learning that extend beyond traditional in-clinic experiences is the use of simulated environments and/or simulated patients to supplement or in some cases, replace components of in situ experiences (Bennett et al., 2017; Pai, 2016; Sorenson, 2015). Examples of simulated experiential learning are in abundance within healthcare education literature, including but not limited to professions such as medicine, nursing, physical therapy, and occupational therapy (Bennett et al., 2017; Imms et al., 2017; Giles, et al., 2014; Ozelie, Both, Fricke, & Maddock, 2016; Pai, 2016; Smith & Crocker, 2017). In each of these examples, simulation is used in isolation or in combination with traditional clinical experiences to allow students the opportunity to address hands-on, practical skill development.

Clinical simulation brings the issue of context to the forefront of discussion within the literature. Hayes, Garfield, and Beardmore (2015) utilized a case study method to outline the impact of creating authentic learning environments to develop the skills necessary for practice within healthcare professions. In this example, the authors emphasized the design of physical space that allows for collaborative learning opportunities, access to modern technologies, and the

ability to create “real-world” scenarios in which students can apply and develop critical thinking skills (Hayes et al., 2015).

Given the ability to create these authentic environments within simulation scenarios, Sorensen et al. (2015) argued the case for using simulation versus on site or “in situ” experiences within medical education. In their study, Sorensen et al. (2015) found no significant difference in learning experiences when comparing in situ experiential learning to simulation, provided that the specific details of the environments were comparable. Conversely, in a study by Pai (2016), nursing students reported greater learning outcomes through “real” onsite clinical experiences than through simulated experiences.

Evaluating the Effectiveness of Field Experiences in Occupational Therapy

Preparing students for practice is a primary objective of healthcare education programs. Researchers continue to explore methods to clarify components of learning experiences that are most effective in achieving that goal (Brown et al., 2016; Knecht-Sabres, 2013; Precin et al., 2018; Ryan et al., 2018; Yu et al., 2017). Research in the field of occupational therapy has largely focused on measures of effectiveness related to student or faculty perceptions, primarily utilizing methods such as quantitative surveys, and qualitative interviews, focus groups, and case studies (Knecht-Sabres, 2013; Precin et al., 2018; Ryan et al., 2018; Yu et al., 2017). In one example, Ryan et al. (2018) focused on the perceptions of occupational therapists who supervised students during clinical experiences, termed Fieldwork Educators [FWE] (ACOTE, 2018a). This mixed method approach used both quantitative surveys and semi-structured qualitative interviews and identified that a majority of FWEs did not consider themselves effective in preparing students for practice, based on the workplace demands and their limited time available to dedicate to teaching (Ryan et al., 2018). Conversely, Knecht (2013) revealed

different results in a study that focused on students' perspectives of experiential learning in a mixed method design similar to that of Ryan et al. (2018). Knecht (2013) identified that students perceived a significant impact on their level of skill development following experiential learning opportunities; indicating a discrepancy between supervisors' perspectives and that of their students with regard to the impact that supervisors and experiences have on skill development.

Preparing for practice and gaining entry-level competence in occupational therapy may also have different meanings based upon the perspective of the individual. Wallingford, Knecht-Sabres, Lee, and St. Amand (2016) considered this issue through surveys and interviews of two groups, OT practitioners who have supervised students and OT students. Wallingford et al. (2016) obtained information on each group's perception of competency relative to twelve different competency characteristics. Although both groups identified each of the twelve skill items as important in defining entry-level competence, students consistently ranked the items at a higher level of importance (Wallingford et al., 2016). Students also felt that competency should be determined only when a student is able to demonstrate a skill consistently over several weeks, whereas practicing therapist felt students could be deemed competent over a shorter period; suggesting that students have a high level of expectation of their own performance (Wallingford et al., 2016).

Despite the quantitative and qualitative measures of student and practitioner's perceptions of the effectiveness of experiential learning (Barker et al., 2016; Bell et al., 2015; Boardman et al., 2019; Giles, et al., 2014; Ozelie et al., 2016; Roberts et al., 2017; Schreiber et al., 2015), less evidence of measurements of skill acquisition or learning outcomes is available. Coker (2010) utilized pre-test and post-test measures to assess the effectiveness of experiential learning on clinical reasoning with positive results; additionally, this work identified the need for researchers

to add to this body of evidence through further research. Chapleau and Harrison (2015) utilized the Goal Attainment Scale (GAS) as a method to assess occupational therapy student learning outcomes, and found the use of the GAS an effective tool. Again, findings indicated the need for further study within occupational therapy and other related professions (Chapleau & Harrison, 2015). In another study focused on assessing outcomes of experiential learning opportunities, Ozelie et al. (2016) compared final scores of student performance on full-time Level II fieldwork experiences for two distinct students groups, one student group who had participated in high fidelity simulation as part of their academic preparation compared to a student group who had not. Ozelie et al. (2016) found no significant difference in performance scores, however, self-identified a limitation of the study in the tool selected for measuring outcomes. Ozelie et al. (2016) indicated the tool only allowed for a rating of competent or not competent which may not have been sensitive enough to adequately capture outcome measures and the subtleties in the assessment of skills acquisition.

In each of the examples, the authors presented various limitations within their studies that affect the ability to apply evidence of the effectiveness of experiential learning on a broader scale, and in each case, the authors called for further research. This limitation is further supported by the work of Roberts et al. (2015) whose extensive literature review of occupational therapy fieldwork education came to a similar conclusion that assessment of the effectiveness of experiential learning outcomes was an identified deficit in the current literature.

Identified Gaps in the Literature

Detailing the context for success. Despite the significant number of studies that explored the use of hands-on practical learning opportunities and their application within healthcare education (Barker et al., 2016; Bell et al., 2015; Boardman et al., 2019; Giles, et al.,

2014; Ozelie et al., 2016; Roberts et al., 2017; Schreiber et al., 2015), few studies describe the specific contextual details of the learning experiences that allow students the greatest opportunity for success. Numerous studies provided a general overview of various forms of experiential learning and focus on the location and length of the experience, the demographics of the population served, or at what point in the curriculum the experience occurs (Boardman et al., 2019; Chapleau & Harrison, 2015; Kruger et al., 2015; Sorenson et al., 2015). However, the specific contextual elements that facilitate an environment for learning were challenging to discern. These factors are critical to allow for what Kolb (1984) identified as the uniqueness of the interaction between the individual and the environment that creates the opportunity for learning. This lack of detail about the nuances of the experience that allow for effective learning, illustrates an important gap in the literature (Brown et al., 2016; Roberts et al., 2015; Ryan et al., 2018).

In one detailed account, Knecht-Sabres (2013) outlined the type of setting, the referral process for clients' participation in the experience, the structure of supervision and debriefing provided by faculty, as well as the frequency and duration of the student experiences. Knecht-Sabres (2013) indicated this student-learning experience was supervised by a faculty member for in-home experiences with clients referred by a local senior center, and incorporated 1-2 hour sessions within the client's home, and a structured debriefing session for all student-participants. However, Knecht-Sabres (2013) also identified numerous logistical issues and time constraints associated with the use of this design, and cautions that the time requirements for coordination of schedules and services for the chosen client population and setting may not be the most efficient or effective experiential learning design to achieve intended student outcomes.

Beyond the information provided by Knecht-Sabres (2013), several studies included general information about the type of setting and circumstances of the experience, however, the details are sparse. Boardman et al. (2019) outlined some of the parameters of an experiential learning opportunity, such as number of weeks of the experience and the frequency of student participation. Chapleau and Harrison (2015) provided information about the ratio of student to supervisor and indicated the supervisors were faculty of the learning institution, which shed some light on the supervisors' investment in achieving objectives of the experience. However, neither article provides specific details of the learning experience that impact student learning outcomes.

While many researchers provided some general details about the structure of the experiential learning opportunities, as in the examples above, none was as explicit as that of Myers and Schenkman (2017). The authors provided a thorough description of the systematic process of curriculum development utilized when creating the experiential learning program, and they detailed how to integrate it within the curriculum. Additionally, the authors provided detailed design and implementation strategies including information about the types of experiences, supervision model, and logistical strategies utilized for successful program implementation (Myers & Schenkman, 2017). The information provided contextualized successful components of experiential learning opportunities within one physical therapy program that could serve as a foundation for future study with broader application.

Barker et al. (2016), and Nowakowski, Kaufman, and Pelletier (2014), also detailed the specific components of an experiential learning opportunity. Barker et al. (2016) combined a variety of experiential learning methods including lab and classroom-based simulations, and in situ learning experiences. The authors outlined the specific learning activities performed by the

student during the on-site clinical fieldwork component, which allows greater insight into the practical, logistical, and environmental factors that influenced the learning opportunity. Similarly, Nowakowski et al. (2014) detailed an experiential learning opportunity with a community-based client population that allows students repeated exposure to the same client population over the course of four semesters. The authors detailed both the structure of the experience, as well as the specific learning activities as part of a developmental sequence of experiential opportunities that require students to demonstrate an increased level of hands-on participation and performance in each subsequent semester. The application of this model of experiential learning outlined the importance of the thoughtful and intentional curricular design to address student learning, and includes a model for sustainability.

Although Barker et al. (2016), Myers and Schenkman (2017), and Nowakowski et al. (2014) each provided a very detailed account within the literature, of the thirty-two studies included within this literature review that outlined the use of experiential learning within the curriculum, only these three authors were explicit in describing the details of the learning experience. In the absence of the specific details of the learning experience, it is difficult to discern the phases of experiential learning (D. Kolb, 1984; A. Kolb & D. Kolb, 2005), and the factors that contribute to effective learning. The limited availability of resources that clearly described and defined the specific contextual elements of the experience revealed a gap in the literature (Brown et al., 2016; Roberts et al., 2015; Ryan et al., 2018).

Measuring the outcome of learning experiences. Evidence within the literature (Barker et al., 2016; Bell et al., 2015; Boardman et al., 2019; Giles, et al., 2014; Ozelie et al., 2016; Roberts et al., 2017; Schreiber et al., 2015), as noted throughout this literature review, provided studies that incorporate qualitative, quantitative, or mixed method designs and measured the

effectiveness of experiential learning using student or supervisor perception of the impact of these experiences in preparation for practice. Beyond general student or faculty perceptions, only two studies of occupational therapy education addressed specific outcome measures of skill development (Chapleau & Harrison, 2015; Coker, 2010). Coker (2010) explored the impact of experiential learning on clinical reasoning and critical thinking; and Chapleau and Harrison addressed student goal attainment over the course of several experiential learning opportunities. Additionally, a majority of the research designs in healthcare education research, as reviewed in this literature review, utilized non-randomized populations and convenience sampling. Many authors concluded the need for more research that assesses the outcomes of the learning experiences for students. The lack of research that addresses specific outcome measures for students through the use of experiential learning demonstrates a gap in the literature (Brown et al., 2016; Roberts et al., 2015; Ryan et al., 2018)

Conclusion

The research identified within this review includes qualitative, quantitative, and mixed method research designs to measure the effectiveness of experiential learning, and a majority of these studies addresses the measure of effectiveness through student or supervisor perception of the impact of these experiences in preparation for practice. Results of these studies overwhelmingly demonstrated the student and educator's belief in the benefits of experiential learning (Boardman et al., 2019; Kruger et al., 2015; Reneker et al., 2016; Schreiber et al., 2015; Tovin et al., 2017), with one study identifying experiential learning as a necessary component to prepare for healthcare practice (Myers & Schenkman, 2017). Through the use of experiential learning, study participants identified specific benefits that included a perceived growth in practical knowledge, skill development, increased comfort and confidence, improved

interprofessional communication and practice, and decreased anxiety when working with clients (Boardman et al., 2019; Kruger et al., 2015; Myers & Schenkman, 2017; Reneker et al., 2016; Schreiber et al., 2015; Tovin et al., 2017).

The literature also identified many challenges for providing experiential learning opportunities within healthcare education. Contributing factors included the high number of students requiring onsite learning experiences, and the rate and volume of work that current healthcare demands of practitioners limiting the time they have to devote to supervision (AOTA, 2018b; Evenson et al., 2015; Ozelie et al., 2018; Roberts et al., 2015; Ryan et al., 2018). Within occupational therapy education, challenges were most apparent with the use of traditional one-to-one models of fieldwork that placed excessive demands on practitioner's time (Evenson et al., 2015; Ozelie et al., 2018; Ryan et al., 2018). These traditional models also created disparities in learning experiences due to variability within practice settings, and the degree of student participation incorporated in the experience (Barker et al., 2016; Johnson et al., 2006).

Based on the perceived benefits and challenges of experiential learning, coupled with the challenges of healthcare practice, there is an identified need to develop alternative models of experiential learning (Barker et al., 2016; Bell et al., 2015; Boardman et al., 2019; Roberts et al., 2017; Schreiber et al., 2015). The development of alternative models must also address the needs of the practitioner (Barker et al., 2016; Bell et al., 2015; Boardman et al., 2019; Roberts et al., 2017; Schreiber et al., 2015) to maximize the use of therapists' time with students, and to prepare students for the rigors of current practice. To design the most effective and efficient experiential learning opportunities will require future research efforts to identify and outline the contextual factors that contribute to effective learning within experiential settings. The specific contextual elements of an experience that promote student learning and student perceptions of preparedness

for practice are not sufficiently demonstrated in current literature; indicating a need for further research.

Within current literature related to student preparedness, there is a noted deficit in evidence of specific outcome measures that affect skill development. Further research is needed to identify the effect of skill development on student preparedness and could contribute to assessment of best practices for effective, efficient, and sustainable models. Schreiber et al. (2015) advocated strongly for the use of experiential learning within healthcare education, and in particular within physical therapy education, however, they also noted significant limitations within current literature based on the experimental design. Schreiber et al. (2015) indicated that current research on the effectiveness of experiential learning in healthcare is insufficient, and they outlined recommendations for future research to address this limited substantive evidence. In the field of occupational therapy, Roberts et al. (2015) made a similar call for more research, based on the review of current literature, that revealed a lack of evidence to demonstrate measurable outcomes through the use of experiential learning. The frequent call for further study and the limited availability of evidence to demonstrate specific performance outcomes is another identified gap in the literature (Brown et al., 2016; Roberts et al., 2015; Ryan et al., 2018; Schreiber et al., 2015).

Occupational therapy education programs have a responsibility to prepare students for clinical practice, and experiential learning is an essential component of occupational therapy education (ACOTE, 2018a). However, design and implementation of experiences that are efficient, effective, and sustainable is a challenge and contributes to an identified problem of practice. New accreditation standards may create an additional challenge of requiring experiences that offer consistent learning opportunities from student to student. This study will

build upon existing research and address gaps in the literature. The study will outline the specific contextual components of a skill-based experiential learning opportunity for occupational therapy students and explore the impact of these experiences on student perceptions of preparedness for Level II Fieldwork.

CHAPTER 3

METHODOLOGY

Based on the U.S. Department of Labor (2019) statistics, the healthcare profession of Occupational Therapy (OT) continues to demonstrate steady growth. The statistics for 2016 – 2026 project OT job growth at a rate of 24%, compared to the overall 7% job growth rate projected for all other professions. This upward trend has led to a nearly 75% increase in enrollment in existing occupational therapy education programs over the past ten years, and an increase in the number of new programs across the country with more than twenty new programs in the last two years alone (AOTA, 2018b). To ensure the integrity of OT education, occupational therapy education programs are held to rigorous and comprehensive accreditation standards (ACOTE, 2018a) that incorporate didactic learning, as well as practical skill development and application. As part of these educational requirements, OT education programs must incorporate exposure to clinical experiences within the didactic portion of the curriculum, termed Level I Fieldwork, and must prepare students for intensive full-time clinical experiences at the end of the didactic portion of the program, termed Level II Fieldwork (ACOTE, 2018a). In order to meet student needs and comply with accreditation requirements, OT education programs must engage and collaborate with healthcare providers within the community toward the development of sustainable models of Level I and Level II fieldwork experiences.

Within the current healthcare environment of occupational therapy, practicing therapists identify increases in job demands and greater challenges finding time within their workday to provide students with quality learning experiences (Evenson et al., 2015; Ozelie et al., 2018; Ryan et al., 2018). Additionally, traditional models of OT Level I fieldwork that require a one-to-one student to supervisor assignment, and are primarily observational in nature, have

presented challenges for the practitioner and for educational programs (Evenson, et al., 2015; Johnson et al., 2006; Ryan et al., 2018). These traditional models of Level I Fieldwork have demonstrated variability in their effectiveness of achieving student learning objectives; and are perceived by supervising therapists as an inefficient use of therapists' time (Barker et al., 2016; Evenson, et al., 2015; Johnson, et al., 2006; Ryan et al., 2018).

Collectively, trends in current healthcare delivery and occupational therapy education have created a problem of practice, seen as the increased number of occupational therapy students in need of clinical fieldwork experiences, and the limited availability of supervising therapists associated with the increased job requirements and time constraints that current practice demands. This imbalance of supply and demand has created a sense of urgency for change (Kotter, 2012) from traditional models of Level I Fieldwork within occupational therapy education programs. As alternative approaches to traditional fieldwork are considered there is the continued responsibility for educational programs to identify best practices that effectively and efficiently prepare students for clinical experiences, and ensure development of sustainable models of fieldwork that decrease the burden placed on practicing therapists working to meet the demands of the current healthcare environment.

The urgency of this issue prompted one occupational therapy program, identified as Occupational Therapy Program X (OTPX), located within a private not-for-profit institution on an urban campus in the Northeast region of the United States, to develop an experiential learning opportunity intended for use as an alternative approach to traditional Level I Fieldwork experiences. This approach was designed to address student-learning needs using skill-based activities applied within an experiential learning context. OTPX implemented this new program in the Fall of 2019 at an outpatient rehabilitation therapy practice located on the campus of

OTPX. The program provided local community members access to a comprehensive fall prevention clinic. Second-year Master's level occupational therapy students within OTPX, along with second-year physical therapy students from the same institution participated in this experiential learning activity. Student-participants administered assessments and provided education on fall prevention and home safety to program client-participants under the supervision of licensed physical and occupational therapists.

Upon completion of the first semester of implementation of this pilot program as a potential alternative to traditional Level I Fieldwork, a program evaluation research design was identified as the most effective method to explore the effectiveness of the program and assist in ongoing program development and improvement. A formative assessment approach was selected as this pilot program is only one of the Level I Fieldwork experiences within the curriculum at OTPX. This research study addressed the effectiveness of the experiential learning opportunity embedded within the curriculum for second-year Master of Science occupational therapy students at OTPX, to prepare students for Level II Fieldwork. The purpose of this study was to explore occupational therapy students' perceptions of preparedness for Level II Fieldwork following participation in a Pilot OT Level I Fieldwork experience that focused on skill-based learning opportunities within a "real-world" context. Birdwell indicated "[q]ualitative methods have become central to program evaluation...[and] are empirical and systematic, relying on careful documentation and analysis grounded in data" (p. 20). Uncovering and gaining a greater understanding of students' perceptions of preparedness for Level II Fieldwork assisted in evaluating the Pilot OT Level I Fieldwork program as the intent of OT Level I Fieldwork is to prepare students for the rigor and intensity of OT Level II Fieldwork (ACOTE, 2018a). This formative program evaluation explored occupational therapy students' perceptions utilizing a

retrospective review of program data that included pre-experience and post-experience survey data. Surveys included numeric and narrative query data to explore occupational therapy student-participants' perceptions of the experience and the impact of the experiences on student perceptions of preparedness for Level II Fieldwork. All data analyzed by the researcher was de-identified prior to analysis, therefore, the research methodology employed a retrospective desk review of data obtained as part of a course within the OTPX curriculum and did not incorporate the direct participation of human subjects.

