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Abstract

The introduction of the occupational therapy doctoral (OTD) program to the field of occupational therapy (OT) education was intended to advance the field by developing future leaders, increasing advanced practice, and promoting scholarship in practice. Limited information to date is available regarding outcomes of the OTD program related to the future research potential of graduates. One such approach to promoting the scholarship of practice among OTD graduates is the use of the practice-scholar model. The practice-scholar model is designed to build research skills among OTD students to encourage their ongoing commitment to evidence-based practice through implementing their own research in practice. Founded in 2014, the Northern Arizona University (NAU) entry-level OTD program has implemented the practice-scholar model through their practice-scholar apprenticeship (PSA) program. The NAU PSA program involves a mentorship experience with OTD students engaging in faculty and/or community clinician led research. The purpose of this paper is to share evaluation results of the NAU PSA program related to the research development among the program's graduates. NAU OTD students completed pre and post surveys regarding their expectations towards research and a post qualitative feedback session. Students reported statistically significant improvements in their research self-efficacy skills. Qualitatively students identified their developed research skills, the importance of research and their desire to continue implementing research in the future. The field of OT should continue to identify structural ways to support research in practice to realize the potential of future OTD practitioners.

Keywords

Practice-scholar, research, occupational therapy doctorate

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Outcomes from an Entry-level Occupational Therapy Doctoral Practice-Scholar Apprenticeship Program

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ABSTRACT

The introduction of the occupational therapy doctoral (OTD) program to the field of occupational therapy (OT) education was intended to advance the field by developing future leaders, increasing advanced practice, and promoting scholarship in practice. Limited information to date is available regarding outcomes of the OTD program related to the future research potential of graduates. One such approach to promoting the scholarship of practice among OTD graduates is the use of the practice-scholar model. The practice-scholar model is designed to build research skills among OTD students to encourage their ongoing commitment to evidence-based practice through implementing their own research in practice. Founded in 2014, the Northern Arizona University (NAU) entry-level OTD program has implemented the practice-scholar model through their practice-scholar apprenticeship (PSA) program. The NAU PSA program involves a mentorship experience with OTD students engaging in faculty and/or community clinician led research. The purpose of this paper is to share evaluation results of the NAU PSA program related to the research development among the program's graduates. NAU OTD students completed pre and post surveys regarding their expectations towards research and a post qualitative feedback session. Students reported statistically significant improvements in their research self-efficacy skills. Qualitatively students identified their developed research skills, the importance of research and their desire to continue implementing research in the future. The field of OT should continue to identify structural ways to support research in practice to realize the potential of future OTD practitioners.

Introduction

Occupational Therapy Doctoral Programs

For over the past two decades, the literature has noted the importance of the occupational-therapy doctoral (OTD) program as critical to helping meet societal and professional needs (Brown et al., 2015; Royeen & Stohs, 1999). The purpose of the OTD is for students to develop leadership, advanced practice, and program development skills (American Occupational Therapy Association, 2018; Accreditation Council for Occupational Therapy Education [ACOTE], 2022). Further, this degree focuses on developing knowledge and skills in professional leadership and advocacy, integrating evidence into therapeutic practice, demonstrating scholarship abilities, and advancing practice through additional coursework and clinical experiences (Case-Smith et al., 2014). There is currently limited research comparing the outcomes of graduates with a master's versus doctorate degree in occupational therapy (OT). Smallfield et al. (2019) found that those who graduated with an OTD were more likely to become an educator and use evidence-based practices compared to those who graduated with a master's degree in OT. However, if the OTD truly achieves the established purposes noted above, more understanding is needed to explore the research readiness of OTD graduates.

A unique facet of the OTD program is the requirement of students to complete an advanced competency experience, or doctoral capstone, at the end of the doctoral program upon completion of their 24-week Level II fieldwork rotations (Stephenson et al., 2020). This 14-week doctoral capstone experience and project allows students to develop their knowledge and skills in at least one of the following areas: clinical practice research, administration, leadership, program and policy development, advocacy, education, and theory development (ACOTE, 2018). Emerging research suggests that students primarily select their capstone experience and project to further develop their knowledge and skills in clinical practice and program development, leaving research development infrequently selected, if at all (Stephenson et al., 2020). This limited focus on research skills within the doctoral capstone experience indicates that there may be other programmatic and curriculum requirements necessary to promote OTD graduate scholarship. The purpose of this program evaluation is to describe the short-term outcomes related to research development among Northern Arizona University (NAU) entry-level OTD students from their mentored practice-scholar apprenticeship (PSA) experience.

