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Abstract

Few studies have investigated entry-level doctoral capstone outcomes regarding how the experience and project relate to employment opportunities. This descriptive study reports various stakeholders' perspectives regarding the entry-level occupational therapy doctoral (OTD) capstone in relation to employment opportunities and awareness of the profession. Authors disseminated a nationwide survey to doctoral capstone coordinators, entry-level OTD graduates, and capstone site mentors. Ten doctoral capstone coordinators, 68 OTD graduates, and 22 capstone site mentors responded to the survey. Collectively, doctoral capstone coordinators reported that 117 OTD graduates obtained employment in a setting related to the focus of their doctoral capstone and gave examples of graduates employed as entrepreneurs, faculty, program specialists, and supervisors. OTD graduates most often completed their doctoral capstones in community-based settings with projects focusing on program development. Sixty-four percent of the OTD graduates were employed at their doctoral capstone site or at a site similar to where they completed their doctoral capstone. Professional background of capstone site mentors varied, and all mentors who were not occupational therapy professionals reported improved awareness of occupational therapy after mentoring an OTD student. Outcomes of the OTD doctoral capstone are needed to support the efficacy of this experience and project. This study begins to provide such outcomes by reporting findings related to employment and awareness of the profession.

Keywords

Doctoral capstone experience, capstone project, workforce, awareness, employment

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An Exploration of the Occupational Therapy Doctoral Capstone: Perspectives from Capstone Coordinators, Graduates, and Site Mentors

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ABSTRACT

Few studies have investigated entry-level doctoral capstone outcomes regarding how the experience and project relate to employment opportunities. This descriptive study reports various stakeholders' perspectives regarding the entry-level occupational therapy doctoral (OTD) capstone in relation to employment opportunities and awareness of the profession. Authors disseminated a nationwide survey to doctoral capstone coordinators, entry-level OTD graduates, and capstone site mentors. Ten doctoral capstone coordinators, 68 OTD graduates, and 22 capstone site mentors responded to the survey. Collectively, doctoral capstone coordinators reported that 117 OTD graduates obtained employment in a setting related to the focus of their doctoral capstone and gave examples of graduates employed as entrepreneurs, faculty, program specialists, and supervisors. OTD graduates most often completed their doctoral capstones in community-based settings with projects focusing on program development. Sixty-four percent of the OTD graduates were employed at their doctoral capstone site or at a site similar to where they completed their doctoral capstone. Professional background of capstone site mentors varied, and all mentors who were not occupational therapy professionals reported improved awareness of occupational therapy after mentoring an OTD student. Outcomes of the OTD doctoral capstone are needed to support the efficacy of this experience and project. This study begins to provide such outcomes by reporting findings related to employment and awareness of the profession.

Introduction

Although entry-level degree requirements for occupational therapy necessitate either a master's or doctoral degree, the profession has seen a rapidly expanding number of programs at the doctoral level. A component of the entry-level occupational therapy doctorate (OTD) curricula is the doctoral capstone, which includes a capstone experience and project. The purpose of the doctoral capstone is to provide in-depth exposure to one or more areas of focus: clinical practice skills, research, administration, leadership, program and policy development, advocacy, education, or theory development (Accreditation Council for Occupational Therapy Education [ACOTE], 2018). The doctoral capstone experience, previously referred to as a doctoral experiential component, is a 14-week "full-time in-depth exposure in a concentrated area that may include on-site and off-site activities that meet developed goals/objectives of the doctoral capstone" (ACOTE, 2018, p. 47). The capstone project coincides with the experience, providing students with an opportunity to demonstrate synthesis of knowledge gained.

In the occupational therapy literature, few published studies exist that report outcomes of the doctoral capstone or demonstrate the scope and efficacy of projects to provide insight into the implications for employment. In short, it is not well known whether the doctoral capstone is better preparing students to work in clinical and community settings, advocate for or develop programs, or serve in roles that may not traditionally be designed for or marketed to occupational therapists. Therefore, the purpose of this study was to explore the perspectives of various stakeholders (OTD graduates, capstone site mentors, and capstone coordinators) regarding the doctoral capstone in relation to employment opportunities and awareness of the profession.