Purpose of the Proposed Study

The purpose of this formative program evaluation was to explore the impact that an experiential learning opportunity has on second-year, Master of Science occupational therapy students at OTPX through the examination of OT students' perception of preparedness for intensive clinical Level II Fieldwork experiences. The program evaluated provided occupational and physical therapy students at one institution the opportunity to engage in experiential learning through participation in a fall prevention clinic offered to community members at an outpatient rehabilitation therapy practice located on the campus of OTPX. The development and implementation of this learning opportunity followed a logic model, which incorporated input from practicing therapists within the community, clinical faculty, and the institution's administration. This collaborative effort of inputs to the logic model aimed to address the needs of students and members of the community. The program model design's intended outputs included increased community engagement, expanded models of sustainable clinical fieldwork experiences, improved marketability to prospective students, and a primary goal of a healthcare education program, to promote clinical excellence. The OTPX program formatively evaluated contained elements of all of these outputs with an emphasis on student preparedness toward the

goal of promoting clinical excellence. This formative program evaluation explored students' perspectives of preparedness for OT Level II Fieldwork following participation in the Pilot OT Level I Fieldwork program at OTPX. It was a formative study as this learning experience was only one of several OT Level I Fieldwork experiences leading up to the preparation of OT students for Level II Fieldwork, and it focused on the students perception of preparedness as one outcome measure of the effectiveness of the overall Pilot program. The program focus of this research study was on occupational therapy students' perceptions of the learning experience, and the impact the experience had on students' perception of preparedness for the required Level II Fieldwork, which occurs at the end of the didactic program.

A program evaluation approach was identified as the most appropriate methodology to explore the line of inquiry of this study. A program evaluation "is a systematic collection of information about the activities, characteristics, and outcomes of programs to make judgements about the program, improve program effectiveness, and/or inform decisions about future programming" (Patton, 2015, p. 18). This research study served to explore program data to "illuminate the people behind the numbers and put faces on the statistics to deepen the understanding and inform decision making" (Patton, 2015, p. 18). Descriptive statistics and qualitative data analysis within this research design was used to allow what Creswell (2015) identified as "a deep understanding of the views of one group" (p. 128). Program evaluation methodology "asks not only what has occurred and what was accomplished but *why*" (Patton, 2015, p. 179). This program evaluation approach explored the "meaning of those outcomes to the people whose lives have been affected" (Patton, 2015, p. 179). The focus of this study was the occupational therapy students' perceptions of skill-based learning within an experiential context,

and the impact of participation in the Pilot Level I Fieldwork experience on perceived preparedness for Level II fieldwork.

Although the program evaluated incorporated objective assessment measures to address student learning and skill competencies, the intent of this study was not to quantify the specific skill competencies achieved through the experiential learning opportunity. Therefore, this study did not attempt to draw any comparison of objective individual performance measures to perception of preparedness for Level II Fieldwork. The intent of this study was to explore students' perception of preparedness for Level II Fieldwork following participation in a Pilot Level I Fieldwork experience. Whereby individualized experiences are at the core of Experiential Learning Theory (Kolb, 1984), a qualitative approach was best suited to address the perceived effect of experiential learning on students' perceptions of preparedness for Level II Fieldwork by identifying "that rich data that is nested in a real context" (Bloomberg & Volpe, 2016, p. 41). The Pilot Level I Fieldwork program was designed to offer contextualized learning through experiential opportunities; this formative program evaluation utilized qualitative inquiry to allow a deeper understanding of the individualized learning experience and the impact of the experience on students' perception of preparedness for Level II Fieldwork.

The United States Department of Health and Human Services: Administration for Children and Families (2016) outlines several reasons to utilize qualitative program evaluation methodology that are relevant to this study. These include "studying program implementation...[and to discover] why the program had the effect that it did – or failed to have such an effect" (p. 5). OTPX currently offers several Level I Fieldwork experiences with varied designs, therefore this study was formative in nature. A formative program evaluation allowed

the researcher to better understand the effectiveness of this program, and to identify consideration for future program design, development, and improvements.

Research Questions and Design

Level I Fieldwork experiences are intended to expose students to components of occupational therapy practice that complement the didactic portion of the program, that when combined prepare students for Level II Fieldwork (ACOTE, 2018a). Traditional models of observational Level I Fieldwork experiences have presented challenges for both educational programs and occupational therapy practitioners which have prompted educational programs to consider alternative approaches to Level I Fieldwork learning experiences (Barker et al., 2016; Evenson, et al., 2015; Johnson, et al., 2006; Ryan et al., 2018). This study applied a retrospective formative program evaluation to explore the effectiveness of a potential alternative to traditional Level I Fieldwork implemented at OTPX and focused on several specific research questions.

The research question that was central to this study was:

RQ: What is the graduate occupational therapy student's perceptions of preparedness for intensive Level II Fieldwork following a skill-based, experiential learning opportunity?

Sub-questions derived from the central question sought to differentiate components of student preparedness to detail the impact on base occupational therapy skill performance, and then the impact on the application of these skills with client-participants within a clinical context.

The sub-questions are as follows:

RQ 1: What is the occupational therapy student's perception of comfort level with skill performance when exposed to a learning experience within a clinical context?

RQ₂: What is the occupational therapy student's perception of comfort level with skill performance when interacting with client-participants within an experiential learning environment?

These research questions demonstrated alignment with the identified problem indicating the need to prepare occupational therapy students for practice, and directly addressed the purpose of this study to explore and describe graduate occupational therapy students at OTPX and their perceptions of preparedness for Level II Fieldwork. The research sub-questions specifically addressed two components of preparedness that include skill performance and the application of these skills during interactions with client-participants. Additionally, the exploratory research questions were in alignment with the problem statement and purpose of this study to allow an in-depth exploration of student perceptions of preparedness for OT Level II Fieldwork following participation in the Pilot OT Level I Fieldwork program to assist in future program design and development.

Site Information

The occupational therapy program that was the focus of this study, Occupational Therapy Program X (OTPX), is located within a private, not-for-profit institution in the Northeast region of the United States. The occupational therapy program offers a Master of Science degree and has a Carnegie classification as a "Master's L" program (AOTA, 2015) indicating OTPX is within an institution that confers a larger number of Master's degrees relative to other institutions in the country (Indiana University Center on Postsecondary Research, 2017). The Fall 2019 second-year graduate student cohort of enrolled students was approximately forty students. The specific program evaluated within this study was a component of the OT Fieldwork Program for

OTPX. This exploration focused on a skill-based, experiential learning opportunity that occurred in the Fall of 2019, and was developed for the second-year graduate students in OTPX.

The identified problem of practice that included an imbalance of supply and demand of fieldwork opportunities, coupled with impending changes in accreditation standards affecting fieldwork requirements (ACOTE, 2018b) prompted faculty at OTPX to examine their fieldwork program. This researcher's particular investment in both the identified problem, as well as in the assessment of the effectiveness of the program, was that along with the role of researcher, I serve as faculty at OTPX in the role of the Academic Fieldwork Coordinator. In this role, I am primarily responsible for the design, implementation, and quality and outcome measures of the fieldwork program (ACOTE, 2018a). As such, the selection of this site was one both of convenience for the researcher, and of particular relevance to the study.

To address the problem of practice, faculty at OTPX developed and implemented a new inter-professional experiential learning opportunity of a Fall Prevention Clinic, which provided fall risk screenings and education to community members. The program was intended to address the identified problem of practice through the creation of a faculty-supported experiential learning opportunity that allowed students to gain hands-on experience within a clinical setting without an increase in supervisory responsibilities of practicing clinicians. Additionally, the experiential learning opportunity that was designed supported components of a logic model that sought to address the needs of students and members of the community through community engagement, expanded models of sustainable clinical fieldwork experiences, to prepare students for practice to promote clinical excellence. The goal of this study was to explore students' perceptions of preparedness for OT Level II Fieldwork following a skill-based experiential

learning opportunity to inform faculty of the effectiveness of the program, and to contribute to future program development as a potential alternative model of Level I fieldwork.

Participants and Sampling Method

As this study is a retrospective review of data from an OTPX program, no human subject participation was utilized in the research design. Site permission for participation in a formative program evaluation was obtained from the Dean of the school in which OTPX resides. All data that utilized within this study was presented to the researcher in a de-identified state with no direct interaction of researcher with human subjects. All data presented to the researcher was analyzed, therefore no exclusionary criteria was applied.

The program evaluated was a Pilot Level I Fieldwork Program designed by OTPX faculty targeting students who were at the onset of the second year of a 2 ½- year graduate program. The students represented the entire cohort of second-year graduate students registered for the course associated with the embedded learning experience. The OTPX faculty identified this group of students for participation in the experiential learning opportunity of a Fall Prevention Clinic offered to community members based on the students' previous exposure to didactic and practical skill development through classroom and lab activities. The students, who participated in the program evaluated, also had participated in one previous Level I Fieldwork experience that followed a traditional observational model. This student group also completed applications for the Level II fieldwork experiences that occurs upon completion of the didactic portion of the program, which for this cohort was anticipated to begin in the Summer of 2020. The student-group's proximity to Level II Fieldwork was key to the exploration of the research questions to understand student perceptions of preparedness for Level II Fieldwork. This sampling method "focuses on developing in-depth information on and insight into a limited

number of cases” (United States Department of Health and Human Services: Administration for Children and Families, 2016, p.14). Program data reviewed for the formative program evaluation allowed for a depth of understanding of the perceptions of students’ experiences.

Ethical considerations for students who participated in the program were applied relative to participants’ rights and informed consent. This issue was of particular concern as the program evaluated was embedded within a required course, and participation in the experiential learning opportunity was a course requirement. Therefore, although participation in the experience was not optional, steps were taken to ensure that inclusion of any data as part of a research study was done on a voluntary basis. In order to protect the rights of participants, students participating in the experiential learning opportunity were informed in writing of the possibility for course data to be utilized in future research study, and inclusion of their data in this research was voluntary (see Appendix A). Students were informed if they did not wish to participate, their data would be removed from the sample prior to any analysis. Students who volunteered to have their data included as part of the program evaluation were de-identified prior to the onset of the study. Therefore, the entirety of this formative program evaluation included retrospective data analysis and had no direct participation from human subjects.

Instrumentation

The design of this formative program evaluation study was a desk review of program data provided by OTPX, which was analyzed for an in-depth exploration of the research questions. Discussion and conclusions resulted in suggestions for alternative tools and methods for future program implementation, and provided suggestions for potential improvements to maximize program outcomes. Based on data available at the time of the program evaluation, the following

items were incorporated as part of the document review and analysis (See Appendix B for survey sample):

- Participant De-identified Demographic Survey Data: This included age, gender, and programmatic information to better define and describe the population sample
- De-identified Pre/Post Survey Data: Data responses were based on a 5-point Likert scale for a variety of component skills with respondents indicating perceived comfort with skill performance, and perceived comfort performing the same skill with client-participants
- De-identified Post Survey Data: Data drawn from narrative responses to open-ended questions that explored participants' perceptions of practical skill development and interactions with client-community participants, and the perceived impact on preparedness for Level II fieldwork. The open-ended survey questions also allowed the respondents to identify perceived benefits, challenges, and suggestions for future program improvements.

Data Collection

As the design of this formative program evaluation was a retrospective review of data provided by OTPX, data collection was not performed as part of the research process. Faculty members who facilitated the learning experience associated with a course within OTPX determined data collection based on the needs and objectives of the program and course requirements. Prior to participation in course assignments and activities, student were informed of the potential use of course material in future research (see Appendix A). As part of the course process, the pre-survey and post-survey data collection of demographic data, numeric responses, and responses to open-ended questions were combined into two on-line surveys using the Google Forms application (see Appendix B). Links to the forms were provided within the electronic

classroom platform associated with the course in which the experiential learning was embedded. Pre-experience surveys were administered at the onset of the semester, and participants completed post-experience surveys within 24 hours of participation in the experience. Course facilitators confirmed completion of surveys by all participants, and then downloaded the data. Course facilitators ensured all student respondents had a signed statement on file at OTPX that indicated voluntary inclusion of their data as part of a program evaluation. Faculty at OTPX then de-identify all student information to maintain participant confidentiality, and following completion of the program, provided the de-identified data to the researcher for analysis.

Data Analysis

All data was derived from course data provided by OTPX. This data focused on student responses to pre-experience and post-experience surveys that included both numeric responses and narrative responses to open-ended questions. Pre-experience and post-experience numeric ratings allowed students to rate their perception of skill performance for skills that were specific components of the experiential learning opportunity. The post-experience survey included open-ended questions that allowed students to elaborate on the learning experience in relation to preparedness for Level II Fieldwork. Data analysis incorporated the use of descriptive statistics derived from numeric survey responses, and coding of narrative responses to survey questions. The combination of data analysis methods was intended to provide a deepened understanding of student perspectives, and to allow for triangulation of data for examination of themes for consistencies and inconsistencies between numeric and narrative responses (Bloomberg & Volpe, 2016).

Descriptive Statistics

Sample population demographic data generated from the electronic surveys was collated and organized. Extracted data was then be compared to available national occupational therapy program demographic data as a method of situating this sample in relation to other occupational therapy programs within the United States. As the design of this study was qualitative in nature, “generalizability is not the goal, but rather transferability” (Bloomberg & Volpe, 2016, p. 47). Demographic data was used to provide a deeper understanding of participant characteristics within the context of this formative program evaluation.

Descriptive statistics were also be used for the pre-experience and post-experience survey data. This data was not used to generate any inferential analysis, but rather to outline and “summarize the overall trends and tendencies” (Creswell, 2015, p. 183). The study included descriptive statistical analysis that included calculations of central tendencies for mean, median, mode and weighted mean; measures of variability including the variance and standard deviation; and measures of relative standing including z scores and percentile rank to further describe and clarify the distribution of responses (Creswell, 2015; Salkind, 2017). The descriptive statistics were used to “organize and describe the characteristics” (Salkind, 2017, p. 8) of the data of pre-experience and post-experience perceptions of the participants. The use of descriptive statistics was intended to allow triangulation of data to relate the numeric survey results with the themes identified from the coded open-ended survey questions.

Coding

The process for coding followed the recommendations outlined by Saldana (2009) and included pre-coding, first and second cycle coding, and the use of analytical memos. The primary emphasis of the coding employed the use of *in vivo* coding which is defined by Saldana

(2009) as the “use the direct language of participants as codes rather than researcher-generated words or phrases” (p. 48) to allow greater authenticity of the perspectives generated by the participants (Creswell, 2015; Saldana, 2009). Descriptive coding (Saldana, 2009) was also incorporated in the initial coding to “summarize[s] in a word or short phrase...the basic topic[s]”(Saldana, 2009, p. 70). Second and third stages of coding incorporated axial coding methods to “sort[ing] and re-label[ing] them [initial codes] into conceptual categories” (Saldana, 2009, p. 160), and to cross-reference the data for a more in depth analysis of the data. In the second and third stages of coding, initial *in vivo* coding was analyzed for themes to create categories and sub-categories to provide further exploration and deeper understanding of the responses. Analytical memos were used throughout the coding process to “...contribute to the quality of your analysis by rigorous reflection on the data” (Saldana, 2009, p. 41). Analytical memos recorded within journals tracked the coding process throughout all stages of analysis with entries recorded throughout the first, second, and third stages of the process.

The details of the coding process included pre-coding, first, and second cycle coding. Saldana (2009) recommends the use of pre-coding and defines it as “circling, highlighting, bolding, underlining, or coloring rich or significant participant quotes or passages” (p. 16). This precoding was recorded in a coding book along with the analytical memos. First cycle coding, that utilized *in vivo* and descriptive coding sought to identify themes as part of the initial coding process. The second cycle coding as outlined by Saldana (2009) included “classifying, prioritizing, integrating, synthesizing, abstracting, conceptualizing, and theory building” (p. 45). This included re-examination of the first cycle coding and incorporated deeper processing to illustrate and describe perspectives of the participants.

Upon completion of the coding process for the open-ended survey questions, the codes and themes for each session were compared across the three coding sessions to search for consistencies and differences of themes as a form of triangulation of the data. Bloomberg and Volpe (2016) indicate the importance of triangulation with regard to case studies as “triangulation is critical in attempting to obtain an in-depth understanding of the phenomenon” (p. 46). Similarly, program evaluation methodology seeks to gain an in-depth understanding to “ask not only what has occurred and what was accomplished, but why” (Patton, 2015, p.179). Triangulation of data allowed for this greater depth of analysis. Additionally, the descriptive statistical data were utilized as a component of triangulation in relation to the coded qualitative results to observe the similarities and differences in participant perspectives expressed in numeric values and in narrative responses from surveys. Demographic data was utilized strictly for descriptive purposes to allow a clearer picture of the student population that participated in the Pilot Level I Fieldwork program at OTPX.

Analytical memos utilized throughout the process added to the depth of the study for what Saldana (2009) identifies as a method to increase the “trustworthiness of [her] account” (p. 28). This research process adds credibility as it maps the thought processes and connections that will lead the researcher to determine codes, themes, and descriptions. Multiple layers of coding along with the documentation of the process through journal and analytical memos fostered the development of rich descriptions of the perspectives of participants that accurately reflected their thoughts and ideas. The methodology for this study addressed the research questions to describe, clarify, and add to the understanding of the effectiveness of the program designed by OTPX in its goal to prepare students for Level II Fieldwork through an exploration of student perceptions of preparedness for Level II Fieldwork.

Limitations and Delimitations

The limitations and the delimitations of this study were given intentional and thoughtful consideration throughout the design, development, implementation and the analysis components of this research study. Bloomberg and Volpe (2016) indicate limitations within research studies frequently relate to “restricted sample size, sample selection, reliance on certain techniques for gathering data, and issues of researcher bias and participant reactivity” (p. 166). Each of these areas were addressed within the following section.

By nature of the design of a retrospective formative program evaluation, the data gathered for this study was based on data provided to the researcher at the time of the evaluation. Therefore, limitations in this research design were inherent in the methodology. The small sample size and convenience sample were a limitation of this study, however, they were also an intentional part of the research design as program evaluation is a “systematic collection of information about the activities, characteristics, and outcomes of programs ...to inform decisions about future programming” (Patton, 2015, p. 18). This research design explored student perspectives within one occupational therapy education program that was implementing a new approach to achieving learning objectives to outline the activities and characteristics of the experience to explore their impact on student perspectives of preparedness for practice. The population identified allowed for the exploration of the effectiveness of the learning experience on of students’ perceptions of preparedness for Level II Fieldwork, and the information can be applied to future program development and improvement.

The design of this formative program evaluation delved into data that included the students’ perceptions of a skill-based experiential learning. To add a richness and depth to understanding the participants’ experience, delimitations of this study were the utilization of

descriptive statistics and qualitative inquiry to focus on student perception of competency and preparedness for practice. A further delimitation of this study was the intentional exclusion of objective measures of student performance on test scores and skill performance evaluations, as a comparative analysis of student perceptions related to demonstrated performance measures were beyond the scope of this inquiry.

Additionally, the pilot program developed utilized a logic model, which Kalu and Norman (2018) indicated is “one of the frameworks used in evaluating educational programmes” (p. 73). The logic model specific to the fieldwork program at OTPX incorporated several outputs that include increased community engagement, expanded models of sustainable clinical fieldwork experiences, improved marketability to prospective students, and the promotion of clinical excellence. This Pilot Level I Fieldwork program incorporated components of many of these outputs; however, the formative program evaluation targeted students’ perceptions of preparedness for clinical experiences toward the promotion of clinical excellence. This represented a further limitation of the study as exploration of the program’s ability to achieve the remaining outputs was beyond the scope of this study, yet of equal importance for future program evaluation.

Ethical Considerations

Creswell (2015) considered the question of conflict of interest as those “who will profit from the research” (p. 280). Although no conflict of interest existed with relation to potential profits or financial gain resulting from this study, researcher bias was an identified limitation, and a factor of great consideration in this study. Researcher bias was complicated by the multiple roles of this researcher in the program that was evaluated. As a faculty member and the Academic Fieldwork Coordinator for OTPX, this researcher assisted in the design,

implementation, and facilitation of the program and has had full access to the participants, which amplified the effect of researcher bias within this study. When discussing the ethical nature of action research, Coghlan and Brannick (2010) identified that a “distinction needs to be made between engaging in action research and reporting on it” (p. 136). With relation to this program evaluation, the faculty role within the program and then as researcher, required this same distinct clarification to ensure the integrity of this inquiry. The acknowledgement of researcher bias and the potential impact on the participants and the data analysis was an important consideration to maintain the integrity of the research design. The intentional selection of a retrospective design and analysis of existing data versus direct interaction of researcher and participants was intended to reduce the impact that active engagement by the researcher might have on participant responses, and to increase clarity of role delineation between faculty and researcher.

Data analysis included the use of multiple data sources, methods of triangulation, and the researcher’s use of journals and analytical memos to document the emergence of themes. All data reviewed as part of the formative program evaluation was de-identified by the program facilitators, prior to providing it to the researcher for analysis. This process included removing all personal data and replacing it with a numeric identifier to allow for pairing of pre-survey and post-survey data. This method was utilized to protect the privacy of participants and to decrease researcher bias in the analysis process. Further clarification of methods to increase the credibility and trustworthiness of the design and implementation of this study is outlined in the following section.