Practice-Scholar Model

The NAU OTD program's founding Director, Dr. Patricia Crist, along with faculty at Duquesne University (DU), developed and implemented a practice-scholar model in 1999 (Crist et al., 2005; Crist, 2010). The DU innovation emanated from faculty motivation to lead efforts promoting practice scholarship. Additionally, the DU faculty identified that students working in mentored research projects designed by experienced practitioners reflected more meaningful learning and encouraged graduates to embed scholarship in their future practice, as practice-scholar leaders.

The term “practice-scholar” has been defined as one who engages in the “scholarship of practice” (Crist & Kielhofner, 2013, p. 2). The goal of the practice-scholar model is to guide students in developing the skills and confidence needed to continue in the implementation and consumption of research throughout their OT careers. Being a practice-scholar includes using evidence to inform practice decisions, engaging in scholarly practice, and participating in and disseminating research, or scholarship. Crist and Kielhofner (2013, p. 2) encouraged researchers and clinicians to work together:

In occupational therapy, when investigators and practitioners work together to combine innovation with action, documentation, and reflection, they embark on a journey that is the scholarship of practice. The scholarship of practice in occupational therapy will take on many different forms that reflect the unique needs of the academic and practice settings; no ‘one size fits all;’ because the scholarship of practice in occupational therapy is built on unique partnerships between the academic and practice settings. Each brings their own mission and purpose for seeking the partnership and the partnership develops and sustains itself only when mutual interest and needs are addressed.

Faculty/investigator and clinician teams habitually working together have the potential to greatly increase scholarship on the efficacy and effectiveness of OT and improve outcomes of everyday practice (Crist & Kielhofner, 2013). Further, engaging in mentored, practice-based research initiated by the mentor’s everyday practice questions, provide student engagement in meaningful projects that enhance their participatory motivation (Crist & Kielhofner, 2013).

Program Description

Practice-Scholar Apprenticeship at Northern Arizona University

NAU faculty enhanced and broadened the practice-scholar model, by more fully defining practice-scholar competencies, in order to encourage linkages between research and practice, promote service-learning and servant leadership, and support research among faculty, community practitioners, and OT students. The NAU PSA series begins after the students have completed two preliminary research courses where they learn about quantitative and qualitative research methods and evidence-based practice. In the first of the five-semester PSA series, the students engage in classroom discussion and activities to enforce and review the content of the first two research and evidence-based practice semester courses in context to clinical practice. They then have an opportunity to learn about the research of faculty and community mentors through written descriptions, brief videos, and a meet and greet event. The students then rate the research projects, and based on the ratings, two to three students are paired with a faculty and/or community mentor investigator. The community mentors will typically have a faculty member associate who will assist or serve as a liaison to use university resources, such as library services and the Institutional Review Board. Furthermore, community mentors can affiliate with the university as adjunct instructors.

The remaining four semesters (7 credits) are spent working in their PSA teams to implement a PSA project that will promote scholarship which interprets the scope of the profession, establishes new knowledge, and/or applies this knowledge to practice. The outcomes of this apprenticeship experience may include, but are not limited to, completing a literature review, submission of an Institutional Review Board (IRB) application, data collection, data analysis, report writing, and preparation of oral and written dissemination of the research project. To fulfill the PSA goal, the students present research posters summarizing their PSA project experience at the end of the program. Many students also successfully publish their PSA projects in peer-reviewed journals and present at peer-reviewed conferences.

The PSA program at NAU began with its inaugural cohort who graduated in 2017. The first two cohorts (2017, 2018) in the PSA experience helped inform the development of the PSA program and processes. In the first two cohorts, the PSA mentors were primarily faculty as it took some time to identify, orient, and begin offering PSA experiences with community mentors. By the 2019 cohort, half of the available PSA projects were being mentored by community mentors and the formal evaluation processes were in place of the program. This trend of keeping at least half of the projects in collaboration with community mentors has been maintained since the 2019 cohort.