Background

Occupational Therapy Job Market Trends

Occupational therapy is frequently recognized as one of the top careers within the United States (e.g., U.S. News & World Report, 2021). Scholars predict that the demand for jobs in the profession will continue to increase through 2030 (Lin et al., 2015). Despite these statistics, many people are unaware of the profession and lack knowledge of the scope of occupational therapy practice (Collins & Carr, 2018; Darawsheh, 2018; Rahja & Laver, 2019). Overton et al. (2009) identified that exposure to occupational therapy through role-emerging and project placements created jobs in settings that did not previously provide occupational therapy.

The *2019 AOTA Salary and Workforce Survey* (American Occupational Therapy Association [AOTA], 2020a) identified the most common employment settings for occupational therapists in the United States as hospitals, schools, long-term care/skilled nursing facilities, and free-standing outpatient clinics. The highest occupational therapy degree earned by most of those surveyed (67.7%) was a master's degree, with 9.6% of respondents reporting having a professional doctorate (AOTA, 2020a). Although the

AOTA survey provides information on salary by race/ethnicity, years of experience, state, region, and gender, it does not report any relationship between educational preparation (degree earned) and other factors such as practice setting of employment or salary.

In addition to employment information provided by workforce surveys, there are additional reports of employment rates and starting salaries for new practitioners in the United States. In one report, 70% of new occupational therapists reported they were hired for their first job within three months after graduation, but there is no information available about job acquisition differences between those with master's versus doctoral degrees (AOTA, 2020a). Additionally, 76% of OTD programs reported an average starting salary of \$60,001 - \$80,000 for their new graduates (compared to 63% of master's programs) and 19% of OTD programs reported an average starting salary of \$80,001 - \$100,000 (compared to 3% of master's programs; AOTA, 2020b). These reports suggest that OTD graduates are successfully securing jobs after graduation, and some may receive higher salaries than graduates with a master's degree. However, there is a need for more research regarding employment opportunities, specifically for OTD graduates.

Outcomes of the Occupational Therapy Doctorate

Because there previously were few occupational therapy programs at the entry-level OTD level, limited outcomes are published reporting the scope, efficacy, and impact of doctoral capstones. Some evidence highlights overall outcomes for graduates from OTD programs related to confidence with skills, job opportunities, and opportunities for scholarship and leadership (Mu & Coppard, 2007; Smallfield et al., 2019). Graduates from one entry-level OTD program reported confidence in demonstrating various professional behaviors and clinical reasoning skills as well as positive employment status after graduation (Mu & Coppard, 2007). Another study compared outcomes of graduates from one university's OTD and master's programs. Findings suggest the OTD graduates were significantly more likely than the master's level graduates to be educators (versus clinicians), utilize evidence-based practice, conduct research, own their own business, and be involved in professional activities such as presenting, publishing, or volunteering for professional organizations (Smallfield et al., 2019). Although these results are promising, these studies focus on a single program, limiting the generalizability of outcomes of entry-level OTD programs on a larger scale.

Outcomes of Capstones

In education, a capstone is a culminating project that is considered a 'crowning achievement' (Merriam-Webster, n.d.) of a student's program of study. The doctoral capstone embodies experiential learning in which the student learns by doing and through observation and reflection (Knowles et al., 2015). Students apply knowledge through active involvement in hands-on activities. In doing so, students can conceptualize theoretical models of practice through application to real life situations. Often the project is focused on training in the student's area of study and requires a

series of planning and preparation, beginning with the investigation of a topic and progressing to the development of ideas and objectives. The student then carries out a project, is evaluated on their work, and in most cases, publicly presents their findings (Deluliis & Bednarski, 2020).

There is limited evidence of common outcomes of doctoral capstones within various healthcare professions, as indicated by a recent scoping review (Krusen et al., 2020). Only a few studies have explored outcomes specific to occupational therapy capstones. One study found that entry-level OTD students experienced a significant increase in self-perceived leadership practices after participating in a capstone experience (Recigno et al., 2020). Salls et al. (2012) found that their graduates were confident in using evidence-based practice and increased their leadership and scholarship skills. Enriched relationships within the community were also reported (Copolillo et al., 2010; Jirikowic et al., 2015; Zajac, 2017). However, some of this evidence relates capstones completed within post-professional doctoral or master's programs, or the generalizability of the information is limited because it focuses on only one student's experience and project. More research is needed to explore outcomes that are specific to entry-level OTD capstones. This research may help doctoral capstone coordinators to plan doctoral capstones that best prepare their students for entering the workforce.