Credibility and Trustworthiness

The use of terms such as validity and credibility, and reliability and dependability in qualitative research are debated within the literature (Bloomberg & Volpe, 2016). However,

regardless of the selected terminology, Bloomberg and Volpe (2016) best captured the idea of trustworthiness in qualitative research as “reassuring the reader that a study was of significance and value” (p. 162). Qualitative research by design cannot draw generalization relative to a population as a whole, as the methodology most commonly relies on “collecting data based on words from a small number of individuals so that the participants’ views are obtained” (Creswell, 2015, p. 16). The value of qualitative research is in its transferability, which as described by Bloomberg and Volpe (2016) requires that the researcher accurately describe, detail, and reflect the views and perspectives of a group; and to allow the reader to consider possible connections between the details illustrated within the study as they relate to the reader’s own context. These connections are only relevant if the study demonstrates trustworthiness throughout the research process.

Evidence of trustworthiness within this study included: utilization of multiple sources and triangulation of data, disclosure of researcher bias, the use of analytical memos and journals to increase transparency of the process, eliciting input from colleagues about the interpretations and themes identified, and “seeking instances that might disconfirm or challenge the researcher’s expectations” (Bloomberg & Volpe, 2016, p. 163). The methodology employed in this study incorporated all of these factors as demonstrated by the analysis of pre-experience and post-experience survey data combined with transcribed data from post-experience narrative surveys. Descriptive statistics was utilized to explore trends of consistencies and inconsistencies of numeric responses. Additionally, coded themes from open-ended responses to survey questions deepened the understanding and description of the participants’ views, and in efforts to triangulate the data. The coding process included the use of analytical memos and journaling, and consultation and discussions with colleagues and research advisors to increase the integrity

of the process. All of these methods were in direct alignment with the research questions and design, and outlined a plan for a credible and trustworthy research application.

The potential for transferability for this study was strengthened through the relevance of the topic that explored the phenomenon of the preparedness of occupational therapy students for intensive clinical Level II Fieldwork experiences, a goal for all occupational therapy education programs. The use of skill-based experiential learning within a “real-life” context, and the exploration of students’ perceptions of this experience was intended to be reproducible, and to foster the development of future paths of discovery that build upon the exploration of the research questions and design of this study.

Participant Rights

Ethical considerations and the protection of participants’ rights were employed with an emphasis on protecting the privacy and maintaining confidentiality of all data utilized as part of this program evaluation. An Institutional Review Board reviewed this study, however, since this study was a formative program evaluation, it was a retrospective desk review of program data and there was not any direct researcher- to-participant interactions. Confidentiality of the institution included a de-identification process to remove any reference to the name of OTPX.

OTPX ensured that all student data was de-identified prior to presentation to the researcher with original data stored securely by OTPX as per the Institution’s policies and procedures. Additionally, prior to the dissemination of any course surveys, OTPX ensured that students were made aware of the potential for use of specific course data as part of future research studies, and maintained signed evidence of such within each student’s individual department record. Students who opted out of inclusion in future research, were able to do so

with no risk of it affecting their course grade, course participation, or relationship with the department or course instructor (Creswell, 2015).

Summary

The intent of this study was to address a problem of practice within the field of occupational therapy education, identified as the imbalance of supply and demand of clinical fieldwork opportunities, through the use of an alternative approach to traditional observational Level I Fieldwork experience. This study utilized a formative program evaluation methodology to explore one occupational therapy educational institution's approach of a skill-based experiential learning opportunity to prepare students for intensive Level II Fieldwork. The purpose of this study was to explore the perspectives of second-year, Master of Science occupational therapy students at OTPX and their perceptions of preparedness for Level II Fieldwork prior to and following this skill-based experiential learning opportunity. This program evaluation used pre-experience and post-experience surveys to delve deeply into the perspectives of the student participants' perceptions of preparedness for Level II Fieldwork.

This research study was specific to one cohort of occupational therapy graduate students in one semester of their program at one institution. Although the focus on one specific group limited the ability to generalize the findings, the study addressed an issue that is problematic for many occupational therapy programs. This exploration was relevant to current practice and occupational therapy education, and demonstrated the potential for transferability within other occupational therapy and healthcare education contexts that utilize experiential learning opportunities to achieve student outcomes. This formative program evaluation sought to explore students' perceptions of preparedness for Level II Fieldwork following participation in a Pilot OT Level I Fieldwork program to inform future program design and development of OT

Fieldwork experiences that contribute to the promotion of clinical excellence through a deeper understanding of occupational therapy students' perceptions of preparedness for Level II

Fieldwork.

CHAPTER 4

DATA ANALYSIS AND RESULTS

Program evaluation is intended to provide information to inform future program development and implementation (Patton, 2015). The overall purpose of program evaluation as defined by Posavac (2016) is “contributing to the provision of quality services to people in need” (p. 13). The primary goal of all occupational therapy education programs is to prepare occupational therapy (OT) students for the provision of quality, skilled occupational therapy services. This research study was formative in nature (Posavac, 2016) as it was only one of several preparatory learning experiences within the curriculum at Occupational Therapy Program X (OTPX), the site of this study, and a goal of the study was to “help [OTPX] retain positive features of the program and modify or improve others” (p. 30). The intent of this formative program evaluation was to explore student perceptions of preparedness for intensive OT Level II Fieldwork in preparation for serving the occupational therapy needs of the population as OT practitioners. This study aimed to address a problem of practice that resulted from an imbalance in supply and demand for OT Fieldwork experiences based on the ever-increasing number of OT students, and explored students’ perceptions of an experiential learning opportunity developed by one institution as an alternative to traditional OT Level I Fieldwork. This evaluation was formative in nature as OT curriculum allows for several OT Level I experiences, and this study examined one Pilot Level I Program offered to second-year graduate students in an occupational therapy program at OTPX. This skill-based experience was a collaborative effort of occupational and physical therapy faculty at OTPX designed in conjunction with an on-site provider of physical rehabilitation services. The experience was a Fall Prevention Clinic offered to area

community members in the Fall 2019 academic semester. This formative program evaluation was a retrospective review of de-identified program data provided by OTPX.

Chapter Four outlines the process of analysis for the quantitative and qualitative data that revealed four emergent themes representing the perspectives of occupational therapy graduate students at OTPX. Quantitative results are summarized and assist in the triangulation of data. An in-depth coding process of qualitative data revealed four themes that frame students' perspectives following participation in the experiential learning opportunity. Subsequently, Chapter Five provides a discussion and interpretation of the findings that demonstrate an alignment with the research study's conceptual framework and illustrate the connection of problem, purpose, and analysis as they address the central research question and sub-questions.

Data Analysis Method

A formative program evaluation seeks to inform future program development and design (Patton, 2015). This research methodology was identified as the most appropriate approach to address the central research question and two sub-questions that sought to explore students' perceptions of preparedness for OT Level II Fieldwork following a Pilot OT Level I Fieldwork experience at OTPX. The goal of the pilot program at OTPX was to contribute to OT student preparedness through the use of a skill-based experiential learning opportunity as an alternative to a more traditional, observational Level I learning experience. This experience was only one of several Level I learning experiences at OTPX, and therefore, program evaluation of the Pilot OT Level I program at OTPX was formative (Posavac, 2016). Retrospective program data was analyzed to explore a line of inquiry that sought to illuminate students' perceptions of preparedness for OT Level II Fieldwork for second-year OT graduate students at one institution following a skill-based experiential learning opportunity.

All data included within this study was retrospective program data provided by OTPX with no data collection completed as part of this study. The data sets included as part of this study were surveys administered by faculty to second-year graduate occupational therapy students at OTPX with each survey created to align with the goals and objectives of the course associated with the Pilot Level I program. Within the course offered at OTPX, each student had the opportunity to voluntarily allow or deny the use of their work in future research, and completed a signed statement indicating their willingness for the data to be utilized (see Appendix A). The specific data included within this study were a pre-experience and post-experience survey, and one final program debriefing survey. Each survey was administered to students via the course's electronic learning platform and downloaded by faculty at OTPX. All course survey data was de-identified by faculty at OTPX prior to the provision of that data to the researcher to ensure all respondents' confidentiality was maintained, and all data was retrospective and analyzed in the semester following the Pilot OT Level I experience.

The retrospective data included within this study incorporated numeric and narrative pre-experience, post-experience, and debriefing surveys of student responses to numeric and open-ended questions, in efforts to gain an in-depth understanding of student perspectives on preparedness for intensive Level II Fieldwork experiences following a Pilot OT Level I Fieldwork experience. Retrospective program data reviewed included demographic data of student participants, a 20-question numeric survey completed both pre-experience and post-experience, narrative survey data completed by participants within 72 hours of experience, and a narrative debriefing survey completed at the end of the Fall 2019 semester.

Numeric Data Analysis

Numeric pre-experience and post-experience data were analyzed using IBM SPSS Statistics Software (version 26) and focused on descriptive statistics to “summarize the overall trends and tendencies” (Creswell, 2015, p. 183) of OT students’ responses. Demographic data were analyzed to describe characteristics of the survey respondents and to situate demographic characteristics in relation to other occupational therapy Master of Science programs within the United States. Demographic characteristics included the program of study within OTPX, gender identification, and age. Descriptive analyses were also performed on survey responses that included 20 pre-experience questions, each rated on a scale of 1 - 5 with “1” indicating strongly disagree, and a rating of “5” indicating strongly agree, and the same 20 questions and rating scale were completed as part of each post-experience survey. Creswell (2015) indicated that researchers have considered rating scales such as the one described to be “treated as both ordinal and interval data in educational research” (p. 167). However, in order for the data to be considered on an interval scale, the distance from one response rating to the next must be equivalent (Creswell, 2015). Therefore, “although an ordinal scale ... may seem like an interval scale, we have no guarantee that the intervals are equal, as in the well-tested Likert scale” (Creswell, 2015, p. 167). Numerically ranked data analyzed within this research study met the criteria for ordinal rating scales and therefore, statistical analysis applied guidelines for analysis of ordinal data (Creswell, 2015).

Responses to each pre-experience and post-experience question were analyzed individually to explore central tendencies including mean, median, mode, and measures of variability including the range of responses, the variance, and standard deviation. Based on the ordinal nature of the numeric rating scale, non-parametric measures (Salkind, 2017) were

utilized. Creswell (2015) indicated “ordinal scales require nonparametric statistical tests whereas interval scales require parametric (p. 167). Parametric tests are based on large sample sizes with assumptions about the distribution of responses, whereas, non-parametric tests are appropriate for smaller sample sizes and “make no assumptions about the shape of the population distributions” (Agresti & Finlay, 2009, p. 205). Therefore, non-parametric tests were applied to numerically ranked responses to analyze the trends for individual question responses and to allow for a better understanding of the relationship of these distributions from pre-experience relative to post-experience trends in order to provide a deeper understanding of the range of ranked scores. It is important to note that Posavac (2016) posits that “a statistically significant finding can only show that the change was unlikely to reflect only sampling error, not to reveal causality” (p. 167). Therefore, analysis of these data was not utilized to draw any causal conclusions, but more so to consider and describe trends as a basis to delve more deeply into specific student perspectives through the use of qualitative inquiry.

Narrative Data Analysis

Retrospective data provided by OTPX included narrative data derived from two different surveys. The first of which was a narrative post-experience survey administered and completed by students within 72 hours of the experiential learning opportunity. The second was a separate narrative response survey administered at the end of the semester intended as a debriefing survey. For each of the surveys the coding process followed similar steps as recommended by Saldana (2009), which began with an initial review of the data in which no notes or highlighting took place. The next step began the application of first cycle coding methods (Saldana, 2009) that included pre-coding or “circling, highlighting, bolding, underlining, for coloring rich or significant participant quotes or passages” (p. 16). Pre-coding then progressed to *in vivo* coding

that “use[d] the direct language of participants as codes rather than researcher-generated words or phrases” (p. 48). Following the *in vivo* coding of data, descriptive coding was utilized to “summarize in a word or short phrase...the basic topic[s]” (Saldana, 2009, p. 70). Analytical memos and journals were utilized throughout the three steps of the coding process which when combined completed the first round or stage of coding.

The second stage of coding utilized axial coding methods of “sorting and re-labeling them [initial codes] into conceptual categories” (Saldana, 2009, p. 160). This process also incorporated the use of analytical memos and journals to reflect on category labels, and to ensure accuracy and consistency of coded data within each category. A second round of axial coding was then performed which resulted in what Saldana indicated as “rearrangement and reclassification of coded data into different and even new categories” (p. 10). This second round of axial coding occurred with both of the survey data sets. Additionally, the second round of axial coding of the debriefing survey resulted in a sub-set of data that was coded as a separate data set. This sub-set of data was generated from one of the survey questions that asked students to list three skills they perceived would best prepare the student for Level II Fieldwork. The list of skills identified by each respondent provided unique insight into students’ perceptions of preparedness to directly address an important component of the central research question. The uniqueness of this data supported the need for the creation of a sub-set of data that was coded separately to ensure the students’ perspectives were adequately expressed. The sub-set of data were coded by topic or skill type using descriptive codes, and then arranged into categories using axial coding. Thus, the second stage of coding resulted in three coded data sets; the post-experience survey, the debriefing survey, and the coded list of skills that were a sub-set of the debriefing data set.

The third and final stage of the coding process was to analyze all three of the coded data sets as a collective. This included eight codes from the post-experience survey, eight codes from the debriefing survey, and four codes from the skill list. The eight codes identified for the post-experience survey were *Relevance, Desires for Future, Self-Awareness, Environment, Observation, Doing, Adaptation, and Collaboration*. The eight codes for the debriefing experiences were *Self-Esteem, Feedback, Self-Assessment, Skill Development, Client-Centeredness, Professional Identity, Accountability, and Resources*. Finally, the four codes from the skill list were *Practical Skills, Integration of Skills, Communication, and Personal/Professional Attributes*. The use of analytical memos and journaling supported the process of coding to ensure the coding remained an accurate reflection of the students' perspectives that revealed the emergence of four main themes with sub-themes within each category, which are outlined in the results section.

Analysis of Overall Results

Upon completion of the quantitative analysis of numeric responses, and the qualitative analysis through the coding of post-experience surveys, debriefing surveys, and coding of skill lists, the data was compiled and analyzed for trends and themes. The conceptual framework guided the process of analysis to address the purpose and the central research questions and sub-questions of this research study. Coded data sets were compared and contrasted for a deepened understanding of students' perspectives. Coded categories were grouped with similar categories from each of the three coded data sets, and reflection on the similarities and differences were recorded in journals and analytical memos. This analytical process led to an interconnection of coded data from each of the three sets of data, which resulted in the emergence of four distinct themes. These themes were identified as *Learning in Context, Self-Awareness, Awareness of*

Others, and *Awareness of Professional Identity*. Details from the emergent themes in the expression of students' perceptions of preparedness for OT Level II Fieldwork are outlined within the results section.

Results

This section provides information from the quantitative analysis and the qualitative analysis in support of the results that revealed the emergence of four themes. These results demonstrated alignment with the conceptual framework that applied the researcher's personal experience, current topical literature, and Experiential Learning Theory (Kolb, 1984) as a theoretical framework (Ravitch & Riggan, 2017). This section summarizes results from each component of data analyzed including results of the quantitative data analyses that utilized descriptive statistics including demographic data to describe characteristics of the participants, and results from students' numerically ranked survey question responses. Qualitative analysis provided results from the in-depth coding process of students' narrative responses to survey questions to reveal students' expression of perceptions of preparedness for OT Level II Fieldwork following participation in the Pilot OT Level I Fieldwork at OTPX.

Demographic Data

Student participants in the Pilot OT Level I experience of a Fall Prevention Clinic that took place in the 2019 Fall semester were all second-year graduate students in the Master of Science in Occupational Therapy Program at OTPX. Demographic data was derived from post-experience surveys completed by the student participants. Descriptive statistical analysis was applied to demographic data to describe the survey respondents with specific demographic factors including program of study within OTPX, gender identification, and age.

The total number of OT student participants in the Pilot Level I Program was consistent with the total number of survey respondents (n= 44). The OT program at OTPX offers two points of entry into the Master of Science degree program at OTPX. One program is the Health Science OT (HSOT) program, defined as students who progressed directly from undergraduate to graduate studies within OTPX, and the second program is the Entry-Level Master's (ELM) program, that included those students who entered the program with a Bachelor of Science degree from another institution or field of study. Data analysis revealed an equal distribution of students from each of the two programs of study at OTPX with HSOT (n= 22) and ELM (n= 22).

Demographic characteristics of gender and age were also analyzed using descriptive statistics. Figure 1 depicts the distribution of ages and gender identification of survey participants. Regarding gender identification, thirty-six respondents or 82% identified as female, and eight or 18% as male. This distribution of male students is slightly higher than the national averages for Master of Science Programs in the United States with data indicating a ratio of 89% female to 11% male within other similar programs (AOTA, 2018b). The distribution of students' ages ranged from 22 - 40 years with a mean of 25. 2 years, a median of 23 years, and a mode of

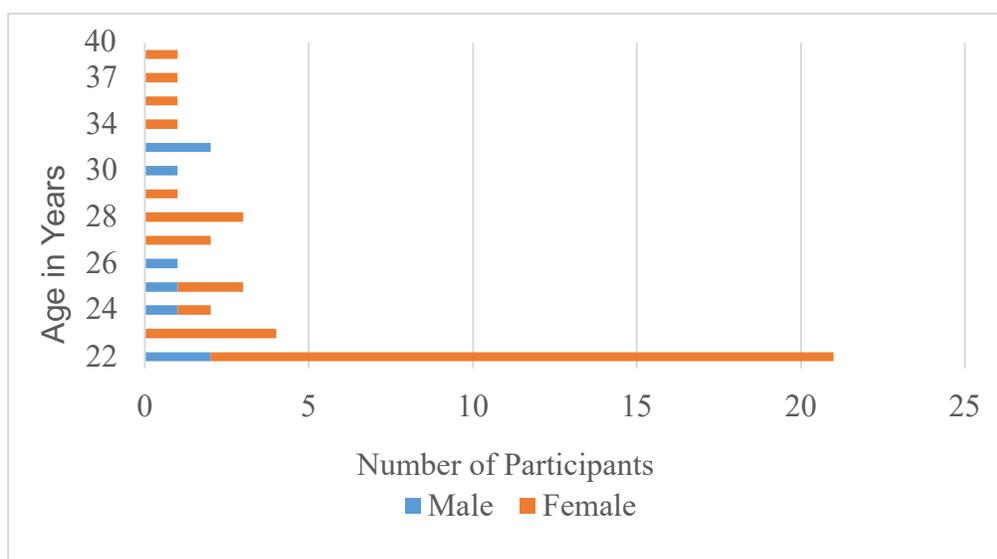


Figure 1. Distribution of participants by age and gender identification

22 years. The mode of 22 years was representative of 47.7% of the sample population (n= 21 of 44 respondents). The range of ages for females was 22 – 40 years, and for males, the range was 22 - 32 years.

Descriptive Statistical Analysis of Numeric Survey Questions

Each pre-experience and post-experience numeric survey was comprised of 20 questions. Ten questions identified a certain skill and asked respondents to rate their comfort level performing the skill with a peer, and then the same ten questions were asked with respondents rating their comfort level performing the skill with a client-participant (see Appendix B). Statistical analysis of pre-experience and post experience responses were analyzed using the IBM SPSS Statistics software (version 26). Initial analysis included calculation of mean, standard deviation, and variance for each of the pre-experience and post-experience survey responses.

Results for the mean scores for each of the pre-experience survey results ranged from 3.41 - 4.36 with standard deviation scores ranging from 0.4866 - 0.8340. The mean scores for the post-survey ranged from 3.92 - 4.59 with standard deviation scores that ranged from 0.4974 - 0.8209. All pre-experience questions 1- 10 were rated higher than pre-experience questions 11- 20; indicating that for pre-experience responses students had a higher level of comfort with skills performed with a peer versus the same skill performed with a client. Similarly, all post-experience questions 1- 10 were rated higher than post-experience questions 11- 20; indicating that for post-experience responses students indicated a higher level of comfort with skill performed with a peer versus the same skill performed with a client. Finally, for all questions (1- 20), each post-experience mean was greater than the pre-experience mean for the same question, and in 16 of 20 instances, the pre-experience standard deviation was higher than the post-

experience standard deviation for that same question. Examination of the mean and standard deviation of responses for each of the 20 questions on both the pre-experience and post-experience surveys suggested that students rated skill performance with peers at a higher comfort level than those same skills performed with clients. Students also rated all skill performance following the experiential learning opportunity at a higher rank. Table 1 reflects the numeric value of the mean and standard deviation for each of the 20 questions within both the pre-experience and post-experience survey.