Program Evaluation Process

To achieve the established accreditation requirements and prepare doctorly trained OT clinicians, OTD programs need to teach, provide opportunities, and mentor students to engage in scholarship throughout their time in the educational program. The NAU OTD faculty completed a program evaluation to identify short-term outcomes related to research development among NAU OTD students from their mentored scholarship of practice experience within the PSA program. All program evaluation activities were approved by the university's Institutional Review Board [IRB #1182612-4].

Participants

The PSA program evaluation was formalized by the enrollment of the 2019 cohort. Therefore, the cohort included in this evaluation were OTD students who had completed the PSA program and graduated from three consecutive cohorts (2019, 2020, 2021) in NAU's entry-level OTD program. The NAU OTD program has an annual enrollment goal of 45 students per year and it took a few years until the program achieved full enrollment. Therefore, 100% of the students in the 2019 (n=37), 2020 (n=45), and 2020 (n=44) participated in the program evaluation.

Data Collection and Analysis

Quantitative Surveys

A quantitative twenty question survey was developed by the NAU program faculty and administered to OTD students at the beginning (pre research expectations survey) and end (post research expectations survey) of their five-semester long PSA experience. The survey used a 5-point Likert scale (strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, strongly agree) and included questions regarding

the students' expectations for their use of research in their career, their use of research to inform practice, and their confidence in research, including their research skills. The survey was completed anonymously via Qualtrics. The survey did not undergo pilot testing.

In light of the limited sample size, the study team met and decided on a thematic classification approach to identify content domains assessed by the 20 survey questions. The PSA coordinators, faculty within the NAU program, responsible for survey instrument administration identified four conceptually distinct content areas comprised of unique question subsets: Career (items 1, 5, 6, 10), Research-to-Practice (items 2, 3, 7, 9, 11, 12, 13, 14, 16), Self-Efficacy (items 4, 18, 19, 20), and Research Skills (items 8, 15, 17). The reliability (internal consistency) of these composite variables was evaluated using the pre-research expectations survey responses provided by all cohorts (2019, 2020, 2021), and revisions to the scale composition were guided by analysis of inter-item correlations.

Survey Reliability. Cronbach's alpha analysis of the thematically derived composite variables based on pre data revealed that the four items composing the Career Expectations for Research subscale functioned as an internally consistent (reliable) index ($\alpha = .72$). In contrast, reliability analysis of the Research-to-Practice subscale revealed that items 14 and 16 were virtually uncorrelated with the other items in the subscale (item-total $r_s = .01, -.01$), and additional follow-up analyses suggested that items 8 and 15 correlated strongly with the other items in this index. The revised Research-to-Practice subscale (items 2, 3, 7, 8, 9, 11, 12, 13, 15) exhibited good internal consistency ($\alpha = .82$).

Qualitative Feedback Sessions

Qualitative data collection included anonymous open-ended responses to the following prompts, "I liked...", "I learned...", "I wonder...", and "What if..." regarding their experience in the PSA program. Qualitative feedback data was collected during the final week of the NAU OTD program in which they presented the results of their PSA experience. The qualitative data was intended to capture outcomes of the PSA experience and process evaluation data for programmatic quality improvement. The 2019 cohort participated in qualitative data collection in person using post-it notes placed in areas of a classroom where the prompts were provided. The 2020 and 2021 cohort qualitative data collection, due to COVID, occurred via Zoom and a Google Doc link was used where students could anonymously type in their responses to each prompt. Member checking was completed at the end of each feedback session to confirm accuracy of data and improve credibility of findings (Shenton, 2004).

Written responses to the open-ended prompts were transcribed verbatim for analysis. The two faculty members who both had served in the PSA coordinator role were the qualitative analysts. In order to improve the credibility and dependability of the qualitative analysis, there were two analysts involved in the analysis process (Shenton, 2004). First the two analysts reviewed the transcribed data independently from one another and inductively proposed initial codes from the data. Next, the two analysts met

together and reviewed their proposed codes and themes to develop an initial codebook by consensus. Then each analyst again reviewed the data individually and coded using the developed codebook. The analysts met a third time to review their coding and come to consensus on the final codebook and coding of transcribed data for final analysis. In final decisions regarding data reporting, the research team decided that areas coded related to program development or quality improvement would not be reported in this evaluation, as they did not relate to the stated purpose of this evaluation to report short-term outcomes related to expectations for research in their careers and the role of research in practice among the program's graduates.