Purpose of Study

Because of the limited available research regarding occupational therapy doctoral capstone outcomes, this study explored the perspectives of various stakeholders regarding the occupational therapy doctoral capstone in relation to employment opportunities and awareness of the profession. The authors collected information from doctoral capstone coordinators, OTD graduates, and capstone site mentors to describe employment opportunities and status, the settings in which students carried out their capstones, areas of focus of doctoral capstones, and awareness of occupational therapy among individuals at the capstone site.

Methods

This study consisted of a cross-sectional descriptive design using a nationwide survey (Kielhofner, 2006). The authors utilized this design to gather information from multiple stakeholders and reach the most potential participants. Institutional Review Board (IRB) approval was received (Protocol number: HSC20200134E) before survey dissemination.

Participants

Potential participants were eligible to participate if they fit into one of three roles: (a) a doctoral capstone coordinator for an accredited entry-level OTD program that had at least one cohort of students graduate from their program at the time of survey dissemination, (b) an entry-level OTD graduate who had graduated from an accredited entry-level OTD program and completed a doctoral capstone, or (c) a capstone site mentor who had mentored at least one entry-level OTD student during their doctoral capstone.

The authors publicly accessed the email addresses for the doctoral capstone coordinators at the 35 fully accredited OTD programs at the time of the study. They sent a recruitment message with a link to the survey and asked the doctoral capstone coordinators to forward the recruitment email with the survey link to their OTD graduates and previous capstone site mentors. The authors sent two reminder messages to the doctoral capstone coordinators before the survey closed.

Instrument

Two of the authors designed the survey based on a thorough review of the literature and their knowledge of the doctoral capstone as doctoral capstone coordinators. The survey consisted of three separate categories of questions, which participants answered based upon their self-identified role. Survey questions for doctoral capstone coordinators focused on the following: 1) number of graduates from their program, 2) employment opportunities for their graduates in settings related to capstones, and 3) positions that were created as a direct result of a capstone of which they were aware. Survey questions for OTD graduates asked about the types of settings and projects for doctoral capstones as well as previous and current employment opportunities. Survey questions for capstone site mentors asked about the role of the mentor at the capstone site, information about the influence of the doctoral capstone on the opportunity to learn about and increase awareness of occupational therapy for themselves, staff members, and clients/consumers at their site, their experiences of the doctoral capstone, and other involvement with occupational therapy practitioners following the doctoral capstone.

To increase face validity and ensure clarity of item meaning, two additional doctoral capstone coordinators serving as co-chairs of a national ad-hoc committee for capstone coordinators reviewed the survey. The authors edited the survey based on their feedback before disseminating the survey using the survey platform Qualtrics. The first page of the survey included an electronic statement of informed consent, which gave information regarding the contact information of the researchers, IRB approval, the purpose of the study, approximate time required to complete the survey, risks/benefits, and definitions of the eligible participant groups. The survey was open for eight weeks between August and October 2020.

Data Analysis

The authors analyzed quantitative results using descriptive statistics in Microsoft Excel to calculate averages, means, and percentages (Kielhofner, 2006). Comments gathered from open-ended responses were analyzed using content analysis (Saldana, 2016). Due to the limited amount of qualitative data, the authors grouped data into categories and did not establish themes. Using this approach, the authors began by completing an initial review of responses. During a second review, the authors independently developed categories to group similar responses to a single question. Next, all authors came together to review and compare their findings. The authors reached a consensus on final categories through discussion. Interrater review of findings reduced bias during qualitative data analysis.

Results

The authors organized survey responses based upon the three targeted participant groups. There were 10 responses from doctoral capstone coordinators, 68 from OTD graduates, and 22 from capstone site mentors. Because each survey item was optional, the authors included the results for each answered item. If a participant opened the survey but did not respond to any items, their survey did not count towards the total number of responses.

Doctoral Capstone Coordinators

Ten doctoral capstone coordinators completed the survey. They collectively reported 32 graduated cohorts of OTD students, which represented 996 total students. Doctoral capstone coordinators reported their graduates completed doctoral capstone experiences in both traditional and non-traditional settings. Seven doctoral capstone coordinators reported that, collectively, 117 OTD graduates had obtained employment in a setting that was related to their doctoral capstones. Five coordinators reported awareness of positions created as a direct result of the doctoral capstone, which impacted 31 graduates. Table 1 provides examples of these created positions. Doctoral capstone coordinators also reported other outcomes, including students becoming involved in advocacy, students serving in roles not initially advertised for an occupational therapist (e.g., case manager), and students becoming entrepreneurs after graduation.