Table 1

Comparison of Pre-Experience Responses v. Post-Experience Responses

Survey Question	Pre-Experience		Post-Experience	
	M	SD	M	SD
Question 1	4.364	0.4866	4.523	0.5053
Question 2	4.114	0.5793	4.364	0.5323
Question 3	3.898	0.661	4.261	0.6146
Question 4	3.784	0.7345	4.034	0.6324
Question 5	3.864	0.7653	4.136	0.5537
Question 6	3.636	0.7499	4.091	0.8017
Question 7	3.955	0.834	4.182	0.6567
Question 8	3.807	0.741	4.114	0.8131
Question 9	4.295	0.7339	4.591	0.4974
Question 10	4.295	0.7015	4.523	0.6283
Question 11	4.136	0.5537	4.477	0.5053
Question 12	3.977	0.6643	4.227	0.6421
Question 13	3.636	0.7803	4.125	0.6391
Question 14	3.409	0.8441	3.92	0.6984
Question 15	3.614	0.7538	3.955	0.6889
Question 16	3.409	0.8441	4.023	0.6985
Question 17	3.773	0.8315	4.17	0.5901
Question 18	3.636	0.7499	4.023	0.8209
Question 19	4.250	0.6862	4.545	0.5037
Question 20	4.182	0.7555	4.568	0.5011

Despite the greater numeric value in each of these comparisons, the ordinal nature of the data required additional measures of statistical analysis that considered the median, mode, and range of responses to explore and define trends in students' responses. Additional quantitative analysis included the exploration of the median, mode and range of responses. The median rating for pre-experience responses was "4" in 19 of 20 circumstances, and the median rating post-experience was "4" in 15 of 20 circumstances, and "5" in 5 of 20 circumstances. The mode for all pre-experience questions had a value of "4", while post-experience the mode was equal to "4" in 15 of 20 instances, and a value of "5" in 5 of 20 instances. Ratings for pre-experience responses for each of the 20 questions fell within a range of 1- 5 (n= 1), 3- 5 (n= 3), 4- 5 (n= 1) with the greatest number of questions ranging from 2- 5 (n= 15). Whereas, the distribution of scores fell about evenly for post-experience scores with ranges of 2- 5 (n= 7), 3- 5 (n= 8) and 4- 5 (n= 5).

These descriptive statistics provided information about the frequency and trends of distributions for response questions, and similar to the comparison of the mean and standard deviation of each response, results suggested a slightly higher central tendency and distribution of responses following the experiential learning opportunity. However, the results were not definitive. These results may be limited in part by the narrow response range of the survey tool that potentially lacked sufficient sensitivity to demonstrate higher levels of statistical significance.

In an effort to evaluate the available data thoroughly, non-parametric testing was utilized to explore trends in data for survey responses to each question using the Chi Test for Goodness of Fit (Salkind, 2017). Results indicated that for each pre-experience and post-experience question, responses were not likely due to chance. The Chi Test for Independence was then performed as this test allowed for the assessment of the relationship of two variables (Salkind,

2017). The two dimensions for comparison using the Chi Test for Independence were a comparison of the demographic of Program of Study (HSOT to ELM students) compared to response ratings for each question, in order to evaluate if the Program of Study had an effect on response ratings. Results of analysis indicated that in 39 of 40 circumstances there was no significant difference in response ratings of students in the HSOT Program versus those in the ELM Program. Post-experience question 8 indicated significance as the actual value (10.93) exceeded the critical value (7.82) for the test parameters. However, the level of significance defined by the asymptotic value or *p*-value (Agresti & Finlay, 2009) for that test was 0.012 indicating results were significant at the 0.05 level, but not at the 0.01 level.

With 97.5% of results (39 of 40) for the Chi Test for Independence when response ratings of students from the HSOT Program were compared to response ratings for students from the ELM Program, program of study and its relation to response rate were interpreted as not independent of one another. In other words, a student's program of study did not significantly affect response ratings for pre-experience and post-experience questions 97.5% of the time. Therefore, for the remainder of the statistical analysis consideration of program of study was not parsed out and the students were considered one group composed of 44 individual perspectives.

Although program of study did not demonstrate statistical significance in a majority of the analysis, observable numeric differences were identified in response ratings from pre-experience to post-experience. Further analysis continued with non-parametric testing to assess if these differences were of statistical significance. This analysis compared the median responses of each pre-experience question to that same question rated post-experience to determine whether to retain the null hypothesis that support the differences noted occurred only by chance (Salkind, 2017). Selection of specific analytical tests were based on the criteria that tests needed to be

appropriate for ordinal data, and those tests that allowed for comparison of two groups of data, pre-experience and post-experience survey responses. Based on this criteria three non-parametric test were identified. These tests were the Sign Test, the Wilcoxon Rank Test, and Friedman's Two-way Analysis of Variance (Salkind, 2017). Table 2 illustrates the results of the three non-parametric tests performed.

Table 2

Non-Parametric Analysis of Pre-Experience v. Post-Experience Responses

Survey Question	Non-Parametric Test		
	Sign Test	Wilcoxon Rank Test	Friedman's Test
	Test Results		
Question 1	RETAIN	RETAIN	RETAIN
Question 2	RETAIN	REJECT	RETAIN
Question 3	RETAIN	REJECT	RETAIN
Question 4	RETAIN	RETAIN	RETAIN
Question 5	RETAIN	RETAIN	RETAIN
Question 6	REJECT	REJECT	REJECT
Question 7	RETAIN	RETAIN	RETAIN
Question 8	RETAIN	RETAIN	RETAIN
Question 9	REJECT	REJECT	REJECT
Question 10	RETAIN	RETAIN	RETAIN
Question 11	REJECT	REJECT	REJECT
Question 12	RETAIN	REJECT	RETAIN
Question 13	REJECT	REJECT	REJECT
Question 14	REJECT	REJECT	REJECT
Question 15	REJECT	REJECT	REJECT
Question 16	REJECT	REJECT	REJECT
Question 17	REJECT	REJECT	REJECT
Question 18	REJECT	REJECT	REJECT
Question 19	REJECT	REJECT	REJECT
Question 20	REJECT	REJECT	REJECT

Note. RETAIN indicates retain the null hypothesis. REJECT indicates reject the null hypothesis.

The Sign Test was selected to “compare the medians from two samples” (Salkind, 2017, p. 328). The Wilcoxon Rank Test was selected “to compare the magnitude, as well as the direction of differences between the groups” (Salkind, 2017, p. 328), and Friedman’s Two-way Analysis of Variance alternatively termed Friedman’s Test (Agresti & Finlay, 2009) was selected “to compare the overall difference between two or more independent samples on more than one dimension” (Salkind, 2017, p. 328). Each test was selected in order to compare each pre-experience question to the same question completed post- experience in consideration of retaining the null hypothesis that assumes no relationship existed (Salkind, 2017).

Each test offered some insight into characteristics of the data; therefore, multiple methods of analysis were utilized to determine significance of trends and tendencies. Results from the three non-parametric tests performed indicated that for comparison of pre-experience to post-experience questions 1 – 10 only two questions (questions 6 and 9) resulted in multiple tests that rejected the null hypothesis, therefore, in eight of ten tests no significance in pre-experience to post-experience ratings was found. Whereas, comparison of pre-experience and post-experience data for questions 11 – 20 suggested rejection of the null hypothesis for all questions with the exception of question 12. These results suggest a statistically significant difference in response from pre-experience to post-experience occurred in students’ reported comfort level when interacting with client participants in nine of ten instances using non-parametric testing. However, within program evaluation Posavac (2016) cautioned against the use of statistical significance to determine causality. These results contributed to a logical path of discovery toward further exploration through qualitative inquiry and analysis and were not intended to identify causality.

Qualitative Analysis and Themes

Qualitative analysis of program data was performed on two data sets. The first data set was narrative responses (n= 44) to post-experience survey questions that students completed within 72 hours of the learning experience. The second was a debriefing survey (n= 42) with respondents completing surveys at the end of the Fall 2019 semester (see Appendix B). It should be noted that two of the participants in the learning experience did not complete the debriefing survey, be that intentionally opting out or circumstantially, the reason for the difference in number of respondents was unknown to this researcher, and will be considered in the discussion and interpretation of results in Chapter 5.

Analysis of qualitative data followed guidelines of coding recommended by Saldana (2009) for three data sets that included the post-experience narrative survey responses, the debriefing narrative survey responses, and the sub-set of data from the debriefing survey that identified students' perceptions of skills necessary for preparedness for Level II. For each of the data sets, two complete rounds of coding that incorporated first and second cycle coding methods (Saldana, 2009) were performed. Completion of the second round of coding for each data set revealed eight distinct codes for the post-experience survey and eight additional codes for the debriefing survey. The eight codes identified for the post-experience survey were *Relevance, Desires for Future, Self-Awareness, Environment, Observation, Doing, Adaptation, and Collaboration*. The eight codes for the debriefing experiences were *Self-Esteem, Feedback, Self-Assessment, Skill Development, Client-Centeredness, Professional Identity, Accountability, and Resources*. Finally, the second round of coding illuminated a sub-set of data from the debriefing survey that identified a list of skills students perceived as necessary for preparedness for OT Level II Fieldwork. The skill lists were categorized resulting in four additional codes. The skill

list codes were identified as *Practical Skills, Integration of Skills, Communication, and Personal/Professional Attributes*.

All three sets of codes were then analyzed collectively for a third and final round of coding which led to the emergence of four themes that represented students' perspectives regarding the experiential learning opportunity, and addressed the purpose of this formative program evaluation that explored student's perceptions of preparedness for intensive OT Level II Fieldwork. Components of each of these themes were interwoven throughout the data with emergent themes of students' perspectives surfacing and re-emerging over the course of the analytical process. Therefore, the four emergent themes are presented in no particular sequence or order. Details of each emergent theme are explored to provide an in-depth presentation of students' perspectives on preparedness for Level II Fieldwork.

The first emergent theme to be discussed was *Learning in Context* which demonstrated students' perspectives of the overall learning experience and views on preparedness including the relevance of the skills incorporated within the experience, the environmental factors, and the impact of the learning within a clinical context versus within a classroom setting. The second theme was *Self-Awareness*, which gave light to students' expressions of the reflective process of self-assessment generated through introspection, and from external feedback and students' responses and reactions to that information. The third emergent theme was *Awareness of Others and Interpersonal Interactions*. This theme outlined students' perceptions of the learning experience that included observation and skill application, the nuances of interpersonal communication and collaboration, as well as students' perceptions of the need for adaptation in the moment. Finally, the fourth theme explored responses that demonstrated students' *Awareness of Professional Identity*. Professional identification included expressions of an awareness of

professional roles and a sense of self in that role, an expressed awareness and understanding of professional attributes, and the perception of accountability and responsibility for continued growth and development in preparation for Level II Fieldwork. The following section describes and defines the four themes and sub-themes that emerged from an in-depth analysis through coding of the qualitative data.

Theme 1: Learning in Context

The first emergent theme of *Learning in Context* revealed students' expressions and responses to the overall experience. All of the respondents (44 of 44) indicated the relevance of the learning experience to preparedness for Level II Fieldwork. Noted throughout the data, a majority of students (35 students in 53 instances) responded with emphatic support of the experiential learning opportunity expressed in statements that identified the experience as "an amazing experience", "neat", "loved the experience!", "helpful", "really great experience!", and "definitely learned a lot". Additionally, for 33 students in 44 instances throughout all data sets analyzed, students indicated the desire to have more experiences that allowed for "hands-on" practice and application of skills within a clinical context. Comments reflective of this perspective such as "this was a wonderful experience and I would love to do it again!" and "I enjoyed the experience...[and] wish for more" were indicative of the sentiment offered by many.

Several sub-themes emerged from within the larger theme of *Learning in Context*. The themes emerged through a rigorous review of data in a manner that Callahan (2014) applied to methods for conducting a literature review using the "Six Ws" (p. 273). This method of exploration of "Who, When, Where, hoW, What, and Why" (p. 273) was especially important as the analysis of retrospective data required thoughtful consideration of each question to highlight students' perceptions and detail the components of the experiential learning opportunity through

consideration of each of the six questions. Consideration included students' perspectives on the relevance and importance of "who" played the role of the client; "when" are/were hands-on experiences useful; was it important "where" and "how" the learning occurred; "what" about the experience was similar or different to other learning methods, and "why" did students find relevance in the experience? Consideration of these questions revealed sub-themes that included *Perceived Relevance* in preparation for Level II Fieldwork, *Environmental Factors* that influenced the learning experience, and finally, the impact of experiential learning within the *Clinic versus Classroom*. Table 3 demonstrates the descriptors and key words that led to the emergence of the theme of *Learning in Context*.

Table 3

Frequency Table for Coded Data within Learning in Context Theme

Sub Theme	Theme: Learning in Context			
	Data Set	Code Number	Descriptor/ Key Word	Code Count
1.1	POST	1	Relevant to Prepare	44
1.1	POST	1a	Relevance: Positive Descriptor	21
1.1	POST	1b	Relevance: to Fieldwork	19
1.1	POST	1c	Relevance: Purpose (Self, Team, Client, Supervisor)	38
1.2	POST	2a	More Experiential Opportunities	44
1.2	POST	2b	More but Different or altered	17
1.2	DEBRIEF	4e	Advice for Future Experiences	3
1.3	POST	4a	Positive Learning Experience	32
1.3	POST	4b	Negative/Constructive Criticism	7
1.3	POST	6b	Application vs Practice	22
1.3	DEBRIEF	4a	Concrete: In Context vs In Class	32
1.3	DEBRIEF	4b	Reflective: "Realize the need for..."	4
1.3	DEBRIEF	4c	Abstract: Integration of skills	6
1.3	SKILL	1	Practical Skills Necessary for Fieldwork	35

Note. Data sets represented include Post-Experience Surveys = POST; Debriefing Surveys= DEBRIEF; and Skills for Preparedness= SKILL.

Perceived Relevance. Skills incorporated into this learning experience were identified as relevant in relation to preparedness for OT Level II Fieldwork by all students (n= 44). Respondents provided many descriptors of the relevance of the experience (n= 21) such as “essential”, “vital”, “critical to our success in the future”, and “the building blocks and foundation” of occupational therapy practice. Respondents indicated a variety of reasons that led them to perceive relevance, some identified a general sense of the potential to demonstrate confidence and competence, and other students identified specific skill application and development. Students perceived the relevance of these skills as important in preparation for clients, for their supervisors, for the promotion of self-confidence, and for some, in efforts to represent their institution and profession in a positive light.

Environmental Factors. Twenty-Three students in thirty-two different instances identified environmental elements that had a positive effect on learning. Students identified factors such as supportive staff/supervisors who were “friendly and helpful”, and a positive response from client-participants. One respondent indicated the structure of the learning experience allowed for the “comfort of knowing I was being supervised within a relaxed environment”. Others perceived the event as organized with adequate information and preparation details provided prior to the experience, and sufficient time to observe others and to process the information following the learning experience.

While a large majority of students desired the opportunity for more experiences (33 students in 44 instances) and relished in the ability to receive feedback in the moment (n= 24), there were seven students who provided constructive or negative feedback. Five students offered suggestions for improvement for future experiences indicating the need for more space and fewer students. Two respondents provided a negative perspective of the experience as indicated by a

voiced perspective that the experience to be “just thrown together” and lacked organization. These two respondents also had a negative perception of feedback received during the experience. Both positive and negative perspectives on feedback and response to feedback are further explored within the next theme, *Self-Awareness*.

Clinic versus Classroom. The benefits of contextual application versus learning within a classroom was a theme interwoven throughout all data sets. Respondents indicated the significance of working with “real patients” and practicing skills in a “real clinic” particularly in relation to performing hands-on application of skills (n= 22) and the impact of participating in a clinic environment versus a classroom setting (n= 32). One respondent captured the essence of this perspective by stating, “while many of our classes work to simulate the real-life experiences we'll have, this one actually provided us with that experience”. Students’ comments also indicated a deeper level of connection and understanding of skill performance as seen by comments such as “[I gained] more insight into skills...”, and “[it was] very different actually performing these learned skills”. The desire for practical application of skills was a theme noted throughout the data. In the coding of a subset of data in which student identified skills necessary for OT Level II Fieldwork preparedness, 35 of 125 responses identified the need for more *in situ* experiences to allow for application of skills within a clinical context. Some of the specific skills students identified included assessment, documentation, and skills that incorporated the management of patient safety during functional mobility tasks.

Students expressed the impact of learning in context on skill development, and connected skill performance in context with preparedness for occupational therapy practice. Students identified the application of knowledge and skills in context tended to prompt self-assessment. The next section will explore students’ introspective statements reflective of *Self-Awareness*.

Theme 2: Self-Awareness

The theme of *Self-Awareness* that emerged from the data came to light as students expressed their perceived level of confidence in their abilities, performed self-assessments identifying strengths and challenges, spoke of feelings evoked by participating in a hands-on learning experience, and expressed the role of feedback as part of the learning experience. Again, the “6 W’s” (Callahan, 2014, p. 273) played a role in the exploration of students’ perspectives in consideration of who were key players in the learning process, when, where and how did the experience affect the learner, what elements were impactful, and why? These questions also followed the same line of inquiry as the central research question for this study that sought to explore “*What is the graduate occupational therapy student’s perception of preparedness for intensive Level II Fieldwork following a skill-based experiential learning opportunity?*” Exploration of factors that contributed to students’ perceptions yielded two sub-themes, *An Internal Process*, and *External Feedback and Response* to that feedback that contributed to awareness of self and perceptions of preparedness for Level II Fieldwork. The following sections detail more specifics of students’ perspectives that demonstrated self-awareness.

An Internal Process. Students’ responses to the learning experience opened a window into some of the internal thoughts and processes expressed by students that accompanied learning in context. Students’ expressions revealed the role of self-esteem and the impact of self-esteem on recognizing one’s strengths and challenges. Confidence or comfort level was reflected in many responses (n= 71) and directly addressed the purpose and central research question of this study that sought to explore students’ perceptions of preparedness following an experiential learning opportunity. Students identified confidence and/or comfort levels with great frequency as demonstrated by 52 instances of the use of the word confidence/confident and an additional 19

instances of the use of the word comfort/comfortable. Some students (n=21) expressed confidence as a feeling they possessed following the experience, while others (n= 12) identified confidence as a developing skill, and 12 students identified confidence as one of three skills most important in preparation for Level II Fieldwork. A list of coded data for the theme Self-Awareness is outlined in Table 4.

Table 4

Frequency Table for Coded Data within Self-Awareness Theme

Sub Theme	Theme: Self-Awareness			
	Data Set	Code Number	Descriptor/ Key Word	Code Count
2.1	POST	3a	Internal Strengths	19
2.1	POST	3b	Internal Areas for Improvement	25
2.1	POST	3c	Feelings Evoked with Learning	19
2.1	POST	3d	No Change in self-awareness	3
2.1	POST	3e	External View as School's responsibility	12
2.1	DEBRIEF	1a	Confidence/Comfort Level increased	21
2.1	DEBRIEF	1b	Confidence/Comfort Level decreased	2
2.1	DEBRIEF	1c	Confidence as a Developing Skill	12
2.1	DEBRIEF	1d	No Change in Confidence	1
2.1	DEBRIEF	3a	Strengths/Successes	3
2.1	DEBRIEF	3b	Areas for Growth/Challenges	13
2.2	POST	8c	Supervisor- Positive	16
2.2	POST	8d	Supervisor – Challenging/Negative	4
2.2	DEBRIEF	2a	Benefit of In-the-Moment Feedback	8
2.2	DEBRIEF	2b	Self-Acceptance: “okay to make mistakes”	15

Note. Data sets represented include Post-Experience Surveys = POST; Debriefing Surveys= DEBRIEF.

The internal processes that students discussed included 60 coded instances of assessment of personal strengths and areas for growth. Twenty-two different students either identified a general sense of achievement or specifically identified skills in which they performed strongly.