Program Outcomes

Participants

A total of 126 students were included in this evaluation including 37 from 2019, 45 from 2020, and 44 from 2021. A majority identified as female (n=104), not Hispanic or Latino (n=110), and White (n=101). See Table 1 for more detailed participant demographic data.

Table 1

Student Demographics

	2019	2020	2021
Total # of students	37	45	44
Age range	21-36	20-52	19-40
Ethnicity (Hispanic or Latino)	4	3	9
Ethnicity (Not Hispanic or Latino)	33	42	35
Race (Black or African American)	2	1	2
Race (White)	31	37	33
Race (American Indian or Alaska Native)	0	0	2
Race (Native Hawaiian or Other Pacific Islander)	1	0	0
Race (Asian)	3	6	3
Race (Mixed)	8	9	12
Gender (male)	9	8	5
Gender (female)	28	37	39

*Students could identify more than one race category and therefore the total number reported in race are more than the total number of students.

Quantitative Surveys

The nature of the data collection procedure did not allow for pre- and post-research expectations responses to be matched for the 2019 and 2021 cohorts, however, responses for the 2020 cohort were able to be reliably merged. As a result, paired sample t-tests were used to provide null-hypothesis tests comparing pre- and post

means for each in the 2020 cohort, but not 2019 or 2021. Therefore, dependent-samples t-tests, also known as paired-sample t-tests, were completed for the 2020 respondents in order to determine if there was a statistically significant ($\alpha = .05$, two-tailed) difference in mean scores (M_{Diff}) over time. Mean scores for the Career Expectations for Research ($M_{Diff} = -0.19$, $t(42) = -1.17$, $p = .25$, *Hedges' g* = $-.46$) and Research-to-Practice ($M_{Diff} = -0.21$, $t(42) = -1.26$, $p = .21$, *Hedges' g* = $-.62$) subscales exhibited a slight decline among graduates in the 2020 cohort, however, these differences failed to reach statistical significance. In contrast, scores on the Research Self Efficacy subscale reflected a statistically significant increase ($M_{Diff} = 0.60$, $t(42) = 2.81$, $p < .01$) across the pre- and post-program assessments and a large effect size (*Hedges' g* = $.91$).

The absence of matched responses for the 2019 and 2021 cohorts would lead to biased inferential tests, however, Table 2 does provide estimates of mean difference over time (M_{Diff}) and effect size (*Hedges' g*) for these groups. The estimates of M_{Diff} and *Hedges' g* for the Career Expectations for Research and Research-to-Practice subscales indicated small increases from pre- to post-program. In contrast, the estimated increase in endorsement of the Research Self-Efficacy subscale was much larger ($M_{Diff} = 0.61$, 0.67 , respectively), and very similar to the magnitude of increase observed in the 2020 cohort (both *Hedges' g* = $.82$).

Table 2

Pre and Post Quantitative Survey Results

	Variable	Pre-Program	Post-Program	M_{Diff}	t_{obs}, p	Hedges' g^*
$N_{post}=36$	Career Expectations	4.40 (0.56)	4.54 (0.47)	0.15	--	.26
2019	Research-to-Practice	4.53 (0.36)	4.67 (0.27)	0.14	--	.39
$N_{pre}=36$	Research Self Efficacy	3.51 (0.79)	4.17 (0.56)	0.65	--	.82
$N_{post}=45$	Career Expectations	4.48 (0.41)	4.28 (1.12)	-0.19 (1.04)	1.17, $p=.25$	-.46
2020	Research-to-Practice	4.60 (0.34)	4.38 (1.12)	-0.21 (1.09)	1.26, $p=.21$	-.62
$N_{post}=43$	Research Self Efficacy	3.57 (0.66)	4.16 (1.07)	0.60 (1.41)	2.81, $p<.01$.91
$N_{pre}=36$	Career Expectations	4.58 (0.52)	4.68 (0.40)	0.10	--	.19
2021	Research-to-Practice	4.69 (0.38)	4.75 (0.32)	0.06	--	.16
$N_{post}=45$	Research Self Efficacy	3.67 (0.82)	4.34 (0.65)	0.67	--	.82

Note. Items 8 and 15 now included in the Research-to-Practice composite, *Hedge's g in a measure of effect size, small effect 0-0.2, medium effect 0.5, large effect 0.8 or higher.