Table 1

Jobs Created as a Result of a Doctoral Capstone

Developed Positions

Adjunct Instructor

Case Manager

Community Dog Agility Program

Day Program Serving Clients with Dementia

Director

Home Modification / Ergonomic Consultant

Member of Pain Clinic

Pediatric Mental Health Practitioner

Therapist in Outpatient Tai Chi Program

Researcher

Capstone Site Mentors

Twenty-two capstone site mentors completed the survey. Site mentors represented professionals from four states (CA, IL, IN, TX) who had served as the site mentor for an OTD student who completed their doctoral capstones between 2018-2020. Of those that responded to the site mentor survey, 10 reported being occupational therapy professionals. The remaining mentors included managers/directors, physical therapists, and a speech-language pathologist working in a variety of settings (see Table 2). Ninety-five percent of capstone site mentors were satisfied with their experiences serving as site mentors, and 67% indicated they would mentor another OTD student if given the opportunity.

Table 2

Overview of Capstone Site Mentors by Employment Setting

Setting	Number of Mentors (N=25)
Academic Institution	1
Community	11
School / Early Intervention	2
Outpatient or Inpatient Therapy	10
Other	1

The authors wanted to know if serving as a capstone site mentor altered the mentors' perceptions of occupational therapy, if at all. Two questions asked about knowledge and awareness of occupational therapy. When asked if serving as a capstone site mentor improved their awareness of occupational therapy, 100% of the mentors that were not occupational therapy professionals agreed that it had enhanced their awareness. Sixty-seven percent of respondents agreed that serving as a capstone site mentor increased their knowledge of how occupational therapy could serve a role within their organization.

The authors inquired about the awareness and knowledge of occupational therapy among the sites' employees and consumers of services following the doctoral capstone. Collectively, the capstone site mentors reported that 422 (37%) employees at their sites and 525 (22%) clients/consumers had the opportunity to learn about occupational therapy as a result of having an OTD student on-site.

After serving as a capstone site mentor, seven respondents reported they had consulted with an occupational therapy professional regarding business expansion, additional projects, fall prevention programming, equipment modifications, or treatment recommendations in the Neonatal Intensive Care Unit (NICU). Results of the consultation included expansion of occupational therapy services at the site, plans to develop services, and the reinforcement of the relationship between the site and the OT

school. Regarding job development and funding, one site mentor reported their site developed one full-time position, focusing on direct service provision, advocacy, marketing, and business development, as a result of having the OTD student. While other site mentors reported interest in hiring an occupational therapist in the future, they reported lack of funding as a barrier to this process. Two site mentors reported applying for grant funding to support future positions for occupational therapists.

Outcomes for the site as a result of the doctoral capstone varied. Many capstone site mentors described that having an OTD student within their organization resulted in development of materials to promote screenings, quality of services, increased telehealth services, marketing materials, website design, and staff and client wellness. They also described piloting new program services to enhance awareness of occupational therapy among family members and adding content in the area of mental health. Only one mentor reported an experience that did not go as planned, stating, “We learned, the hard way, that it does not work to have an OTD [student] provide supportive services to the staff of the organization itself. Seemed like it would work and help and be supportive. It created, or maybe just exacerbated, internal division and conflict.” However, despite the doctoral capstone not going as planned, this participant indicated an interest in hiring an occupational therapist and working with future OTD students.

Doctor of Occupational Therapy Graduates

Sixty-eight graduates of entry-level OTD programs who had completed a doctoral capstone responded to the survey. Graduates represented six states from all regions of the U.S. (CA, IL, IN, IA, SD, VA). While they attended an OTD program in these states, many (39.7%, $n=27$) completed their doctoral capstone in a different state. In total, students carried out their doctoral capstone in 24 states, and had graduated between 2017 and 2020 (2017, $n=2$; 2018, $n=11$; 2019, $n=13$; 2020, $n=42$).