In 21 coded instances respondents indicated the experience had a positive impact on their confidence level. Examples of response to the experience included statements such as “[the learning experience] was a big confidence booster”, and “increased my ability to feel prepared”. The expressed perspective of the benefits of the experiential learning opportunity that “allowed me to feel better prepared” was a common theme. The positive sentiments expressed did vary in intensity from “it went smoothly and I feel prepared” to “I am a little less nervous about fieldwork”. Students also indicated the experience helped to alleviate some of their anxieties about Level II Fieldwork as seen in statements about the learning experience such as “[it] put my mind at ease”, “helped me to feel more confident in my abilities”, and “helped to relieve some of the anticipation and anxiety” associated with preparing for fieldwork.

Although not representative of a majority of respondents who reported experiencing some successes during the experience (n= 22) or who specifically identified increased confidence (n= 21), two students expressed decreased confidence following the experience. This decreased confidence was demonstrated in the statements “it made me feel incompetent”, and “I am a little concerned and feel unprepared for level 2”. Additionally, although not all students expressed an increased confidence in their abilities, many students (38 instances) indicated a deepened awareness of areas for growth expressed in statements such as “self-awareness will be really important”, “[the experience] highlighted the many skills I need to be prepared for it [Level II]”, and “I am even more motivated to improve”. The internal processes that supported an honest self-assessment and the acknowledgement of strengths and challenges was coupled with self-acceptance in 15 instances in which the individual indicated the importance of “learn[ing] from [my] mistakes” and to receive and integrate external input to begin to create a plan for the future. This self-acceptance was expressed as the need and willingness “to figure out my weaknesses so

I can work on those areas now” in preparation for Level II Fieldwork. The ability to understand and reflect on strengths and challenges and to respond to external feedback from others is explored in the following section within the sub-theme *External Feedback and Response*.

External Feedback and Response. Factors such as self-esteem, confidence, and self-acceptance, described some of the components of self-awareness and their impact on perceptions of preparedness expressed by respondents. The next component of self-awareness was derived from students’ self-reflections when given external input or feedback from the environment and from interacting with others. In a self-assessment of strengths (n= 19 in post-experience survey, and n= 3 in debriefing survey), respondents indicated a general perception of competence and confidence in their performance, and a view into “what aspects of being a therapist I am naturally good at”. A greater number of respondents (n= 25 in the post-experience survey, and n= 13 in the debriefing survey) indicated an increased awareness of areas for growth with several students identifying specific skills such as taking vital signs, summarizing results of testing, or “coming up with probing questions”. Statement such as the experience “highlighted areas I need to work on”, and a realization that “[skills] will not come as naturally as anticipated” demonstrated students’ reflection on their performance. Through participation in the experience the students expressed that they became “more aware of things I need to work on” indicating an increased self-awareness following the experiential learning opportunity.

Several students (n= 19) identified feelings of internal struggles associated with the learning experience. Six students identified such emotions as “nervous”, “awkward” and even “disappointed in my performance”. One particular challenge that confronted 13 of these respondents was in the management of feelings of uncertainty. This was expressed as an uncomfortable feeling of “not knowing what to expect” and “a little unsure of what to say or do”.

One respondent demonstrated self-awareness of this challenge in the statement, “I know this [feeling of uncertainty] will be the case [during Fieldwork]...so it was great [to get the experience now]”. The acknowledgement of management of uncertainty as a developing skill demonstrated the more subtle aspects of *in situ* learning as students identified contextual elements that are more challenging to simulate within classroom settings.

In 16 instances, students indicated that external input in the form of feedback from supervising faculty contributed to student’s sense of self-awareness. These students indicated a positive response to feedback and eight additional students specifically identified the qualitative difference when the feedback was received “in the moment”. There were two students and four coded instances in which feedback from supervisors was perceived as negative. These two students identified the interactions as “awkward and not supportive” and the experience as a “trial by fire”. These sentiments were not representative of the majority of expressions (n= 24) that identified the external input of feedback contributed to self-awareness, and was best described in the statement, “this simple note [of feedback in the moment] helped change my perception”. The ability to receive and process information toward increased self-awareness and self-acceptance, contributed to students’ expressed willingness to put concepts and ideas into action toward preparation for Level II Fieldwork.

Self-acceptance and the ability to hear and integrate feedback from others into practice was a powerful concept identified by students. Respondents indicated an understanding of the importance of “accepting and incorporating feedback from others” and the need to “take constructive criticism and truly learn from it”. The ability to receive information and to begin to integrate that information into a new understanding emerged in the next theme identified as *Awareness of Others and Interpersonal Interactions*.

Theme 3: Awareness of Others and Interpersonal Interactions

In the emergence of the next theme, students identified not only an increased sense of self, but also an increased awareness of others. Students spoke of interactions with peers, clients, and supervisors. Table 5 details the descriptors and key words that led to the emergence of the theme *Awareness of Others*. Students outlined the impact of these interactions on their own sense of self, and noted concepts of collaboration and the intricacies of interpersonal communications as the basis for building therapeutic rapport. Students also identified differences of application of skills in context and the need to integrate skills and to adapt to the client and the circumstances.

Table 5

Frequency Table for Coded Data within Awareness of Others Theme

Sub Theme	Theme: Awareness of Others			
	Data Set	Code Number	Descriptor/ Key Word	Code Count
3.1	POST	5a	Learning by Observation of Peer/Other Students	8
3.1	POST	5b	Learning by Observation of Supervisors	1
3.2	POST	6a	Difference of Peer v. Client	35
3.2	POST	7b	Client Needs: Communication Adaptation	8
3.2	POST	8a	Collaboration with Partner/Student – Positive	19
3.2	POST	8b	Collaboration with Partner/Student – Challenging	6
3.2	DEBRIEF	5a	Communication Skills	29
3.2	DEBRIEF	5c	Therapeutic Rapport	8
3.2	SKILL	3	Interpersonal Communication Skills	43
3.3	POST	7a	Adapting to Client's Needs	8
3.3	POST	7c	Balance Client Needs with Job Demands	3
3.3	DEBRIEF	4d	Active Experimentation (AE): Application in Context	9
3.3	DEBRIEF	5b	Adapting to Client's Needs/Abilities	17
3.3	SKILL	2	Integration of Skills and Knowledge	21

Note. Data sets represented include Post-Experience Surveys = POST; Debriefing Surveys= DEBRIEF; and Skills for Preparedness= SKILL

This relationship between self and others expressed by students was illustrated by the emergence of three distinct sub-themes. The first sub-theme was an awareness of others and learning through *Observation*, the second sub-theme was the dynamics of *Interpersonal Communication*, and finally, an awareness of others that required *Adaptation* in the moment to respond to an individual's needs. The three sub-themes are discussed in the following section.

Observation. The data revealed nine student responses that indicated a perceived benefit from observing others. One response indicated the benefit of learning through observation and collaboration with supervisors, and eight of nine respondents remarked on learning that occurred *in situ* through observation and collaboration with partners and peers within the clinical environment. Student comments highlighted the ability to “watch the other stations and learn from more of my peers” as a benefit from learning in context. Several students identified specific factors that helped them gain increased insights such as “we learned from each other” and more specifically, learned by “hearing how they [peers] give instructions and present information”. These comments indicated students’ ability to compare and contrast their approaches and beliefs with those demonstrated by their peers in context.

Interpersonal Communication. The dynamics of interpersonal communication was another important aspect of learning in context identified 37 times by respondents, and an additional 8 times students identified the role of communication in building therapeutic rapport. Additionally, 43 students identified communication as a skill necessary for preparedness for Level II Fieldwork. On 19 occasions, students referred to the benefit of interactions with peers as partners during the experiential learning opportunity. This included collaboration and role negotiation as indicated by statements such as work with partners allowed “increased collaboration of learning and knowledge sharing”. Although six students commented on the

challenges associated with communication and role negotiation, four of the six viewed this as an important skill in preparation for clinical practice and reported an appreciation of experiencing different perspectives. One respondent demonstrated insight into the impact of team collaboration on the patient experience indicating, “we were able to educate our client more than we would have been able to individually”. Such insights that incorporated an appreciation for interpersonal communication and the impact of that collaboration on patient care contributed to students’ expressions of a new perspective and greater depth of understanding of interprofessional teams.

Respondents identified the importance of effective communication and interpersonal interactions when working with the clients in 45 instances. This included 8 instances from the post-survey, 29 from the debriefing survey regarding client-centered communication, and an additional 8 from the debriefing survey dealing with building therapeutic rapport. The importance of communication identified by students was further emphasized as 43 students identified communication as one of three skills most important in preparation for Level II Fieldwork making up 43 of 125 instances of identified skills.

Through the experiential learning opportunity, respondents frequently identified both the importance, as well as the challenges of providing the client with instructions and directions, and with education that was meaningful to the client as seen by 28 instances of the words educate, explain, and/or instruct. One student indicated, “I realized the importance of explaining things in layman's terms...and to make sure the client understood” demonstrating a recognition of two-way communication, and demonstrated students’ expression of a deepened understanding of client-centeredness and an increased awareness of an individual’s impact on others. Additionally, eight respondents indicated the importance of interactions with clients in the development of

therapeutic rapport and the importance of “talking with”, “actively listening” and “engaging with” the community members in a way that students indicated could not be recreated in simulated circumstances with peers. Students identified the significance of working with a “real client” versus a peer in 35 different instances. One facet of the difference of client versus peer was identified within the next emergent sub-theme of *Adaptation* as students recognized some of the situational demands and the need to adapt to meet the needs of the client and the situation.

Adaptation. Through the experiential learning opportunity, respondents indicated an increased awareness of the need to adapt in the moment to clients’ needs and to environmental factors, and to balance clients’ needs with job demands. This theme was represented throughout the coded data and included 25 instances in which respondents indicated adaptation to clients’ needs as a necessary component of occupational therapy practice (8 from post-experience survey and 17 from the debriefing survey). The need to adapt in the moment included insights such as the need to “adapt your technique and your directions to each individual client” representative of students’ recognition of the need to provide both client-centered intervention and client-centered communication.

Nine students identified adaptation as an important skill learned through application and necessary for preparedness for Level II Fieldwork. This raised awareness of the need for adaptation was seen by students in experiences where things did “not always go as planned” requiring the need to adapt to the changes in the environment. One student stated “there is no way to tell what you would do in a real life situation until you live through it”, indicating the benefit of the lived experience and the need to adapt in the moment.

Three students also demonstrated an increased recognition of the need to balance the requirements of the job with the needs of the client with one student describing the challenges of

multi-tasking to administer an assessment and complete all necessary documentation while recognizing the need to "...not ignore the patient". This example reflected an increased awareness of both the application of the skill and an increased connection with the client and their needs. The student's recognition of the differences associated with skill performance when interacting with clients, directly addressed the research sub-questions of perception of skill performance and the additional component of skill performance when interacting with clients.

Learning in Context, increased *Self-Awareness*, and the *Awareness of Others* were themes that emerged through coding of student perceptions of the experiential learning opportunity. These themes addressed the central research question that asked, *What is the graduate occupational therapy students' perceptions of preparedness for intensive Level II Fieldwork following a skill-based experiential learning opportunity?* The identified themes also addressed the sub-questions that delved into *students' perceptions of comfort level with skill performance and when interacting with client-participants*. The relevance and importance of learning in context and the significance of interactions with "real" clients was emphasized in student responses as demonstrated by 90 of 125 instances in which students identified skill preparation that incorporated interactions with clients versus interactions with peers within a classroom setting as necessary in order to prepare for Level II Fieldwork.

One final theme that emerged combined context, self-awareness, and awareness of others toward the emergent theme of *Awareness of Professional Identity*. This theme further contributed to an increased understanding of students' perceptions in alignment with the purpose of this study and in response to the central research question and sub-questions. This theme of *Awareness of Professional Identity* is explored within the next section.

Theme 4: Awareness of Professional Identity

Respondents expressed an increased *Awareness of Professional Identity* in three distinct ways, and identified changes in perceptions of self and in relation to others. Table 6 outlines the descriptors and key words that contributed to the emergence of the final theme of *Awareness of Professional Identity*. Concepts such as sense of self as an occupational therapist, the role of interprofessional collaboration, and the importance of developing and integrating professional behaviors such as organization, time management and leadership illustrated the connection between lived experience and the development of a sense of professional identity. Students also predominantly indicated a level of accountability for learning as seen in 35 instances in which

Table 6

Frequency Table for Coded Data within Professional Identity Theme

Sub Theme	Theme: Professional Identity			
	Data Set	Code Number	Descriptor/ Key Word	Code Count
4.1	DEBRIEF	6a	Envision Self as Professional	10
4.1	DEBRIEF	6b	Interprofessional Collaboration	16
4.2	DEBRIEF	6c	Professional Attributes (Organization, Time Management, Leadership)	16
4.2	SKILL	4	Personal/Professional Attributes as Skill	26
4.3	DEBRIEF	7	Active Role in Growth	41
4.3	DEBRIEF	7a	Self-Initiated Learning	35
4.3	DEBRIEF	7b	External: Learning Provided by Institution	6
4.3	DEBRIEF	7c	Lack of Reflective Practice	1
4.3	DEBRIEF	8a	Self-Initiated: “Review”, “Apply”, “Engage”	19
4.3	DEBRIEF	8b	Learning with Peers: In Class (TOTAL= 14)	14
4.3	DEBRIEF	8c	Learning with Peers/Family Outside of Class	12
4.3	DEBRIEF	8d	Learning with Professionals/Professors	10

Note. Data sets represented include Debriefing Surveys= DEBRIEF; and Skills for Preparedness= SKILL.

students identified self-initiated learning versus only 6 instances in which students identified responsibility for learning as the responsibility of the institution.

Within the final theme of *Awareness of Professional Identity*, three sub-themes emerged. The first sub-theme was the conceptualization of *Professional Roles* and the ability to envision one's self in that role, the second sub-theme was an awareness of *Professional Attributes* reflective of the role of an occupational therapist, and the third sub-theme was *Accountability*. The following section describes the emergent sub-themes toward the development of an *Awareness of Professional Identity*.

Professional Roles. The initial component of awareness of a professional role was seen in respondents descriptions of “articulating the role of OT” to clients, and in “communicating [that role] to others from a different discipline”. Students perceived that the ability to express the relevance and role of the profession to others as contributing to students’ ability to envision themselves in that professional role. Ten students indicated the experience promoted “visualizing myself as the therapist” and deepened the relevance of future classroom activities to “really start to look at my assignments like a clinician”. Students also identified with the role of an occupational therapist as a member of an interdisciplinary team. There were 16 coded incidences in which students identified interprofessional collaboration as an important component of being an occupational therapist realized thorough the experiential learning opportunity. The ability to see one’s self as a therapist and to understand that role as a part of an interprofessional team member revealed students’ perceptions of a transformative learning experience. This transformative view began as students identified with the role of a student in a classroom setting and progressed toward envisioning self in the role of a professional and a contributing member of an interprofessional team.

Professional Attributes. Through exploration of the data, students' perceptions of the role of a professional and the development of a professional identity expanded from a general concept toward more specific definitions of professional attributes. The attributes defined by students included confidence, leadership, responsibility, flexibility, open-mindedness, and organization and time management. In response to the Debriefing Survey Question #2: *Identify (3) skills you feel would help you best prepare for Level II fieldwork*, some of the specific skills identified included professional communication (n= 43), confidence (n= 12), and flexibility (n= 5) as key skills that would contribute to student preparedness. All of these skills represented characteristics of professionalism and demonstrated the students' increased awareness of professional identity through the recognition of important professional attributes.

Accountability. The final component in the emergence of an *Awareness of Professional Identity* was demonstrated by the sub-theme of *Accountability*. In response to the Debriefing Survey Question #3: *What steps will you take to strengthen these skills in the coming semester?* 41 of 42 respondents indicated the need to take an active role in their future development in preparation for Level II Fieldwork, whereas, only 1 of 42 respondents generated a passive response to the question indicating "I don't know". This indicated a level of accountability as a component of a professional identity.

Accountability did vary in students' perceptions of whether the responsibility for personal growth was based on an internal locus of control or an external locus of control. A personal sense of responsibility for learning was a sentiment representative of the majority of respondents (35 of 41) as demonstrated by a multitude of "I" statement such as "I will practice", "plan ahead", "listen intently in class and reflect on the material", and "hold myself accountable". These statements were indicative of students' perception of a personal

responsibility to demonstrate self-initiated learning and accountability. A smaller number of students (n= 6) indicated the responsibility for preparedness for Level II was that of the institution. Statements representing more of an external locus of control were seen in plans to “complete all assignments” and “participate in class and labs”. These statements indicated a willingness to follow prescribed activities, but not to create a plan that supplemented the existing structure.

Whether students perceived an internal or external locus of control, the resources students planned to access to contribute to their continued growth were generally distributed evenly between peers, family members, and professionals. These resources included self (n= 19) as demonstrated by statements such as, “I plan to...” and “I will...”; peers as resources (n= 14); family and friends (n= 12); and professors or other professionals (n= 10). Students’ vested interest in the utilization of a variety of resources and toward action for personal and professional growth contributed to the development and *Awareness of Professional Identity*.

An awareness of professional roles, identification of professional attributes, and the development of professional responsibility and accountability were all components of the students’ expressions of increased *Awareness of Professional Identity* following the experiential learning opportunity. The perceptions that revealed an *Awareness of Professional Identity* as students created plans to prepare for their fieldwork experiences demonstrated alignment with the purpose of this study that explored occupational therapy students’ perceptions of preparedness for Level II Fieldwork following participation in a Pilot OT Level I Fieldwork experience.

Summary of Results

This research study was a formative program evaluation derived from a retrospective review of de-identified program data from a Pilot OT Level I Fieldwork program that occurred in the Fall 2019 semester at one occupational therapy institution identified as OTPX. Analysis of data included results from numeric and narrative responses to pre-experience and post-experience surveys from the Pilot OT Level I Fieldwork program. Quantitative analysis was intended to provide descriptive statistics of demographic information regarding respondents to the surveys, and to illustrate trends in the responses to 20 numeric survey questions within the pre-experience and post-experience surveys. Qualitative analysis through the coding of narrative survey responses was performed for an in-depth exploration into the respondents' perspectives of preparedness for OT Level II Fieldwork following a skill-based, experiential learning opportunity. Through the central research question and two sub-questions quantitative and qualitative analyses were utilized to address the purpose of this study that was to explore occupational therapy students' perceptions of preparedness for Level II Fieldwork following participation in a Pilot OT Level I Fieldwork experience, and a rigorous research process was utilized to provide an in-depth view of students' perspectives.

Demographic data analysis described the respondents to the surveys, which revealed a sample of 44 occupational therapy second-year graduate students in a Master of Science degree program. Students were equally distributed between two programs of study within OTPX, were predominantly (n= 36 of 44) female, and ranged in age from 22 – 40 years with a mode of 22 years that represented nearly 50% of the sample population (n= 21 of 44). Each of the surveys administered pre-experience and post-experience included 20 questions in which students' ranked on an ordinal scale perceptions of comfort level with a variety of skills. Due to the ordinal

nature of the data, non-parametric testing was performed which indicated that responses to individual survey questions appeared in frequency distributions that were not likely due to chance.

While the overall numeric value for post-experience scores for each of the 20 questions were higher when compared to the similar pre-experience questions, further statistical analysis using non-parametric testing was performed to explore the numeric significance. Several non-parametric tests demonstrated a statistical significance of pre-experience responses compared to post-experience responses, and suggested that students' perceived a higher level of comfort working with clients following the learning experience. However, quantitative results were not intended to determine causality (Posavac, 2016), but to describe trends in responses, and then to consider those trends following a continued line of inquiry that explored students' perceptions utilizing qualitative methods.

Qualitative analysis utilized three thorough rounds of coding as recommended by Saldana (2009). Data sets were analyzed retrospectively and included a post-experience survey that occurred within 72 hours of the learning experience, and a debriefing survey that occurred at the end of the Fall 2019 semester. Four overarching themes emerged from the data. These themes of *Learning in Context*, *Self-Awareness*, *Awareness of Others*, and *Awareness of Professional Identity* represented students' perspectives and addressed the central research question and sub-questions.

A majority of students (35 of 44) expressed strong support for the experiential learning opportunity indicating the value of *Learning in Context* with 47.7% identifying it as necessary in preparation for Level II Fieldwork. All of the respondents indicated the skills of the experience to be relevant to that preparation, and students identified working with "real" clients within a

clinical context, and the opportunity to receive feedback in a supportive environment as factors that contributed to their learning.