Qualitative Feedback Sessions

The short term self-reported outcomes shared qualitatively by students are organized into two areas: research to practice and research career expectations, and research self-efficacy and research skills. See Figure 1 for a summary of qualitative feedback sessions.

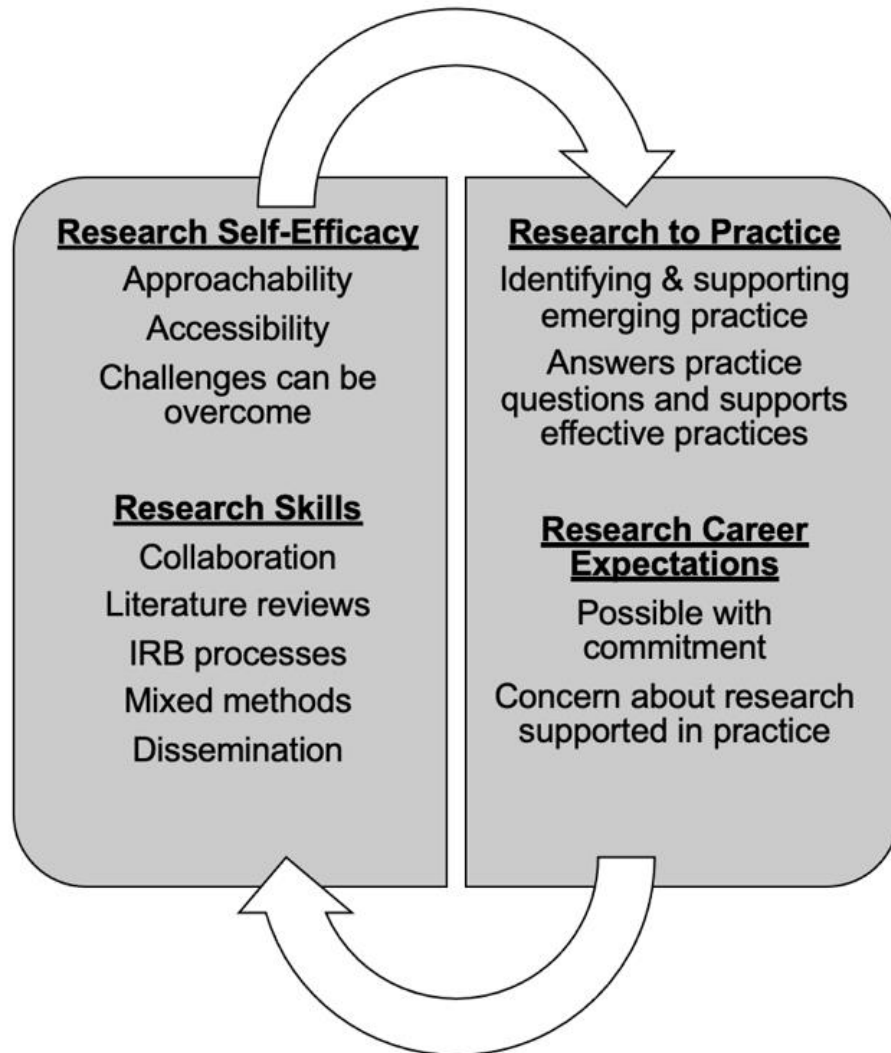


Figure 1: Qualitative Results

Research Self-Efficacy and Research Skills. Students reported they learned about their future expectations for the ways in which research projects may progress. In particular, they learned how research processes can be challenging and are not always predictable: “I learned research projects can be ever changing/learning how to be flexible while continuing research” and “I learned research is tedious but that there is always something to be learned in the process.”