Authors asked graduates about the type of setting in which they completed their doctoral capstone and coded these into like settings (see Table 3). Graduates who responded with more than one site were included in two categories. Examples of practice settings included aquatics, hippotherapy, maternal health, and the NICU. Graduates who worked in the community or non-traditional settings reported experiences with accessible agriculture organizations, mental health sites, day programs, retirement communities, organizations serving veterans, a gymnastics facility, juvenile detention home, non-profit organizations, and a human trafficking organization. We organized responses regarding the primary focus area of the doctoral capstone into the categories identified in the ACOTE standards (2018; see Table 4).

Table 3*Settings OTD Graduates Reported Completing Capstone Experiences*

Setting	Number of Graduates (N=61)
Academia	2
Community / Non-Traditional	17
Home Health or Hospice	2
In-patient Hospital	13
Long-term Care, Skilled Nursing, or Memory Care	5
Mental Health Setting	4
Outpatient Clinic	11
Research Institution (Not Academia)	2
School or Early Intervention	6
Vocational Rehab	3
Other Healthcare Setting	2

Table 4*Primary Focus Area for Capstone Experiences Reported by OTD Graduates*

Primary Focus	Number of Graduates (N=61)
Administration	2
Advocacy	14
Clinical Practice Skills	27
Education	17
Leadership	18
Program and Policy Development	40
Research Skills	18
Theory Development	0

In addition to inquiring about types of settings, authors asked graduates who served as their capstone site mentor and provided them with the options of an occupational therapist, an occupational therapy assistant, or another professional. While 35 graduates reported that an occupational therapist mentored them, none indicated having an occupational therapy assistant as a mentor. For graduates who selected 'other,' the professionals listed included: applied behavior analysis therapist (1), social worker or case manager (7), counselor (1), PhD (2), program coordinator (9), administrator (1), physical therapist (3), speech-language pathologist (1), and the facility owner (1).

A series of seven questions asked graduates to report information related to their employment status. Of the 60 graduates who reported current employment, 40 (67%) worked in the state in which they had carried out their doctoral capstone. Respondents reported holding a total of 84 positions since graduation. Most of these 84 jobs (91%) were within a traditional setting (i.e., a setting which frequently employs occupational therapists), and the remaining eight jobs were non-traditional (i.e., a site that does not routinely employ occupational therapy practitioners). Examples of these jobs were a business owner, case tracker, rehabilitation technician, program specialist, research faculty, school support staff, and supervisor.

Ten graduates reported employment in a setting where they conducted their doctoral capstone. Of these, four jobs already existed and six were newly created positions (three of which were directly related to the graduate's doctoral capstone). Twenty-eight graduates reported working with the same population, or in a similar setting, as was the focus of their doctoral capstone. Only 14 graduates reported not having ever applied for a position that was in a similar setting or with a similar population as was the focus of their doctoral capstone. Regarding promotion or additional responsibilities offered as a result of experience gained during their capstone, four respondents reported receiving a higher starting salary, being required to conduct research, or receiving a promotion.

The authors also asked graduate participants to describe how the doctoral capstone had impacted current or former employment. Thirty-two respondents (of the 58 that completed this item) agreed it had impacted their employment. Authors categorized these responses to describe what impact the respondent felt the doctoral capstone had on their employment by initially reading through each response to get a sense of the meaning of the narrative. Responses were then grouped by those which were similar. Although the authors asked the graduates to report any way in which they felt their doctoral capstone had impacted their employment, all the responses projected positive experiences. The final categories related to specific skills the graduates indicated as being influential in their employment. The authors sorted these into the following categories: program development, clinical, employment, communication, and academic.

Graduates who discussed program development shared how their knowledge in this area provided experiences "that my current employer found valuable and useful to their business." Graduates provided specific types of programs and often related programs to an area of advanced clinical practice. Graduates who mentioned clinical skills reported

more confidence in a given area of in-depth practice. A graduate that had completed their doctoral capstone in a NICU stated, “I am working in a specialty practice setting that requires beyond entry-level knowledge. They [the employer] saw my NICU experience and that I held a full caseload, and that led them to believe that I would be successful in this position.” For employment skills, graduates described skills that supported self-employment, interviewing, and the hiring process. One graduate stated, “skills learned during the DEC [doctoral experiential capstone] have carried over into pediatric practice.” Other responses indicated that graduates viewed the doctoral capstone as a “tool” in the hiring process and as a means of expanding opportunities: “It got me in the door for an interview.” Communication skills related primarily to increased comfort and experience in communicating with the public, including recipients of services and their families as well as program attendees. Responses under the academic category included enhanced abilities related to research, publication, and teaching. See Table 5 for additional exemplars by category.