Analysis of data revealed students indicated increased *Self-Awareness* following the learning experience. Internal processes that students' perceived as contributing to that self-awareness included self-esteem and confidence, and a self-acceptance of imperfect performance with an openness to learn from mistakes. This contributed to students' ability to examine their own performance to assess strengths and weaknesses (60 instances), and identify areas for self-improvement. Students' responses reflected transformative learning that occurred through a combination of self-awareness, self-acceptance, and the integration of external feedback into practice, which contributed to a new understanding of skills and abilities toward preparedness for Level II Fieldwork.

The data revealed students' perceptions were indicative of not only increased self-awareness, but also an increased *Awareness of Others*. This awareness was realized through observation of others and through interpersonal interactions with peers and with client-participants (45 instances). The perceived importance of effective communication with clients, and the connection generated by building therapeutic rapport were apparent within the respondents' statements, and 43 students identified communication as one of three skills necessary for Level II preparation.

The final theme that emerged was an *Awareness of Professional Identity*. Students expressed the ability to envision themselves as occupational therapists, and identified an increased awareness of professional attributes that would best prepare them for Level II Fieldwork. Professional attributes reported with the greatest frequency were communication (n= 43), confidence (n= 12), and flexibility (n= 5). As a component of professional identity,

accountability for one's own learning and preparation for Level II Fieldwork was a dominant theme illustrated by 41 of 42 students identifying a plan to take personal responsibility for their professional growth and development in order to prepare for Level II Fieldwork.

Exploration of the central research question and sub-questions to address the purpose of the study facilitated the emergence of themes that provided insights into occupational therapy graduate students' perceptions of preparedness following an experiential learning opportunity. Chapter Five explores these themes and how they demonstrated alignment with theory as student expressions illustrated "a holistic process of learning from experience that includes experiencing, reflecting, thinking, and acting" (Kolb, 2015, p. 57). Chapter Five considers and discusses the implications of the findings and highlights the alignment of the conceptual framework and purpose of the study to provide insights from students' perceptions of preparedness following an experiential learning experience as input to guide future program development and design. Chapter Five also offers conclusions to address some of the limitations of the study and opportunities for further research.

CHAPTER 5

CONCLUSIONS

Occupational therapy (OT) education programs are designed to prepare students for occupational therapy practice with adherence to rigorous accreditation standards that incorporate classroom and clinical activities that when successfully combined allow students to achieve entry-level competence (ACOTE, 2018a). Occupational therapy accreditation requirements include practical experiences termed Level I and Level II Fieldwork, with Level I Fieldwork integrated within the didactic portion of the program, and Level II Fieldwork as an intensive, mandatory 24 weeks of full-time experience that occurs at the end of the didactic portion of the program (ACOTE, 2018a). This study identified a problem of OT practice in the imbalance of available fieldwork experiences relative to the number of OT students in need of these experiences (AOTA, 2018b). This problem is further exacerbated by the structure of traditional OT Level I Fieldwork experiences that tend to be observational and variable in nature (Barker et al., 2016; Johnson et al., 2006; Roberts et al., 2015). The variable nature of traditional Level I Fieldwork structure may not adequately address the goals of OT educational programs that must be “comparable in rigor” (ACOTE, 2018b, p. 41), and observational experiences may not sufficiently provide learning experiences that build on foundational knowledge and skill development. Finally, this problem of OT practice also affects practicing therapists who expressed concerns about the limited time to devote to students within the demands of the current healthcare environment (Brown et al., 2016; Evenson et al., 2015; Ryan et al., 2018; Varland et al., 2107).

This problem of OT practice prompted Occupational Therapy Program X (OTPX) to develop a pilot program as an alternative to traditional OT Level I Fieldwork. The goals of this

faculty-led learning experience were to increase student preparedness for OT Level II Fieldwork, and to lessen the burden of supervising students on occupational therapists in clinical practice (Brown et al., 2016; Evenson et al., 2015; Ryan et al., 2018; Varland et al., 2017). OTPX developed this pilot program based on a logic model toward outputs that included increased community engagement, expanded models of sustainable clinical fieldwork experiences, improved marketability to prospective students, and the promotion of clinical excellence. The Pilot Program was an experiential learning opportunity of a Fall Prevention Clinic offered to community members, which took place at a physical rehabilitation clinic located on-site at OTPX. Students participated in one orientation meeting that outlined the structure, goals, and expectations of the learning experience, and were provided with access to all assessment and educational materials. The Fall Prevention Clinic experience paired occupational therapy and physical therapy students from the same institution at four stations that required students to perform an intake interview; administer, interpret, and document three fall-risk screenings; and two education stations that provided client-participants education in fall prevention strategies and demonstrations of fall recovery from the floor.

This research study was a formative program evaluation that intended to provide input into future development and design (Patton, 2015) of fieldwork programming at OTPX based on the Pilot OT Level I Fieldwork experience at OTPX. This program evaluation was a formative assessment, as the Pilot Level I experience was only one of several OT Level I Fieldwork experiences within the curriculum at OTPX. The purpose of the research study was to explore occupational therapy students' perceptions of preparedness for OT Level II Fieldwork following participation in a skill-based learning opportunity within a "real-world" context, as an alternative to traditional observational Level I Fieldwork. Program evaluation methodology was identified

as the best approach to “improve or further develop program effectiveness, inform decisions about future programming and/or increase understanding” (Patton, 2015, p. 18). The central research question, *What is the graduate occupational therapy student’s perception of preparedness for intensive Level II Fieldwork following a skill-based experiential learning opportunity?* was in direct alignment with the purpose of this study. The sub-questions added to the line of inquiry building from the central research question by delving into students’ perceptions of skills performed with peers, and those same skills performed with client-participants to deepen the understanding of students’ perceptions of learning in context. The themes that emerged through analysis of the data were derived directly from students’ perspectives in response to the central research question and sub-questions and demonstrated alignment with the conceptual framework of the research study.

Chapter 5 discusses the findings and themes that emerged from the pursuit of the line of inquiry guided by the purpose and research questions of the study. The content includes a review of the central research question and sub-questions that revealed four distinct themes of *Learning in Context, Self-Awareness, Awareness of Others and Interpersonal Interactions*, and an *Awareness of Professional Identity*. Chapter 5 illustrates the alignment of the conceptual framework with the purpose and findings of the study, and considers the relationship of the findings of the study to identified gaps in the literature. Finally, this chapter explores recommendations for action and considers opportunities for further study.

Interpretation of Findings

The intent of a formative program evaluation is to “ask not only what has occurred and what was accomplished, but why” (Patton, 2015, p.179). The details of the findings of this study revealed students’ perception of preparedness following an experiential learning opportunity, and

reflected students' understanding of what factors maximized the learning experience for an increased sense of preparedness in which all students (n= 44) identified the experience as relevant to preparedness for Level II Fieldwork. Interpretation of findings addresses "why" many students perceived the experience as impactful.

Exploration of the central research question and sub-questions through analysis of the quantitative and qualitative data led to the emergence of themes that provided insight into occupational therapy graduate students' perceptions of preparedness following an experiential learning opportunity. The themes demonstrated students' perceptions align with Experiential Learning Theory (Kolb, 2015) as students' expressions illustrated "a holistic process of learning from experience that includes[ed] experiencing, reflecting, thinking, and acting" (p. 57). The findings highlighted alignment with the conceptual framework and purpose of the study, which provided insight from students' perceptions of preparedness following an experiential learning opportunity as input to guide future program development and design (Patton, 2015). Findings for the research question and sub-questions were interpreted and contributed to recommendations for future program design and development, and opportunities for further research.

Central Research Question

The central research question for this study was: *What is the graduate occupational therapy student's perception of preparedness for Level II Fieldwork following a skill-based, experiential learning opportunity?* Exploration of the central research question included consideration of component parts of the question to thoroughly analyze students' perspectives. These components included consideration of the skills incorporated into the learning experience, the context of the experiential learning opportunity, and students' perspectives of the impact of the experience on preparedness for OT Level II Fieldwork. Exploration of students' perceptions

of the skill-based experience revealed that all 44 respondents identified the skill components of the learning experience as relevant to preparedness for Level II Fieldwork. Descriptors of the relevance identified by students included such words as “essential”, “vital”, and “critical” to the learning process in preparation for Level II Fieldwork with some identifying the relevance as important for their individual development, while others indicated the importance for the client, the team, and to demonstrate a level of competency to the supervisor.

Exploration of the component parts of the central research questions led to the emergence of four themes that demonstrated students’ perceptions of preparedness for intensive Level II Fieldwork following a skill-based, experiential learning opportunity. These themes included *Learning in Context*, *Self-Awareness*, *Awareness of Others and Interpersonal Interactions*, and an *Awareness of Professional Identity*. Students’ expressed the importance of *Learning in Context* as they identified the experiential learning opportunity provided within a “real” clinical context (32 instances) and working with “actual clients versus students pretending” (22 instances) contributed to the learning experience. Expressions such as “practice with clients that are not each other cannot be taught, but [only] learned through experience” indicated students’ perceptions of learning within an authentic environment was a key factor. Other contextual components that students perceived as affecting their learning included the ability to observe and collaborate to “learn[ing] to work collaboratively with other professions”, and the ability to receive immediate feedback regarding skill performance. Many students stressed the positive aspects of the application of skills “with the comfort of knowing I was being supervised” indicating students’ perception of the safety of a supervised environment in which they could apply what they had learned in classroom and lab settings within a “real-life” environment

Students' perceptions of preparedness following the experiential opportunity ranged from a noted increased confidence level (n= 21) and confirmation of personal strengths (n= 22) to an increased *Self-Awareness* of areas for growth (38 instances) in preparation for Level II Fieldwork. Kolb (2015) defined learning as "the process whereby knowledge is created through the transformation of experience" (p. 49). Students' awareness of self was one component of the transformative process of learning expressed by students in preparation for Level II Fieldwork. Following the experience, students identified an increased sense of self as they applied their knowledge and skills within context, and recognized the importance of learning within a clinical context (n= 32) with the opportunity for hands-on experiences with "real" clients (n= 22). Students' statements demonstrating the benefit of learning in context and an increased sense of self were reflected in such statements as "[I gained] more insight into skills...", and "[it was] very different actually performing these learned skills". Students' self-awareness also played an important role in students' expressed self-assessments of strengths and areas for improvement, and in 15 instances students identified an increased level of self-acceptance demonstrated by an expressed willingness to "learn from mistakes" as an important component of the learning process toward student preparedness. Students identified self-awareness and self-acceptance as factors that contributed to the development of self-initiated plans to address areas for growth in preparation for Level II Fieldwork as demonstrated by a multitude of "I" statements associated with action verbs such as "I will review", "apply" and "engage". These statements represented students' perceptions of the importance of accountability for professional growth as a component of preparedness for Level II Fieldwork.

Beyond learning about themselves, students' perceptions of the learning experience included an increased *Awareness of Others and Interpersonal Interactions*. This theme emerged

as students identified the benefit of observations (n= 9) and collaboration and interactions with others (n= 19), and differentiated the benefits of learning in context versus a simulated experience in classrooms or laboratories. Students expressed an increased connection with the concept of client-centeredness as they noted the importance of interpersonal communication skills and its role in relationship building in 45 instances. Additionally, 43 students identified communication as a skill necessary for preparedness for fieldwork. Students (n= 25) perceived a greater awareness of the individualized nature of “adapt[ing] your technique and your directions to each individual client” based on each clients’ needs in the moment. Adaptation to the needs of an individual was an area students identified as difficult to simulate in classroom environments working with peers.

The final theme that emerged through students’ expressions was an increased *Awareness of Professional Identity*. Kolb (2015) indicated that experiential learning “literally can change who we are by creating new professional and personal identities” (p. 335). Students demonstrated this transformed sense of professional identity as they indicated the ability to envision themselves in the role of an occupational therapist, and to express the importance of professional attributes such as flexibility, interpersonal skills, and confidence. For most students (35 instances), this increased awareness of professional identity also included increased accountability for one’s own learning. Kolb (2015) identified the significance of the individual learner taking responsibility for learning as “one needs to be in charge of their learning to be in charge of their life” (p. 338). Students demonstrated this accountability through an increased ability to connect didactic coursework with application of skills and knowledge in practice, and the formation of actions plans such as “to listen intently in class and reflect on the material” to address continued growth and development in preparation for Level II Fieldwork.

Research sub-question 1. The question posed by the research sub-question 1 was: *What is the occupational therapy student's perception of comfort level with skill performance when exposed to a learning experience within a clinical context?* Determination of the statistical significance was inconclusive for quantitative analysis of students' rating of pre-experience versus post-experience level of comfort performing skills with a peer; however, qualitative analysis revealed 21 instances in which students' reported increased confidence and comfort level with their skills following the learning experience. This was seen both in students' reported increased awareness of the logistical components of skills, such as the challenge of providing client-centered instructions and demonstration, and in the more subtle challenges such as the attempt to balance the requirements of administration of an assessment while simultaneously managing the client's needs. Following skill performance, students (in 38 instances) indicated increased awareness of areas for improvement, and in most cases (41 of 42) students identified a plan to address continued growth and development of skills. This suggested that although students may not yet have achieved mastery of various skills through participation in the learning experience, students did identify an increased awareness of areas for growth realized through learning in context, and based on this increased awareness, generated a plan to address those areas in preparation for Level II Fieldwork.

Research sub-question 2. The question posed by the research sub-question 2 was: *What is the occupational therapy student's perception of comfort level with skill performance when interacting with client-participants within an experiential learning environment?* Changes from students' pre-experience to post-experience ratings yielded statistical significance for quantitative data analysis for 9 of 10 questions in which students rated an increased comfort level when interacting with client-participants following the learning experience. Qualitative analysis

of coded students' responses further emphasized students' perceived relevance of interacting with "real" clients as an important method toward preparedness for Level II Fieldwork. The student-identified list of skills necessary for OT Level II Fieldwork preparedness demonstrated the raised awareness of the importance of interactions with clients, as seen in 90 of 125 instances in which students identified skills that required interpersonal interactions and adaptation to individuals' needs as necessary for preparedness for a clinical setting.

Students frequently noted skill development as a component of the learning experience. However, most students did not indicate having achieved mastery of skills through the learning experience, but did identify an increased awareness of the complexity of skill performance in context. Students acknowledged the need to have more opportunities (33 students in 44 instances) to practice their skills within context. This desire to intentionally focus efforts on building skills through repeated opportunities in context was consistent with what Kolb (2015) described as:

Deliberate practice involves intense, concentrated, repeated performance that is compared against an ideal or "correct" model of the performance. It requires feedback that compares the actual performance against the ideal to identify errors that are corrected in subsequent performance attempts. (p. 352)

Students differentiated practicing with clients as having a greater impact on their learning than simulated practice with peers, and identified the desire for repeated opportunities to do so. Students indicated that working with "real" clients deepened their understanding of the need to adapt to the client's unique needs and to adjust to the needs of both the client and the situation in a manner that is difficult to replicate with peers.

Connection to Theory

Students' responses following the experiential learning opportunity demonstrated alignment with Experiential Learning Theory [ELT] (Kolb, 2015) as students' expressions illustrated the characteristics or abilities of an effective learner as outlined by Kolb (1984) that included "Concrete Experience abilities (CE), Reflective Observation abilities (RO), Abstract Conceptualization abilities (AC), and Active Experimentation abilities (AE)" (p. 30). These four abilities or phases of the ELT learning cycle (Kolb, 1984) outline the relevance of learning in context, the ability to reflect on one's own beliefs and then to use information in order to develop new ideas and concepts; and finally, to apply those concepts to assess the effectiveness within the context of the lived experience (Kolb, 1984). Analysis of students' responses revealed elements of each of these four phases in the learning cycle. Students expressed positive affirmations for learning within the clinical context in 32 instances. Expressions such as "amazing", "really great experience!", and "critical to our success in the future" demonstrated enthusiasm consistent with the initial phase of ELT of "Concrete Experience" (Kolb, 1984, p. 30). Students demonstrated alignment with the remaining phases of ELT (Kolb, 1984) as they spoke of introspection toward an increased "self-awareness [that] will be really important" and "[the experience] highlighted the many skills I need to be prepared for it [Level II]". Students also indicated a greater connection of self to others as they thoughtfully interacted within the learning environment. Experiential Learning Theory (Kolb, 2015) was based on the premise that "knowledge results from the combination of grasping and transforming experience. Grasping experience refers to the process of taking in information, and transforming experience is how individuals interpret and act on that information" (Kolb, 2015, p. 51). Statements that demonstrated a transformation included "we learned from each other", and in doing so, "help[ed]

the student transition to the [role] of therapist". Students also indicated a professional transformation through the expressed ability to "visualiz[e]ing myself as the therapist". Students indicated a deepened sense of the relevance of future classroom activities indicated by a plan to "really start to look at my assignments like a clinician", and identified the development of individualized, goal-directed plans to achieve preparedness for Level II that included a deepened desire for more opportunities to apply their new perspectives and understandings within context.

Throughout the learning experience, students expressed enthusiasm for a "Concrete Experience" (Kolb, 1984, p. 30) in which to apply their existing beliefs and understandings to new lived experiences. Students indicated they were anxious to "use the skills I have learned throughout my coursework" and "apply what I have learned" within a clinical environment. The application of knowledge and skills in context, facilitated students' expressions that illustrated alignment to the second phase of ELT that Kolb (1984) identified as "Reflective Observation" (p. 30). In this phase, the learner participates in the lived experiences and then "reflects" on the experience, and determines how it relates to previously established beliefs and understandings (Kolb, 1984). Students' statements such as "my perception of preparedness changed...", and the experience "made me realize..." illustrated students' use of reflective practice toward increased self-awareness.

Factors such as self-esteem, confidence, and self-acceptance were also components of self-awareness expressed by students that had an impact on students' perceptions of preparedness for Level II Fieldwork, and demonstrated alignment with theory. Kolb (2015) defined characteristics of learners that include "trusting one's ability to learn from experience, seeking new experiences and challenges, persistence, learning from mistakes, and using other's success as a source of learning" (p. 343). Students identified strengths and areas for growth, and the

importance of knowing it was “okay to make mistakes”. The ability to reflect on, assess, and accept individuals’ strengths and challenges were evident in students’ responses, and demonstrated alignment with the theoretical framework.

Respondents reported learning in context facilitated self-reflection, as well as identified learning that occurred through observation of others’ approaches and perspectives. Respondents considered similarities and differences of others in relation to their own beliefs and actions. Kolb (1984) identified “Abstract Conceptualization” (p. 30) as the phase of the experiential learning cycle in which the learner integrates information into a new understanding. Students’ insights of the relevance of observation and participation in interpersonal communication and collaboration, which led to an appreciation of the impact of these interactions on patient care, contributed to the development of a new perspective. Statement such as “we were able to educate our client more than we would have been able to individually” was one example that demonstrated the depth of that understanding of a new perspective realized through the experiential learning opportunity.

Kolb (1984) identified the fourth phase of Experiential Learning Theory as “Active Experimentation” (p. 30). Adaptation is a key component within this phase of learning as the participants in experiential learning apply new perspectives and understandings, and then assess the effectiveness of their actions and the need for further adaptation (Kolb, 1984). The students who participated in the experiential learning opportunity at OTPX identified adaptation as an important component of the learning experience demonstrating consistency with the theoretical framework. Students perceived the need to adapt to the situation to meet the goals of the experience within the allotted time, and to adapt to the differing opinions and approaches of their assigned partners. In particular, students identified the importance of adapting to the needs of the client. Students noted the need to “adapt your technique and your directions to each individual

client” in order to meet the clients’ demonstrated physical needs during assessments, and the need to adapt the language of their directions and instruction to communicate effectively.

Connection to Literature

Students’ expressed benefits of participation in an experiential learning opportunity that included the application of clinical reasoning and skills in context, and a deepened sense of a professional identity consistent with current literature (Knecht-Sabres, 2013; Kruger et al., 2015; Myers & Schenkman, 2017). Students at OTPX also reported consistency with previous research studies in the expression of increased comfort level and confidence in themselves, as well as during interprofessional interactions (Fink, 2013; Holly, 2014; Tovin et al., 2017).

The alternative approach to traditional OT Level I Fieldwork undertaken by OTPX to incorporate hands-on learning experience within context was consistent with structured experiences suggested within current literature (Bell et al., 2015; Precin et al., 2018; Yu et al., 2017). The program reflected themes found within the literature by incorporating a fieldwork model that addressed the needs of the community through a faculty-led experience while decreasing the burden of student supervision on practicing clinicians (Bell et al., 2015; Precin et al., 2018; Yu et al., 2017). The alternative approach to traditional Level I Fieldwork at OTPX met with strong support from student participants who voiced an appreciation for the hands-on learning opportunity with “real clients” within a “real clinic”, supervised by faculty who provided in the moment feedback to promote student preparedness in the application of skills and knowledge within the context of a clinical environment.