Regarding their research self-efficacy, students identified that research was initially an area in which they were uncomfortable, but they appreciated the challenge. They included statements regarding how they felt more confident in research after being successful in it despite being out of their comfort zone and then they saw research as more accessible to them. One student stated, “I liked being pushed out of my comfort zone—including advocating for what you are doing.” Students discussed seeing research as more approachable stating, “I learned how accessible research can be.” In addition, they even saw the potential for doing their own research in the future, “I learned I feel comfortable starting my own research projects and following through with them.”

Research skills related to the nuts and bolts of research, but also included the importance of relationship building and collaboration in research. Students reported learning about critically reviewing literature, completing literature reviews, submitting Institutional Review Board applications for approval, and mixed methods approaches. Participant recruitment was also identified as a critical skill in research, and one student noted, “I learned the process of finding participants and how some may not show up/trust you due to their life experiences.” Students highlighted how much they enjoyed the skills required to disseminate research. Students stated, “I liked presenting at conferences and writing a manuscript to be published” and “I learned how to develop and format a research poster to disseminate information.”

Collaboration with both research team members and the community were identified as skills necessary for research. Students appreciated interdisciplinary work stating, “I liked being involved with another department and another profession (physical therapy) but still kept it related to OT scope of practice.” Others discussed working with community members, “I liked being able to work with a community partner who wasn’t yet familiar with research. We got to learn together.” Students also appreciated the opportunities that research brought for building relationships with faculty mentors, clinicians, and student teammates. A student noted that they, “liked working with healthcare professionals who are role modeling what being a practice-scholar looks like,” and “I liked opportunity to work more closely/professionally with professors.”

Research to Practice and Research Career Expectations. Students responded to the prompts which discussed their experiences seeing research in action within the PSA program to inform practice. One student noted “I liked helping an OT show that what he is doing is effective and having it now possible to be applied to other future patients.” Another noted that they left the program wondering about what the research they participated in could do to inform newer areas of practice, “I wonder if our project can help create an emerging practice area for OT.” Students also reported appreciating the role they saw for research in making a difference for the profession saying, “I liked the opportunity to answer challenging questions in the profession,” and “I learned how important research is for the profession to grow.”

There was also a reflection on the possibility of incorporating research into their future careers. They learned that “incorporating research into clinical practice is possible with a committed person/team.” A concern related to completing research in their future careers is the support or lack of support their future employers may provide for research. One student noted, “I wonder what opportunities I will have for research in practice?” Another wrote, “What if my future employer isn’t keen on research?”

Discussion

Educating future practitioners in evidence-based clinical decision making is a core standard of AOTA in the doctoral program (ACOTE, 2022). Indeed, faculty report the importance of research in curricula, specifically pointing out that introducing research early is important, along with setting higher expectations, and ensuring competence in research methods (Helgøy et al., 2020). Despite acknowledging the importance of research exposure and training for students, faculty also report that they do not do enough engagement of students in research (Helgøy et al., 2022).

Both quantitative and qualitative findings from this program evaluation identified that exposure to a mentored research experience within an OTD program impacted the self-efficacy of graduates to engage in research. Quantitative data revealed a statistically significant change (per the 2020 cohort results) in research self-efficacy. Results from the 2019 and 2021 cohorts could not be evaluated for statistical significance but did show improvements in overall mean scores from pre to post in career expectations, research to practice and research self-efficacy. The largest mean difference in pre and post scores were consistently in research self-efficacy across all three cohorts. Qualitative data also indicated changes in research self-efficacy across the three cohorts. Additionally, qualitative feedback identified their motivation towards research in their professional journey, but also concerns regarding having the support of their future employers for research engagement.

The field of OT has made clear the importance of conducting research across all clinical OT settings (Bamford et al., 2013; Gardiner et al., 2018). However, there also are known and perceived barriers to implementing the research process in practice (Kielhofner, 2005). Furthermore, there continues to be problems with translating research to the clinic through using evidence-based practice. Eriksson et al. (2019), in a paper that builds on a framework called PARIHS, Promoting Action on Research Implementation in Health Services (Rycroft-Malone, 2010), described and carefully detailed three factors necessary for applying new knowledge into practice which include evidence, context and a facilitator, or mentor. By engaging in mentored research within the NAU OTD PSA program, students identified gains in their self-efficacy towards research and a vision for seeing research in practice as possible in their careers. Ongoing implementation of such mentored research experiences in entry level OTD programs may serve as a catalyst to beginning to change the existing paradigm from separation of research and practice settings to greater integration of the two.

Limitations

This evaluation included the collection of both quantitative survey data collection and open-ended qualitative feedback from students. While the survey was developed internally for program evaluation and not previously validated or pilot tested, it was, nevertheless useful to understand the short-term outcomes from the NAU PSA experience. Our results may not be generalizable to other programs. However, these results indicate the promise of providing hands-on mentored research experiences within OTD programs. Finally, due to program evaluation planning errors, we were unable to match pre and post data across all three cohorts. This is an issue the PSA coordinators have resolved moving forward. Additionally, no theoretical framework was used to guide this evaluation. Future evaluation work and research would benefit from identifying an applicable framework, such as theory of change to guide the evaluation efforts (Weiss, 1995). Future research could also explore the psychometric properties of the research expectations survey used for the quantitative data collection in this study.

Implications for Occupational Therapy Education

This study presents several potential implications for OT education including the promise of the OTD to promote research in the field. Through a five-semester mentored research experience, students gradually attained self-efficacy as the material they learned in the classroom was now scaffolded to real OT inquiry. Mentoring research is rich in supporting a plethora of benefits to both mentee and mentor (Phillips et al., 2019; Smith et al., 2021). Authors from one university point out benefits to students having greater employability when mentored by alumni in their state (Dollinger et al., 2019). Some of the practice-scholar partners in the NAU program are also alumni. It could be that the learning in direction of mentee to mentor comes more naturally in this setting.

In a scoping review on mentoring research in the OT literature, all of the studies analyzed reported positive outcomes, including knowledge acquisition and translation of research skills (Doyle et al., 2019). Mentoring training has shown positive outcomes in understanding the research process (Morrison-Beedy et al., 2001). A PSA approach creates a natural mentoring environment that assists in knowledge acquisition and translation for both the mentor and the mentee. There also lies an opportunity to educate on the mentoring process itself within the program. Educating students on ways of being actively involved in the mentoring process will improve outcomes including potential research self-efficacy and competency for both student and OT practitioner.

In order to change the current barriers faced in OT research regarding feasibility in a clinical setting, educators must begin to find ways to integrate research into practice through collaboration and creation of win-win educational opportunities such as the PSA program. There are a number of possibilities of lower cost, lower stakes projects from quality and process improvement to implementation of doable clinical research such as single subject research designs (Kazdin, 2021). In addition to the promotion of research in the OT field and the encouragement to local OT practitioners to support research, the educational implication that the university is in effect learning and keeping up with clinical nuances while the community practitioner is learning ways to use and implement research is plausible.

One of the stated goals of the OTD degree is to promote the scholarship of practice amongst current and future practitioners. To do so, OTD students need to engage in hands-on, mentored research learning activities, such as were provided through the NAU PSA program to develop their practice-scholar self-efficacy. Results of the PSA experience included increased self-efficacy for engaging in future research and students identifying the importance of research to inform practice. Through the hands-on experience, students were also able to recognize the complexities of completing research and the importance of organizational support for such research. More work needs to be done to educate OT employers on the value of research, in order for there to be resources available to promote research and practice amongst OTD graduates. This may include embedding fieldwork educators into research projects and also demonstrating how research may be used to improve practice outcomes. An additional benefit of the PSA program at NAU, are its linkages to the fieldwork education program and the doctoral capstone experience. Additional fieldwork educators and doctoral capstone mentors have been identified through community collaborations within the PSA. Students have also selected to continue their PSA work as part of their capstone experience. Finally, NAU alumni have volunteered their time to become PSA Mentors, demonstrating to current students that research in practice is possible.

Conclusion

To continue to advance the field of OT, the development of the entry-level OTD was intended to promote the use of scholarship in practice among its graduates. However, gaps remain in understanding how the entry-level OTD has in fact produced outcomes relevant to the growth of research in the field. The opportunity to engage in a mentored research experience within the entry-level NAU OTD PSA program resulted in improved research self-efficacy among its graduates and their identified desire to continue to be practice scholars after graduation. Future research should continue to evaluate the longer-term outcomes related to research productivity amongst entry-level OTD graduates, including the ways in which research in practice can be supported by future employers.

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