Table 5

Ways Graduates Reported the Doctoral Capstone Impacted Current or Previous Employment

Category	Exemplars
Academic	“I have continued to build on the research project started during my [doctoral capstone experience] and am working to publish an article.”
Clinical Skills	<p>“[I have a] better understanding of [the] practice area.”</p> <p>“My capstone experience provided me the opportunity as a new graduate to specialize in children with a mental health diagnosis, specifically in feeding.”</p>
Communication	“Helped me to understand and develop skills in communication with family members.”
Employment	<p>“Completing my capstone project at my site helped with me being hired at my current job.”</p> <p>“When [I applied] for my position, the hiring OT managers were impressed by my capstone experience and asked if I could do something similar at their clinic in the future. I believe it helped me get hired for my current employment.”</p>

Program Development “The employer I am currently working for emphasizes parent education and even conducts parent trainings/groups to educate them about OT services. I believe that my capstone experience, which involved creating an educational program for parents, gave me experience that my current employer found valuable and useful to their business.”

“I believe it benefited me during the hiring process as I have plans with the company to help develop and grow a women's health program. “

Discussion

The discourse regarding the transition to an entry-level doctorate requirement in the occupational therapy profession has been ongoing. Kemp et al. (2020) called for research examining the impact of the doctoral capstone on developing new professional practice opportunities and long-term outcomes for graduates of OTD programs. Our study begins to answer those questions as the results provide an increased understanding of the doctoral capstone regarding job opportunities and awareness of occupational therapy. As the number of OTD programs has grown and continues to rise, this study was necessary to begin providing outcomes of the doctoral capstone.

In this study, OTD graduates were infrequently employed in non-traditional settings (community-based or settings that do not traditionally employ occupational therapists). While this aligns with the most recent workforce survey (AOTA, 2020a), there is a focus within the profession to expand beyond the current primarily medical model of service delivery to be more responsive to communities and to influence the health of populations (AOTA, 2018). Community-based settings were the most common location for carrying out the doctoral capstone among participants in this study. We see this as an encouraging sign that the doctoral capstone is preparing graduates to meet the diverse needs of communities and populations.

It is promising that six jobs were newly created positions and that three of these were the direct result of the doctoral capstone. OTD graduates filled eight positions not advertised as requiring an occupational therapy degree. This is a positive sign that OTD graduates are utilizing their occupational therapy skills in innovative settings. Jobs in non-traditional settings impact the profession's perception by increasing exposure in new arenas where occupational therapists are not present. This study also found that OTD graduates gained employment as entrepreneurs, faculty, program specialists, and supervisors. Participants also described how the skills gained from their doctoral capstone provided opportunities for future experiences and opportunities that may not have otherwise been a possibility. These findings align with the ACOTE Accreditation Standards, which require the capstone experience to include in-depth exposure in one or more areas. Although these standards include clinical practice skills, they also emphasize exposure to research, administration, leadership, program and policy development, advocacy, education, and theory development (ACOTE, 2018).

The authors also explored how the doctoral capstone is contributing to the awareness of the profession. While some studies describe increased involvement with the community as a result of capstones (Copolillo et al., 2010; Jirikowic et al., 2015; Zajac, 2017), others suggest that the OTD degree does not necessarily result in enhanced recognition of the profession (Smith, 2007). However, if the professional OTD degree aims to improve interprofessional collaboration (Case-Smith et al., 2014), other professionals must be aware of the value and scope of occupational therapy. Our study found that the completion of a doctoral capstone in collaboration with a community site provided an important opportunity for others to better understand the profession of occupational therapy. One hundred percent of capstone site mentors who were not occupational therapy professionals reported an increase in awareness about occupational therapy, and all capstone site mentors reported their staff and consumers (i.e., clients, patients, etc.) had the opportunity to learn about occupational therapy. Capstone site mentors reported continued consultation and collaboration with occupational therapy professionals after doctoral capstone completion, which yielded additional opportunities for occupational therapy to demonstrate its value through projects and programming, treatment recommendations, and expansion of services at the doctoral capstone site. While the sample size was small, findings suggest that increased knowledge and awareness of the occupational therapy profession resulted from the doctoral capstone.

Another benefit of increased awareness of the occupational therapy profession is the development of job opportunities. While all capstone site mentors surveyed reported interest in hiring an occupational therapist in the future as a result of the doctoral capstone, one capstone site mentor had developed a new full-time occupational therapy position. In addition, two capstone site mentors had applied for grant funding to support future positions for occupational therapists at the time of the survey. These findings suggest that the doctoral capstone is beginning to establish opportunities for occupational therapists to work in settings where there has previously not been occupational therapy presence. We found that the setting for the doctoral capstone often relates to future employment for the OTD graduate, as evidenced by 10 graduates reporting employment at their actual doctoral capstone site and 57% of all other OTD graduates reporting employment within a setting or population similar to that of their doctoral capstone site. Thus, the doctoral capstone provides students with advanced experience and skills (ACOTE, 2018), allowing them to competently work in a variety of settings, which is a central construct of the professional doctorate (Case-Smith et al., 2014). Students that completed their doctoral capstone in research or academia may be more equipped to serve as faculty members, helping to address the shortage currently observed, and expected to increase, among occupational therapy faculty (Falzarano & Zipp, 2012).

Interestingly, the one capstone site mentor who reported a negative experience with the doctoral capstone completed at their site still stated that they would hire an occupational therapist in the future. This suggests that the capstone site mentor related the negative experience to the specific capstone not achieving its intended benefit with participants

instead of a lack of satisfaction with the OTD student or the intent of the doctoral capstone itself. Overall, findings indicate that increased knowledge and awareness of occupational therapy has the potential to result in new job opportunities at doctoral capstone sites or future collaboration with occupational therapy professionals.

Strengths and Limitations

There were some limitations to this study. First, the authors disseminated the survey in the fall of 2020 during the COVID-19 pandemic, which may account for the low response rate from doctoral capstone coordinators. Due to snowball sampling, it is unknown how many individuals received the recruitment email. We recognize not gathering perspectives directly from the consumers at the doctoral capstone sites as a limitation. While survey items asked capstone site mentors to consider the impact of the doctoral capstone on their consumers, responses provided were subjective. A strength of this research is that we included outcomes of the doctoral capstone from three different perspectives: doctoral capstone coordinators, capstone site mentors, and entry-level OTD graduates. The research design allowed for data collection from a wide variety of stakeholders, and results included diversity in participants' geographic locations, which increases the application of our findings.

Implications for Occupational Therapy Education

This study is one of few published articles in the occupational therapy literature to describe outcomes of the doctoral capstone, specifically related to employment opportunities and awareness of the profession. Our findings begin a dialogue to inform future trends in occupational therapy education and practice. Occupational therapy educators, especially doctoral capstone coordinators, can use information from this study when recruiting potential capstone site mentors. Increased awareness of the doctoral capstone can influence occupational therapists and those outside of the profession to mentor OTD students, expanding opportunities for doctoral capstones into a wider variety of settings, thereby advancing experiential education. Occupational therapy education, specific to the doctoral capstone, can be used to prioritize the development of partnerships within non-traditional areas in order to prepare students to complete doctoral capstones in a variety of settings. This will allow students to acquire a wide range of skills, in addition to those required for clinical practice. Findings from this study suggest that doing so may expand occupational therapy's reach and prepare students to obtain jobs outside of direct patient care and in settings that are considered non-traditional.

Occupational therapy educators could collect additional outcomes of the doctoral capstone to better understand the relationship between the doctoral capstone and graduates' practice settings, salary, professional roles, and skills required for employment. It would be advantageous to explore associations between the doctoral capstone focus area and employment opportunities for OTD graduates. In addition to research about the outcomes of the doctoral capstone for OTD graduates, occupational

therapy educators could also further examine outcomes for the capstone sites and their stakeholders. Having more information about the benefits of doctoral capstones for organizations, staff, or clients would help in articulating the value of occupational therapy in a variety of settings.

Conclusion

Occupational therapy education is experiencing an increase in entry-level OTD programs. A part of OTD preparation is the completion of a doctoral capstone. This study laid the groundwork for future research by exploring the perspectives of various stakeholders regarding the doctoral capstone in relation to employment opportunities and awareness of the occupational therapy profession. This is an important investigation as we move forward with OTD preparation. New and established occupational therapy programs can use this research to demonstrate the role of occupational therapy in job development and innovative areas of practice as a result of skills acquired through the doctoral capstone process.

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