Relevance of Study to Identified Gaps

The review of current literature revealed a limited availability of specific details of the contextual elements of experiential learning opportunities that promoted successful learning in

preparation for Level II Fieldwork (Brown et al., 2016; Roberts et al., 2015; Ryan et al., 2018).

This research study provided details of the learning experience that included such practical aspects as duration and frequency of student participation, structure of experiential learning sessions, supervision models, and the details of surveys utilized within the course associated with the experience. Additionally, the themes that emerged from students' perspectives allowed for contextualization of aspects of the experience that facilitated each of the four phases of learning of Experiential Learning Theory (Kolb, 1984) at differing points throughout the experience.

The details and structure of the learning experience combined with the factors that facilitated demonstration of movement through the four phases of the ELT learning cycle (Kolb, 1984) provided content and clarity to the elements that students perceived to have an impact on preparedness for Level II Fieldwork. Some examples of specific elements were a “friendly and supportive” learning environment, “in-the-moment” feedback, the opportunity to observe others' perspectives and approaches, and the ability to apply skills and knowledge with repeated attempts to continue to build and develop skills and approaches. This finding was consistent with the theoretical framework in which Kolb (2015) discussed “supportive learning relationships and learning spaces are often essential to explore and change a deeply held learning identity and unconscious learning habits” (p.354). Changes in students' personal perspectives and professional identities evidenced within the findings highlighted the relevance of this study and the contribution that addressed identified gaps in the literature.

Limitations of the Study

One limitation of this study was that the study explored perspectives of one group of students in one semester with an experiential learning opportunity that was created as a one-time pilot experience at one specific institution of higher learning. This research design did not allow

the ability to generalize the findings. Additionally, the research design was retrospective, and while *in vivo* coding was intended to bring authenticity to the students' voiced perspectives (Saldana, 2009) it did not allow for "consult[ation with] the participants themselves during analysis" (p. 28) for confirmation of interpretations of themes that emerged through qualitative analysis and coding. This may have revealed why all 44 participants completed the post-experience survey, whereas, only 42 students completed the debriefing survey. Discussion with participants may have been able to uncover whether the omission was circumstantial or intentional, which in the absence of data is impossible to surmise.

Another limitation of the research design was that it was not experimental in nature, therefore, the study design did not incorporate a control group to assess if similar student insights may have been realized over the course of the semester in the absence of the experiential opportunity. Finally, although quantitative results suggested a difference in students' perceived comfort levels with skill performance from pre-experience to post-experience, the five-point scale utilized in the survey tool, may not have provided sufficient sensitivity to allow for an unequivocal identification of statistical significance, especially for those ratings associated with students' comfort level with skills performed with peers. Therefore, the sensitivity of the survey instrument was identified as a limitation of this study.

Recommendations for Action

The frequency and consistency of students' expressed enthusiasm and reported increased awareness of self, others, and of a connection with a sense of professional identity found throughout the data supported the use of skill-based, experiential learning opportunities within the curriculum at OTPX, despite the identified limitations previously outlined. The purpose of this formative program evaluation was to provide input to guide future program development and

improvements (Patton, 2015). Recommendations for action specific to this study are derived directly from the emergent themes from students' perceptions of the beneficial factors of *Learning in Context* and the perceived impact on *Self-Awareness, Awareness of Others and Interpersonal Interactions*, and an *Awareness of Professional Identity*, and are guided by the conceptual framework as well as shaped by the purpose of this study. The recommendations include:

- Create future opportunities for students to engage with “real clients” from the community within authentic environments that do not increase the burden of student supervision on practicing clinicians.
- Provide in-the-moment feedback as students apply their beliefs and understandings to “real-life” circumstances in a manner that promotes students’ reflections and honest self-assessments of strengths and challenges toward self-acceptance and self-improvement.
- Facilitate student participation in opportunities to observe, collaborate, and negotiate roles and responsibilities through experiential learning opportunities; and promote students’ willingness to dwell in the uncertainty that accompanies unscripted interpersonal interactions.
- Promote students’ sense of professional identity through modeling professional communications and interactions, the opportunity to observe others’ approaches, and encourage students to apply their knowledge and skills in the context of a structured learning experience.

All of these recommendations for action are built on the existing structure and design of the Pilot OT Level I Fieldwork Program at OTPX. Additionally, the most prominent recommendation resoundingly voiced by participants and supported by the conceptual framework of this study is a

recommendation for “more” experiential learning opportunities. Experiential Learning Theory (Kolb, 1984) outlined a cyclical learning process in which each experience builds on the previous experience toward a “transformation of experience” (p. 38). Following the Pilot Program at OTPX, seventy-five percent of participants expressed the desire for increased opportunities and exposure to *in situ* learning within the context of a clinical environment. The students’ expressed desire for a greater frequency of experiences was not to reproduce the experience, but to build on the experience in a progressive application of understanding and beliefs. Therefore, the final recommendation for program developers at OTPX is to increase the frequency of experiential learning opportunities that promote students’ insights, awareness, and accountability for their own learning as these experiences weave the threads that connect academic preparation to clinical practice.

Recommendations for Further Study

This study of students’ perceptions of preparedness for occupational therapy fieldwork following a skill-based, experiential learning opportunity brought to light several important themes that addressed some of the gaps in existing literature. However, the study was based on one experiential learning opportunity for one group of students in one semester, which opens the door for future exploration. Recommendations for further research includes the continued exploration of student preparedness for OT Level II Fieldwork that incorporates longitudinal data, and considers the impact of multiple experiences over the course of a semester, and experiences for the same cohort of students across multiple semesters.

Another area of research for further exploration of student preparedness is to gain insight from a variety of perspectives, as this study followed a line of inquiry solely from the perspective of the student. Further research about student preparedness for OT Level II fieldwork would

benefit from the exploration of this topic based on a variety of perspectives including that of the prospective Level II Fieldwork supervisor, and their perceptions of student preparedness at the onset of a Level II experience. There have been studies that explored perspectives of both students and supervisors (Coker, 2010; Knechts-Sabres, 2013; Pai, 2016; Ryan et al., 2018), and one study (Wallingford et al., 2016), in particular, that focused on expectations to achieve entry-level competence following Level II Fieldwork. However, no study identified within the literature review outlined the expectations and skills necessary at the onset of OT Level II Fieldwork versus upon completion of OT Level II Fieldwork. Such a line of inquiry would assist academic programs in a focused effort that promotes skills and abilities toward student preparedness for Level II Fieldwork.

Finally, a review of the literature identified a lack of research that utilized experimental design to evaluate outcome measures (Brown et al., 2016; Roberts et al., 2015; Ryan et al., 2018; Schreiber et al., 2015). An experimental research design was contrary to the conceptual and theoretical framework of this research study as Experiential Learning Theory (Kolb, 1984) emphasizes the individual's experience within the context of lived experience and the "process of learning as opposed to the behavioral outcome" (p. 26). However, to address the identified gap in the literature, future study may benefit from identification of the specific skill sets that achieve objective performance metrics demonstrated through the use of experiential learning toward preparedness for Level II Fieldwork. The development of more objective outcome measures could be of benefit in outlining expectations of performance at the onset of Level II Fieldwork.

Conclusions

The goal of occupational therapy (OT) education is to prepare students for the rigors of current healthcare practice by creating learning opportunities that assist students in the transition

from the classroom to the clinical environment. This formative program evaluation explored OT students' perceptions of preparedness for intensive Level II Fieldwork following a skill-based, experiential learning opportunity. The data was derived from retrospective analysis of de-identified pre-experience and post-experience surveys completed by second-year, Master of Science graduate students (n= 44) at one institution. The line of inquiry outlined by the central research question and two sub-questions revealed students' perspectives that included 100% of students perceived the experience as relevant to preparation for Level II Fieldwork, and 47.7% of students considered the experience a necessary part of that preparation.

The findings aligned with Experiential Learning Theory in which Kolb (2015) defined “a holistic process of learning from experience that included experiencing, reflecting, thinking, and acting” (p. 57). Students noted the value of “experiencing” (p. 57) within authentic environments and identified “it is one thing to practice in your head or with a friend, and another to...” work with “actual clients with real deficits”. Through the learning experience students engaged in “reflecting” (p. 57) on skill performance indicated by “more insight into [my] skills” and a “clear idea of [my] strengths and weaknesses”. Factors that contributed to students' self-assessments included an acknowledgement of the importance of confidence, self-esteem, and a willingness to accept and integrate feedback as necessary in preparation for Level II Fieldwork.

Following the learning experience students indicated a transformation that occurred through “thinking” (Kolb, 2015, p. 57) about their own beliefs and those of others in context, which contributed to the development of new concepts, beliefs, and ideas (Kolb, 2015). Students identified that by “hearing how [other students] gave instructions and presented information” students were able to “learn from each other” and produce results that benefitted the client “more than we would have been able to individually”. Students identified learning in context promoted

collaboration and client-centered communication, which resulted in “acting” (Kolb, 2015, p. 57) on new ideas and strategies to adapt to the needs of the clients and the situation.

Professional identity was another area that students indicated a transformation in the “transition to the [role] of therapist”. Students reported the experience of “visualizing [my]self as the therapist” and identified the importance of possessing professional attributes such as flexibility, organization, and accountability for professional learning and growth. Students identified plans to “listen intently in class and reflect on the material”, and to “hold [my]self accountable” demonstrating the perceived importance of self-directed learning as a professional responsibility. Accountability expressed by students reflected the sentiment by Kolb (2015) who posited “one needs to be in charge of their learning to be in charge of their life” (p. 338). The statement “I want to learn for my future career, and not just to pass a test” indicated students’ expressions supported experiential learning as a method to promote the development of a professional identity (Kolb, 2015).

The goal of this formative program evaluation was to provide input into future program design and development (Patton, 2015) based on an in-depth analysis of students’ perspectives. Students identified clear support for experiential learning as a method that facilitated self-assessment of skills and abilities, and promoted collaboration and the integration of information from a variety of perspectives through the application of skills within a real-life context in preparation for Level II Fieldwork. Students perceived the benefit of experiential learning opportunities within a supervised setting that allowed for supportive and constructive feedback on student performance, and encouraged the exploration of a professional identity. Finally, supported by Experiential Learning Theory (Kolb, 2015) students recognized the need for

repeated opportunities to apply new ideas and concepts in context in order to continue to develop skills and abilities in preparation for intensive OT Level II Fieldwork.

This research study was specific to one institution and one experiential learning opportunity and therefore, the intent was not to generalize the findings. However, issues and challenges of preparing occupational therapy students for Level II Fieldwork within the current healthcare environment are not unique to OTPX. Therefore, results of this study may represent an opportunity for transferability in program development and design of fieldwork experiences within other institutions. Occupational therapy fieldwork programs developing increased experiential learning within their curriculum should consider a structure that offers a supportive learning environment in which students have repeated opportunities to apply skills and knowledge within the context of an authentic environment. Fieldwork program development must also consider the impact of fieldwork design on practicing therapist and attempt to lessen the burden of supervising students on practicing clinicians to address an identified occupational therapy problem of practice. Finally, fieldwork program development allows an opportunity to meet students' needs and create sustainable fieldwork models that also serve the needs of the community. The creation of positive experiential learning opportunities that contribute to OT students' preparation for intensive Level II Fieldwork, do not overburden practicing therapists, and support the needs of the community present a unique opportunity with potential benefits for many stakeholders.

References

- Accreditation Council for Occupational Therapy Education [ACOTE®]. (2018a). *2011 Accreditation Council for Occupational Therapy Education (ACOTE®) standards and interpretive guide: April 2018 interpretive guide version*. Retrieved from AOTA
<https://www.aota.org/~media/Corporate/Files/EducationCareers/Accredit/Standards/2011-Standards-and-Interpretive-Guide.pdf>
- Accreditation Council for Occupational Therapy Education (ACOTE®). (2018b). *2018 Accreditation Council for Occupational Therapy Education (ACOTE®) standards and interpretive guide: Effective July 31, 2020*. Retrieved from AOTA
<https://www.aota.org/~media/Corporate/Files/EducationCareers/Accredit/StandardsReview/2018-ACOTE-Standards-Interpretive-Guide.pdf>
- Accreditation Council for Occupational Therapy Education (ACOTE®). (2018c). *Accreditation Council for Occupational Therapy Education (ACOTE)*. Retrieved from AOTA
<https://www.aota.org/AboutAOTA/Get-Involved/Leadership/Leadership/ACOTE.aspx>
- Agresti, A. & Finlay, B. (2009). *Statistical methods for the social sciences* (4th ed.). Upper Saddle River, NJ: Pearson Preston Hall.
- American Occupational Therapy Association. (2002). *Fieldwork Performance Evaluation for the Occupational Therapy Student* [Measurement Instrument]. Bethesda, MD: AOTA Press.
- American Occupational Therapy Association. (2015, October). *Carnegie Classifications of Accredited and Developing Educational Programs October 2015*. Retrieved from
<https://www.aota.org/~media/Corporate/Files/EducationCareers/Accredit/47682/Carnegie%20Classification%203-2013.pdf>

- American Occupational Therapy Association (2017, February). *Fieldwork (Experiential Learning) Ad Hoc Committee report and recommendations to the AOTA Board of Directors*. Retrieved from <https://www.aota.org/~media/Corporate/Files/EducationCareers/Educators/Fieldwork/AOTA-Fieldwork/Residency-for-OTs-considered-by-AOTA-ad-hoc-committee-report.pdf>
- American Occupational Therapy Association. (2018a). What is occupational therapy? Retrieved June 3, 2018 from <https://www.aota.org/Conference-Events/OTMonth/what-is-OT.aspx>
- American Occupational Therapy Association. (2018b, March). *Academic Program Annual Data Report: Academic Year 2017-2018*. Retrieved July 31, 2019 from <https://www.aota.org/~media/Corporate/Files/EducationCareers/Educators/2017-2018-Annual-Data-Report.pdf>
- American Occupational Therapy Association. (2018c). *About AOTA*. Retrieved June 3, 2018 from <https://www.aota.org/AboutAOTA.aspx>
- American Occupational Therapy Association. (2018d). *Programs and degrees*. Retrieved June 3, 2018 from <https://www.aota.org/Education-Careers/Considering-OT-Career/FAQs/Planning.aspx>
- Barker, D. J., Lencucha, J., & Anderson, R. (2016). Kolb's learning cycle as a framework for early fieldwork learning. *World Federation of Occupational Therapists Bulletin*, 72(1), 28-34. <https://doi.org/10.1080/14473828.2016.1162373>. Retrieved from <https://www.tandfonline.com/doi/abs/10.1080/14473828.2016.1162373>
- Bell, K., Tanner, J., Ruddy, J., Astley-Pepper, M., & Hall, R. (2015). Successful partnerships with third sector organisations to enhance the healthcare student experience: A partnership evaluation. *Nurse Education Today*, 35, 530-534.

- <https://doi.org/10.1016/j.nedt.2014.12.013> . Retrieved from <https://www-sciencedirect-com.une.idm.oclc.org/science/article/pii/S0260691714004080?via%3Dihub>
- Bennett, S., Rodger, S., Fitzgerald, C., & Gibson, L. (2017). Simulation in occupational therapy curricula: A literature review. *Australian Occupational Therapy Journal*, 64(4), 314-327. <https://10.1111/1440-1630.12372>. Retrieved from <https://onlinelibrary-wiley-com.une.idm.oclc.org/doi/abs/10.1111/1440-1630.12372>
- Birdwell, M. A. (2018). A Leader's perspective: Using qualitative methodology for program evaluation in a rural middle school. *Open Journal of Leadership*, 7(1), 19-32. doi:10.4236/ojl.2018.71002. Retrieved from <http://www.scirp.org/journal/paperinformation.aspx?paperid=82821>
- Bloomberg, L. D., & Volpe, M. (2016). *Completing your qualitative dissertations: A road map from beginning to end (3rd ed.)*. Thousand Oaks, CA: Sage Publications, Inc.
- Boardman, G., Lawrence, K., & Polacsek, M. (2019). Undergraduate student nurses' perspectives of an integrated clinical learning model in the mental health environment. *International Journal of Mental Health Nursing*, 28(1), 96-104. <https://doi:10.1111/inm.12496>. Retrieved from <https://onlinelibrary-wiley-com.une.idm.oclc.org/doi/abs/10.1111/inm.12496>
- Brown, T., McKinstry, C. E., & Gustafsson, L. (2016). The need for evidence and new models of practice education to meet the 1000 hour requirement. *Australian Occupational Therapy Journal*, 63(5), 352-356. doi:10.1111/1440-1630.12239. Retrieved from <https://onlinelibrary-wiley-com.une.idm.oclc.org/doi/epdf/10.1111/1440-1630.12239>
- Callahan, J.L. (2014, June 29). Writing literature reviews: A reprise and update. *Human Resource Development Review*. 13(3), 271-275. <https://doi->

- org.une.idm.oclc.org/10.1177/1534484314536705. Retrieved from
<http://journals.sagepub.com.une.idm.oclc.org/doi/10.1177/1534484314536705>
- Chapleau, A., & Harrison, J. (2015). Fieldwork I program evaluation of student learning using goal attainment scaling. *The American Journal of Occupational Therapy, 69 Suppl 2*(Supplement_2), 6912185060p1. doi:10.5014/ajot.2015.018325. Retrieved from <https://ajot.aota.org/article.aspx?articleid=2461655>
- Coghlan, D., & Brannick, T. (2010). *Doing action research in your own organization* (3rd ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Coker, P. (2010). Effects of an experiential learning program on the clinical reasoning and critical thinking skills of occupational therapy students. *Journal of Allied Health, 39*(4), 280-6. Retrieved from <https://une.idm.oclc.org/login?url=https://search-proquest-com.une.idm.oclc.org/docview/874211085?accountid=12756>
- Comer, M. (2016). Rethinking reflection-in-action: What did Schön really mean? *Nurse Education Today, 36*, 4-6. doi:10.1016/j.nedt.2015.08.021. Retrieved from <https://www-sciencedirect-com.une.idm.oclc.org/science/article/pii/S0260691715003457>
- Craig-Duchesne, C., Rochette, A., Scurti, S., Beaulieu, J., & Vachon, B. (2018). Occupational therapy students' experience with using a journal in fieldwork and factors influencing its use. *Reflective Practice, 19*(5), 609-622. doi:10.1080/14623943.2018.1538953. Retrieved from <https://www-tandfonline-com.une.idm.oclc.org/doi/abs/10.1080/14623943.2018.1538953>
- Creswell, J.W. (2015). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (5th ed.). Boston, MA: Pearson.

- Eng, C., & Pai, H. (2015). Determinants of nursing competence of nursing students in Taiwan: The role of self-reflection and insight. *Nurse Education Today*, 35(3), 450-455.
doi:10.1016/j.nedt.2014.11.021
- Evenson, M. E., Roberts, M., Kaldenberg, J., Barnes, M. A., & Ozelie, R. (2015). National survey of fieldwork educators: implications for occupational therapy education. *AJOT: American Journal of Occupational Therapy*, 69(S2). Retrieved from <http://link.galegroup.com.une.idm.oclc.org/apps/doc/A435002422/AONE?u=bidd97564&sid=AONE&xid=40f15795>
- Fink, L. D. (2013). *Creating significant learning experiences: An integrated approach to designing college courses* (2nd ed.). San Francisco: Jossey-Bass.
- Flott, E.A., & Linden, L. (2016). The clinical learning environment in nursing education: A concept analysis. *JAN: Leading Global Nursing Research*, 72(3), 501-513. <https://doi.org.une.idm.oclc.org/10.1111/jan.12861>. Retrieved from <https://onlinelibrary-wiley-com.une.idm.oclc.org/doi/abs/10.1111/jan.12861>
- Giles, A., Carson, N., Breland, H., Coker-Bolt, P. & Bowman, P. (2014). Use of simulated patients and reflective video analysis to assess occupational therapy students' preparedness for fieldwork. *The American Journal of Occupational Therapy*, 68(Suppl. 2), S57–S66. <https://doi:10.5014/ajot.2014.685S03>. Retrieved from <https://ajot.aota.org/article.aspx?articleid=1920224>
- Greenfield, Bruce H, PT,M.A., PhD., Bridges, Patricia H,P.T., EdD., Carter, V., PhD., Barefoot, T., D.P.T., Dobson, A., D.P.T., Eldridge, E., D.P.T., . . . Phillips, Tami, PT, DPT,M.B.A., N.C.S. (2017). Reflective narratives by student physical therapists on their early clinical experiences: An inductive and deductive analysis-the use of a reflective framework.

- Journal of Physical Therapy Education*, 31(4), 49-58.
doi:<http://dx.doi.org.une.idm.oclc.org/10.1097/JTE.0000000000000005>. Retrieved from <https://search-proquest-com.une.idm.oclc.org/docview/2066610823?p-q-origsite=summon>
- Hayes, C., Garfield, I., & Beardmore, P. (2015). Housing a modernisation agenda: ensuring authentic academic learning environments for healthcare assistants. *British Journal of Healthcare Assistants*, 9(2), 84-92. <https://doi.org/10.12968/bjha.2015.9.2.84>. Retrieved from <https://www.magonlinelibrary.com/doi/abs/10.12968/bjha.2015.9.2.84>
- Holly, M. E. (2014). *Experiential learning and student engagement: Meaningful learner outcomes as articulated by Drexel University Sacramento Ed.D. graduates* (Doctoral dissertation). Available from ProQuest Central; ProQuest Dissertations & Theses A&I. (1559118164, Order No. 3628187). Retrieved from <https://une.idm.oclc.org/login?url=https://search-proquest-com.une.idm.oclc.org/docview/1559118164?accountid=12756>
- Imms, C., Chu, E. M. Y., Guinea, S., Sheppard, L., Froude, E., Carter, R., . . . Symmons, M. (2017). Effectiveness and cost-effectiveness of embedded simulation in occupational therapy clinical practice education: Study protocol for a randomised controlled trial. *Trials*, 18(1), 1-16. doi:10.1186/s13063-017-2087-0
- Indiana University Center on Postsecondary Research. (2017). Basic classifications. *The Carnegie classifications of institutions of higher education*. Retrieved from http://carnegieclassifications.iu.edu/classification_descriptions/basic.php
- Jessee, M. A. (2018). Pursuing improvement in clinical reasoning: The integrated clinical education theory. *The Journal of Nursing Education*, 57(1), 7-13. <https://>

- doi:10.3928/01484834-20180102-03. Retrieved from <https://search-proquest-com.une.idm.oclc.org/docview/1991991988?pq-origsite=summon>
- Johnson, C.R., Koenig, K.P., Piersol, C.V., Santalucia, S.E., & Wachter-Schutz, W. (2006). Level I fieldwork today: a study of contexts and perceptions. *American Journal of Occupational Therapy*, 60(3), 275-287. [https://doi: 10.5014/ajot.60.3.275](https://doi:10.5014/ajot.60.3.275). Retrieved from <https://ajot.aota.org/article.aspx?articleid=1870056>
- Kalu, M. E., & Norman, K. E. (2018). Step by step process from logic model to case study method as an approach to educational programme evaluation. *Global Journal of Educational Research*, 17(1), 73. doi:10.4314/gjedr.v17i1.10. Retrieved from <https://search-proquest-com.une.idm.oclc.org/docview/2046093090?OpenUrlRefId=info:xri/sid:summon&accountid=12756>
- Knecht-Sabres, L. (2013). Experiential learning in occupational therapy: Can it enhance readiness for clinical practice? *The Journal of Experiential Education*, 36(1), 22-36. Retrieved from <https://une.idm.oclc.org/login?url=https://search-proquest-com.une.idm.oclc.org/docview/1459731965?accountid=12756>
- Kolb, A. Y., & Kolb, D. A. (2005). Learning styles and learning spaces: Enhancing experiential learning in higher education. *Academy of Management Learning & Education*, 4(2), 193-212. doi:10.5465/AMLE.2005.17268566. Retrieved from https://www-jstor-org.une.idm.oclc.org/stable/40214287?pq-origsite=summon&seq=2#metadata_info_tab_contents
- Kolb, D. A. (1984). The process of experiential learning. *Experiential learning: Experience as the source of learning and development* (pp. 20-38). Englewood Cliffs, NJ: Prentice-Hall.

Retrieved from <https://learningfromexperience.com/research-library/the-process-of-experiential-learning/>

Kolb, D. A. (2015). The process of experiential learning. *Experiential learning: Experience as the source of learning and development* (2nd ed.). Upper Saddle River, NJ: Pearson Education, Inc.

Kotter, J. (2012). *Leading change*. Boston: Harvard Business School Press.

Kruger, J. S., Kruger, D. J., & Suzuki, R. (2015). Assessing the effectiveness of experiential learning in a student-run free clinic. *Pedagogy in Health Promotion*, 1(2), 91-94. doi:10.1177/2373379915575530. Retrieved from <http://journals.sagepub.com.une.idm.oclc.org/doi/abs/10.1177/2373379915575530#article>

Mann, K., Gordon, J., & MacLeod, A. (2009). Reflection and reflective practice in health professions education: A systematic review. *Advances in Health Sciences Education: Theory and Practice*, 14(4), 595-621. doi:10.1007/s10459-007-9090-2. Retrieved from <https://link-springer-com.une.idm.oclc.org/article/10.1007%2Fs10459-007-9090-2>

Mickleborough T. (2015). Intuition in medical practice: A reflection on Donald Schön's reflective practitioner. *Medical Teacher*. 37(10), 889-891. doi: 10.3109/0142159X.2015.1078893. Retrieved from <https://www-tandfonline-com.une.idm.oclc.org/doi/abs/10.3109/0142159X.2015.1078893>

Myers, K., & Schenkman, M. (2017). Utilizing a curriculum development process to design and implement a new integrated clinical education experience. *Journal of Physical Therapy Education*, 31(3), 71-82. <https://10.1097/00001416-201731030-00014>. Retrieved from <https://search-proquest-com.une.idm.oclc.org/docview/2066610297?pq-origsite=summon>

- Nowakowski, K. A., Kaufman, R. R., & Pelletier, D. D. (2014). A clinical service learning program promotes mastery of essential competencies in geriatric physical therapy. *Journal of Physical Therapy Education, 28*(2), 46-53. doi:10.1097/00001416-201401000-00007. Retrieved from http://www.geriatricspt.org/pdfs/JOPTE_SPG14.pdf
- Ozelie, R., Both, C., Fricke, E., & Maddock, C. (2016). High-fidelity simulation in occupational therapy curriculum: Impact on level II fieldwork performance. *The Open Journal of Occupational Therapy, 4*(4) Article 9. <https://doi:10.15453/2168-6408.1242>. Retrieved from <https://scholarworks.wmich.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1242&context=ojot>
- Ozelie, R., Hansen, P., Liguzinski, J., Saylor, A., & Woodcock, E. (2018). Occupational therapy level II fieldwork impact on clinicians: A preliminary time study. *Occupational Therapy in Health Care, 32*:1, 61-71. <https://10.1080/07380577.2017.1421800>. Retrieved from <https://www-tandfonline-com.une.idm.oclc.org/doi/abs/10.1080/07380577.2017.1421800>
- Pai, H. (2016, October). An integrated model for the effects of self-reflection and clinical experiential learning on clinical nursing performance in nursing students: A longitudinal study. *Nurse Education Today, 45*, 156-162. <https://doi:10.1016/j.nedt.2016.07.011>. Retrieved from <https://www-sciencedirect-com.une.idm.oclc.org/science/article/pii/S0260691716301319>
- Patton, M. Q. (2015). *Qualitative research and evaluation methods* (4th ed.). Thousand Oaks, CA: SAGE Publications.
- Posavac, E.J. (2016). *Program evaluation: Methods and case studies* (8th ed.). New York, NY: Routledge.

- Precin, P., Koenig, V.E., Chiariello, E., Masotti, G.K., Diamond, B.N., Lashinsky, D.B., & Tierno, O. (2018). SPOTS: A Model for the Creation of Sustainable, Population-Based, Occupational Therapy Fieldwork Sites. *Occupational Therapy in Health Care*, 32(1), 44-58. <https://10.1080/07380577.2017.1402228>. Retrieved 9/4/2018 from <https://www-tandfonline-com.une.idm.oclc.org/doi/abs/10.1080/07380577.2017.1402228>
- Ravitch, S.M. & Riggan, M. (2017). *Reason & rigor: How conceptual frameworks guide research* (2nd ed.). Thousand Oaks, CA: SAGE Publications.
- Reneker, J. C., Weems, K., & Scaia, V. (2016). Effects of an integrated geriatric group balance class within an entry-level doctorate of physical therapy program on students' perceptions of geriatrics and geriatric education in the United States. *Journal of Educational Evaluation for Health Professions*, 13, 35. doi:10.3352/jeehp.2016.13.35. Retrieved from <https://scholarworks.wmich.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1242&context=ojot>
- Roberts, C., Daly, M., Held, F., & Lyle, D. (2017). Social learning in a longitudinal integrated clinical placement. *Advances in Health Sciences Education*, 22(4), 1011-1029. <https://doi:10.1007/s10459-016-9740-3>. Retrieved from <https://link-springer-com.une.idm.oclc.org/article/10.1007/s10459-016-9740-3>
- Roberts, M. E., Hooper, B. R., Wood, W. H., & King, R. M. (2015). An international systematic mapping review of fieldwork education in occupational therapy/Revue de mappage systématique internationale de la formation clinique en ergothérapie. *The Canadian Journal of Occupational Therapy*, 82(2), 106-118. Retrieved from <https://une.idm.oclc.org/login?url=https://search-proquest-com.une.idm.oclc.org/docview/1674473257?accountid=12756>

- Ryan, K., Beck, M., Ungaretta, L., Rooney, M. Dalomba, E., & Kahanov, L. (2018). Pennsylvania occupational therapy fieldwork educator practices and preferences in clinical education. *The Open Journal of Occupational Therapy*, 6(1), 1-15. <http://dx.doi.org/10.15453/2168-6408.1362>. Retrieved from <https://scholarworks.wmich.edu/ojot/vol6/iss1/12/>
- Saldana, J. (2009). *The coding manual for qualitative researchers*. Thousand Oaks, CA: Sage Publications, Inc.
- Salkind, N. J. (2017). *Statistics for people (who think) they hate statistics*. Thousand Oaks, CA: Sage Publications, Inc.
- Schreiber, J., Moerchen, V.A., Rapport, M.J., Martin, K., Furze, J., Lundeen, H., & Pelletier, E. (2015). Experiential learning with children: an essential component of professional physical therapy education. *Pediatric Physical Therapy*, 27(4), 356–367. [https://doi:10.1097/PEP.0000000000000195](https://doi.org/10.1097/PEP.0000000000000195). Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/26397079>
- Seif, G., Coker-Bolt, P., Kraft, S., Gonsalves, W, Simpson, K, & Johnson, E. (2014). The development of clinical reasoning and interprofessional behaviors: service learning at a student-run free clinic. *Journal of Interprofessional Care*. 28(6), 559 – 564. <https://doi.org.une.idm.oclc.org/10.3109/13561820.2014.921899>. Retrieved from <https://www-tandfonline-com.une.idm.oclc.org/doi/abs/10.3109/13561820.2014.921899>
- Sorensen, J. L., Navne, L. E., Martin, H. M., Ottesen, B., Albrechtsen, C. K., Pedersen, B. W., . . . Van, d. V. (2015). Clarifying the learning experiences of healthcare professionals with in situ and off-site simulation-based medical education: A qualitative study. *BMJ Open*, 5(10). <https://dx.doi.org.une.idm.oclc.org/10.1136/bmjopen-2015-008345>.

Retrieved from <https://search-proquest-com.une.idm.oclc.org/docview/1860803665?pq-origsite=summon>

Smith, E. (2011). Teaching critical reflection. *Teaching in Higher Education*, 16(2), 211-223.

doi:10.1080/13562517.2010.515022. Retrieved from <https://www-tandfonline-com.une.idm.oclc.org/doi/pdf/10.1080/13562517.2010.515022?needAccess=true>

Smith, S.N. & Crocker, A.F. (2017). Experiential learning in physical therapy education.

Advances in Medical education and Practice, 2017(8), 427-433.

<https://doi.org/10.2147/AMEP.S140373>. Retrieved from

<https://www.dovepress.com/experiential-learning-in-physical-therapy-education-peer-reviewed-article-AMEP>

Tovin, M. M., Fernandez-Fernandez, A., & Smith, K. (2017). Pediatric integrated clinical

experiences: Enhancing learning through a series of clinical exposures. *Journal of*

Physical Therapy Education, 31(2), 137. Retrieved from [https://search-proquest-](https://search-proquest-com.une.idm.oclc.org/docview/1915542718?pq-origsite=summon)

[com.une.idm.oclc.org/docview/1915542718?pq-origsite=summon](https://search-proquest-com.une.idm.oclc.org/docview/1915542718?pq-origsite=summon)

United States Department of Health and Human Services: Administration for Children and

Families (2016, May). *Qualitative research methods in program evaluation:*

Considerations for federal staff. Retrieved from

https://www.acf.hhs.gov/sites/default/files/acyf/qualitative_research_methods_in_program_evaluation.pdf

United States Department of Labor, Bureau of Labor Statistics. (2019, June 17). *Occupational*

outlook handbook. Retrieved from [https://www.bls.gov/ooh/healthcare/occupational-](https://www.bls.gov/ooh/healthcare/occupational-therapists.htm)

[therapists.htm](https://www.bls.gov/ooh/healthcare/occupational-therapists.htm)

Varland, J., Cardell, E., Koski, J., & McFadden, M. (2017). Factors influencing

occupational therapists' decision to supervise fieldwork students. *Occupational Therapy in Health Care*, 31(3), 238-254. doi: 10.1080/07380577.2017.1328631.

Retrieved from <https://www-tandfonline-com.une.idm.oclc.org/doi/full/10.1080/07380577.2017.1328631>

Wallingford, M., Knecht-Sabres, L. J., Lee, M. M., & St. Amand, L. E. (2016). OT practitioners' and OT students' perceptions of entry-level competency for occupational therapy practice. *The Open Journal of Occupational Therapy*, 4(4). <https://doi:10.15453/2168-6408.1243>. Retrieved from <https://doaj.org/article/51bbe80c564245c5963310709ec0d409>

Yu, M-L., Brown, T., & Etherington, J. (2017). Students' experiences of attending an innovative occupational therapy professional practice placement in a childcare setting. *Journal of Occupational Therapy, Schools, & Early Intervention*, 11(1). <https://doi-org.une.idm.oclc.org/10.1080/19411243.2017.1408443>. Retrieved from <https://www-tandfonline-com.une.idm.oclc.org/doi/pdf/10.1080/19411243.2017.1408443>

Appendix A

Permission to use student work**Institution PX****Department of Occupational Therapy
and Department of Physical Therapy****Permission to use student work**

1. **Grant of Permission.** I, the undersigned, am enrolled in the Institution PX Occupational Therapy program or DPT program. In the conduct of those courses, I give my permission to use the Work I produce for class in the following ways:
2. **Scope of Permission.** This permission extends to the use of the Work (papers, projects, exams, reflections, electronic forum postings, videos.) for educational and/or academic purposes only. These purposes specifically include: (1) program evaluation and accreditation activities; (2) showing future students examples of the Work in the originally fixed paper or digital medium or as digitally scanned images for use in presentations; (3) providing samples to future students via a course Web site; (4) use as examples in published Works that discuss pedagogical issues related to teaching/pedagogical issues or student learning.

Institution PX Occupational Therapy and/or Physical Therapy faculty members may also display the Work whole or in part to promote the academic and research mission of the Department.
3. **Certification of Authorship.** I am the owner of the copyright to the Work, and the Work is not now subject to any grant or restriction that would prevent its use consistent with this permission. Except as explicitly indicated on the Work, all aspects of the Work are original to me and have not been copied.
4. **Privacy Release.** I hereby authorize and consent to the release, maintenance and display of my name if necessary, and any other personal information I have provided in connection with the Work and its use. This authorization also includes the disclosure of the content of the Work itself and any associated information. I hereby release Institution PX, its member trustees, officers, employees and agents, and any other person who may be legally liable, from any and all claims, demands, causes of action, and suits, including but not limited to claims for invasion of privacy, defamation, breach of contract or other breach of duty (including, e.g., the Family Educational Rights and Privacy Act), arising out of or in connection with the maintenance, use or release of any personal information as described above.

5. **Restrictions:** The restrictions in this agreement cover both the final and any draft, interim or derivative versions of the Work. This agreement may be executed in multiple counterparts, each of which will be deemed an original, and all of which shall constitute but one instrument.

Description of the Work: COURSE: OCTH633: Adults III; or PHTH637: ICE IPE
experience Pre & Post-Experience Surveys and Debriefing Sessions

Student Name (printed): _____

Signature: _____

Date: _____

Appendix B

Student survey examples**PRE-EXPERIENCE SURVEY**

Demographic Data: Please indicate the following:

1. Program of study:
 - a. Occupational Therapy - HSOT
 - b. Occupational Therapy – Entry-Level Master’s
2. Year in Program:
 - a. PY1
 - b. PY2
3. Age: [Free text response]
4. Gender identification: [Free text response]

Skill Self-Assessment Rating Please rate the following questions using the scale provided:

Q#1: I am comfortable performing the following skill with peers in a classroom/lab setting:

- (1) Strongly Disagree (2) Disagree (3) Neither Agree nor Disagree (4) Agree (5) Strongly Agree

SKILL:

1. Maintain a safe environment for participant and therapist
2. Articulate the role and purpose of an activity or assessment
3. Administer an assessment or screening tool
4. Interpret an assessment or screening tool
5. Assist individuals with functional mobility/transfers
6. Assess vital signs
7. Provide education regarding a specific topic
8. Document clinical observations
9. Collaborate with supervisor(s)
10. Collaborate with other professions

Q#2: I would be comfortable performing the following skill with participants within a supervised clinical setting:

- (1) Strongly Disagree (2) Disagree (3) Neither Agree nor Disagree (4) Agree (5) Strongly Agree

SKILL:

1. Maintain a safe environment for participant and therapist
2. Articulate the role and purpose of an activity or assessment
3. Administer an assessment or screening tool

4. Interpret an assessment or screening tool
5. Assist individuals with functional mobility/transfers
6. Assess vital signs
7. Provide education regarding a specific topic
8. Document clinical observations
9. Collaborate with supervisor(s)
10. Collaborate with other professions

POST-EXPERIENCE SURVEY:

Demographic Data: Please indicate the following:

5. **Program of study:**
 - a. Occupational Therapy - HSOT
 - b. Occupational Therapy – Entry-Level Master’s
6. Year in Program:
 - a. PY1
 - b. PY2
7. Age: [Free text response]
8. Gender identification: [Free text response]

Skill Self-Assessment Rating Please rate the following questions using the scale provided:

Q#1: I am comfortable performing the following skill with peers in a classroom/lab setting:

- (2) Strongly Disagree (2) Disagree (3) Neither Agree nor Disagree (4) Agree (5) Strongly Agree

SKILL:

1. Maintain a safe environment for participant and therapist
2. Articulate the role of purpose of an activity or assessment
3. Administer an assessment or screening tool
4. Interpret an assessment or screening tool
5. Assist individuals with functional mobility/transfers
6. Assess vital signs
7. Provide education regarding a specific topic
8. Document clinical observations
9. Collaborate with supervisor(s)
10. Collaborate with other professions

Q#2: I would be comfortable performing the following skill with participants within a supervised clinical setting:

- (2) Strongly Disagree (2) Disagree (3) Neither Agree nor Disagree (4) Agree (5) Strongly Agree

SKILL:

1. Maintain a safe environment for participant and therapist
2. Articulate the role of purpose of an activity or assessment
3. Administer an assessment or screening tool
4. Interpret an assessment or screening tool
5. Assist individuals with functional mobility/transfers
6. Assess vital signs
7. Provide education regarding a specific topic
8. Document clinical observations
9. Collaborate with supervisor(s)
10. Collaborate with other professions

Narrative Response Questions: [Free text responses]

- Do you feel the skills identified above are relevant in preparation for Level II Fieldwork?
Why or why not?
- Do you feel this experience changed your perception of your skills in the areas listed?
Please describe:
- What about this experience did you find most beneficial?
- What about this experience did you find most challenging?
- Please provide suggestions for future Falls Risk Assessment Clinic experiences:
- Other comments: