

## Research mentorship: Implications for the preparation of doctoral students

Faculty members at universities around the world experience the perceived pressure to publish original research (Lambie, Sias, Davis, Lawson, & Akos, 2008). The skills necessary for generating original research and the ensuing publication of the results are cultivated in doctoral level training, yet Benishek and Chessler (2005) assert that there is an overall lack of research productivity from graduate students in the counseling field. This would suggest a substantial lack of connection between training, practice, and application. Recommendations have been proposed to increase research productivity (Magnuson et al., 2003; Sambunjak, Straus, & Marusic, 2006) and one of the most promising methods is the utilization of research mentorship (Briggs & Pehrsson, 2008). A “research mentoring relationship is the vehicle through which the training environment has greatest impact on individual students’ research production” (Hollingsworth & Fassinger, 2002, p. 327). Research mentorship has emerged over the last fifteen years in the counseling profession as a critical component of scholarly engagement for graduate students and pretenured faculty (Briggs & Pehrsson, 2008; Benishek & Chessler, 2005; Borders et al., 2012; Hollingsworth & Fassinger, 2002; Magnuson, Black, & Lahman, 2006; Magnuson et al., 2003; Okech, Astramovich, Johnson, Hoskins, & Rubel, 2006; Paul, Stein, Ottenbacher, & Yuanlong, 2002). In fact, guidelines were developed by the Association for Counselor Education and Supervision’s (ACES) committee for research mentorship to attend to the need of increasing and enhancing the quality of research in the counseling profession (Wester et al., 2009).

Expectations of research mentoring relationships in the field of counselor education are featured in the definition (Wester et al., 2009) of the ACES research mentorship guidelines.

Research mentorship is defined as a: structured, formal or informal relationship that provides relational and instrumental support which may focus on the education, understanding, and potential collaboration around research, research process, research idea development, designs, program evaluation, and data analysis. Additionally, the research mentorship may include mentorship around the dissemination of research (e.g., publication, presentation) or information surrounding grants (e.g., seeking, writing) (p. 1).

These guidelines and definition highlight relational factors such as support and understanding in addition to instructional factors such as data analysis and the dissemination of research as impactful in a successful researcher identity. Furthermore, the areas of knowledge, competencies, and personal qualities are illuminated in Wester et al.'s (2009) ACES research mentorship guidelines. The personal qualities of research mentors are portrayed by their abilities, ethical integrity, knowledge, and skills as a researcher and illustrated through the dissemination of their scholarly agenda (Wester et al., 2009). Those who serve as mentors should be aware of their limitations and utilize appropriate resources when necessary. In turn, those who are mentees or protégés are encouraged to be forthcoming with their research mentoring needs, such as author order, in the dissemination of their scholarly agenda (Wester et al., 2009). Mentees or protégés may find it challenging to adhere to these guidelines due to a lack of awareness and understanding of the contributing variables that have the potential to affect these research mentoring relationships. Pretenured faculty and doctoral students are the typical mentee or protégé in a research mentoring relationship and yet there is a dearth of scholarly exploration investigating their experiences within the field of counselor education. In fact, the least amount of scholarly discourse in regard to research mentoring experiences focused on doctoral student experiences (Benishek & Chessler, 2005; Lambie & Vaccaro, 2011; Okech et

al., 2006).

As doctoral students represent the future of the counseling profession examination of their experiences and productivity at this stage of training and development would be a preventive approach to research mentoring which is in alignment with the counseling profession's proactive nature of interaction. The current research will indicate, there is a significant lack of research focused on doctoral students' productivity within the counseling profession. The literature review will examine the research mentorship scholarly discourse in other disciplines and within the field of counselor education. In addition, the doctoral student experience within counselor education and in relation to research mentoring relationships will be explored and specific recommendations will be discussed in regard to doctoral student research productivity preparation.

### **Review of the Literature**

Over the last fifteen years, research mentorships have been examined in medical education, psychology, and higher education (Briggs & Pehrsson, 2008; Hollingsworth & Fassinger, 2002; Huskins et al., 2011; Okech et al., 2006; Paul et al., 2002; Sambunjak et al., 2006). Huskins et al. (2011) examined the alignment and identification of mentor and protégé expectations through a systematic literature review of publications addressing mentoring in academic medicine (n = 32) and qualitative focus groups of mentors (n = 44) and mentees (n = 55) in academic medicine regarding the research mentoring relationship. Being directive, honest, having open communication, and having explicit expectations were found to help provide an environment conducive to protégé-mentor matching and openness in the mentoring relationship (Huskins et al., 2011).

The effectiveness of the research mentoring relationship was explored in the area of clinical and translational science by Meagher, Taylor, Probsfield, and Fleming's (2011) who found that to create stronger mentoring practices good mentoring characteristics were required. The authors identified good mentor characteristics through their review of ninety peer-reviewed articles containing mentor evaluation in the title or abstract as the ability to provide support, possessing active listening skills, treating the protégé as a colleague, and caring about the mentee or protégé as a person. In addition, they found that measurable outcomes of research productivity, which is an aspect of Wester et al.'s (2009) ACES research mentorship guidelines, were identified as grants, publications, and presentations in their review of the literature.

Sambunjak, Straus, and Marusic's (2006) results were similar to that of Meagher et al.'s (2011) findings in their review of the literature in academic medicine finding twenty-one studies that identified research mentorship as having an impact on overall research productivity. While there were no universal research mentorship definitions within the context of Meagher et al.'s (2011) and Sambunjak et al.'s (2006) articles there were specific traits that were consistent within each review of the relevant research studies. Specifically, by having a research mentor, the mentee increased the amount of time devoted to research and had an increased level of scholarly productivity (Sambunjak et al., 2006). Conversely, a lack of mentoring was considered to be a barrier to completing scholarly projects and publications (Sambunjak et al., 2006). Paul et al. (2002) conducted a quantitative study (n = 127) that used a mentoring questionnaire developed for the field of nursing to explore the role of mentoring on research productivity among occupational therapy faculty and defined research productivity as publications, grants, presentations, researcher investigators, book chapters, and editorial board experiences. Based on the responses of the junior faculty with and without mentors, mentoring specifically in regard to

research productivity was found to be critical to the felt sense of preparation and readiness to engage in scholarly productivity (Paul et al., 2002).

Kiersma et al. (2012) reviewed a mentoring program developed for pharmacy students through a mixed method approach utilizing a pre/post assessment of 49-items designed to assess the importance of certain mentoring qualities and the mentors' confidence in the identified qualities (n = 47) and a content analysis of the qualitative items to assess the impact of the program on student interest in research. Kiersma et al. ascertained in the content analysis that mentees indicated a strong desire to continue research after completion of the program and that increasing the students' desire for continued research experiences enhanced the potential for an increased level of scholarly productivity.

Hollingsworth and Fassinger (2002) contend that students' research productivity is strongly related to their research mentoring experiences and developed the Research Mentoring Experiences Scale (RMES) to measure research mentoring experiences by research task functions such as communicating research ideas as one of the aspects that contribute to the research productivity of counseling psychology doctoral students (Hollingsworth & Fassinger, 2002). In Hollingsworth and Fassinger's quantitative study (n = 194) utilizing the Research Mentoring Experiences Scale (RMES) they found that research mentoring experiences and research self-efficacy were significant predictors of research productivity. Examples of items utilized to assess this information and to describe the instructional factors and relational factors related to research productivity included "encouraging you to apply for research related grants" and "encouraging you to talk openly about anxieties or fears that interfere with research" (Hollingsworth & Fassinger, 2002). These items provided the participants with specific scenarios that illustrated instructional and relational factors of the research mentoring experience.

## **Research Mentorship in Counselor Education**

Briggs and Pehrsson (2008) quantitatively explored the instructional and relational factors of research mentoring, as defined by the ACES research mentorship guidelines, utilizing the Research Mentor Quality Questionnaire (RMQQ) (Briggs, 2006; Wester et al., 2009). The RMQQ is a 19-item survey instrument that was used to investigate the research mentorship experiences of participants who were pretenured counselor education faculty. The guidance received within these critical dimensions spanned the different level of research productivity and yet assistance with writing was identified as the most salient portion of navigating the tenure and promotion process (Briggs & Pehrsson, 2008). Briggs (2006) found that three-fourths (n = 104) of a sample of pretenured faculty (n = 139) received research mentoring in relation to productivity, which was defined as presentations, publications, and grant writing.

Black and Helm's (2010) conceptual article outlined the needs of the counseling profession and recommended engagement in research mentoring relationships and writing teams to encourage the discussion of research designs and ideas that will inspire colleagues and students to produce great scholarly work. Magnuson et al.'s (2003) qualitative participatory and collaborative study of first year assistant professors (n = 8) found that mentorship from multiple sources such as informal encouragement or the pragmatic assistance with finalizing manuscripts contributed to the production of several manuscript submissions and publications in the first year as an assistant professor. Similar to Magnuson et al. (2003), Niles, Akos, and Cutler (2001) in their qualitative inquiry utilizing structured interviews (n = 14) recommended that finding mentors to provide insights and strategies from their own careers within and outside of the institution would be helpful in addressing the teaching, scholarship, and service demands on counselor educators.

Magnuson, Black, and Lahman (2006) in their qualitative study employing a phenomenological approach (n = 36) to examine the third year experience as assistant professors found that mentoring as defined by but not limited to, support for interpersonal issues, the mentor taking initiative to involve the mentee in current research projects, and the ability to collaborate with other faculty on research, was one of three prominent themes of the participants' experiences. Negative mentoring experiences or a lack of mentorship created a grieving process for some participants and an additional struggle to manage their third year as an assistant professor (Magnuson, Black, & Lahman, 2006). Conversely, the continuation of mentoring relationships from doctoral programs, formal mentoring programs, and meaningful connections with other faculty helped the participants to navigate scholarly expectations (Magnuson et al., 2006). In a phenomenological study where over the course of six years they followed the career path of twenty-two assistant professors of counselor education that had successfully navigated the promotion and tenure process Magnuson, Norem, and Lonneman-Doroff (2009) found results that shape how and where support such as mentorship relationships is needed. The authors found that examining the presence of mentoring and support during the interview process such as collaborative working relationships that provided encouragement in the research process was helpful in choosing the best position. They went on to reveal that it was also prudent to find a trusting mentor in their professional relationships who would support and not criticize their research ideas and receiving clear guidelines about the tenure process and the university expectations was helpful to successful navigation of the process (Magnuson, Norem, & Lonneman-Doroff, 2009).

While best practices within a counselor education program involve clear expectations regarding the promotion and tenure process, the mentoring of junior faculty members by senior

faculty members in varying contexts such as formal and informal mentoring relationships is deemed an important professional responsibility (Borders et al., 2011). Research mentoring is therefore not only perceived as a tool to assist junior faculty members but as an obligation that is imperative to professional success. One way to promote professional success is to programmatically and institutionally implement the ACES research mentorship guidelines such as utilizing the guidelines as a self-assessment tool within the field of counselor education (Borders et al., 2012). Implementation of the ACES research mentorship guidelines to promote professional success, further research addressing this process, as well as the continued review of current research in both counselor education and related disciplines, could provide more meaning around the clarity of research mentoring relationships. Counselor educators, in alignment with the proactive nature of the counseling profession, should begin this process at the doctoral student level.

### **The Doctoral Student Experience in Counselor Education**

Doctoral student perceptions have been examined in counselor education in numerous domains such as wellness, persistence, attrition, first semester experiences, and identity development over the course of doctoral study (Dollarhide, Gibson, & Moss, 2013; Hoskins & Goldberg, 2005; Hughes & Kleist, 2005; Perepiczka & Balkin, 2010; Protivnak & Foss, 2009; Smith, Maroney, Nelson, Abel, & Abel, 2006). Hoskins and Goldberg (2005) explored doctoral student persistence in counselor education programs through a qualitative study utilizing interviews and analytic induction, which provided a structure for the development and testing of a theory to the applicable population, (n = 33) and found that matching the students' and program goals were influential to persistence as well as faculty support. Faculty, in addition to peers, facilitating career enhancing connections caused a stronger sense of community and



reasons to stay in the program (Hoskins & Goldberg, 2005). Similarly, Smith, Maroney, Nelson, Abel, and Abel (2006) recommended implementing mentoring relationships to decrease student attrition rates in doctoral programs, helping mentees write for publication or grants, and obtaining professional positions after graduation. Hughes and Kleist (2005), in their qualitative inquiry employing a grounded theory approach, explored first semester doctoral student experiences and found three processes of vicissitudes, integration, and confirmation. In the second process of integration, the students attempted to integrate gathered knowledge and make decisions on how that knowledge manifested itself in their environment which is similar to aspects of Wester et al.'s (2009) ACES research mentorship guidelines (Hughes & Kleist, 2005). In addition, the participants received differing pieces of information from more senior doctoral students and professors while navigating their personal integration process which is indicative of mentorship relationships (Hughes & Kleist, 2005). Previous studies referenced in Hughes and Kleist (2005) and related to doctoral students in counselor education infer that a consistent mentoring relationship seems to clarify expectations, provide a support system, and help to identify important feedback to be integrated into the doctoral students' experiences.

Protivnak and Foss (2009) utilized a qualitative inquiry utilizing open-ended questions to investigate the lived experiences of doctoral students' (n = 141) training to be counselor educators. According to the authors, the participants identified mentoring as the most helpful part of their experiences and at the same time noted that a lack of formal mentoring was a challenging aspect of their experiences. According to Casto, Caldwell, and Salazar (2005), female doctoral students expressed a desire for more female mentors and sought out these mentoring opportunities outside of the program if there were no opportunities available in their department (Protivnak & Foss, 2009). Dollarhide, Gibson, and Moss (2013) in their qualitative

study employing a grounded theory approach (n = 23), explored the process of counselor education doctoral students' professional identity development and found that the need for strong faculty support and external validation was prevalent in the first year of doctoral studies. Additionally, by the third year of doctoral study, there was an integration of internal and external validation coupled with a peer collaboration and mentoring component emergent to their counselor educator identity (Dollarhide et al., 2013). The authors determined that the peer collaboration component was directly related to the doctoral student's emergent counselor educator identity of utilizing their colleagues in their pursuit of scholarly work. This supports the need to further explore doctoral student experiences to illustrate the types of validation and mentoring opportunities, peer and faculty alike, which are necessary to facilitate an increased level of research productivity.

### **The Doctoral Student Experience and Research Mentorship**

Benishek and Chessler's (2005) conceptual exploration of the identity development of graduate students as researchers in the counseling field assert that graduate students in applied areas of counseling produce an overall low level of research productivity. Suggestions for this lack of research productivity are insecurities or fears about particular research methodologies, perceptions that faculty members need to ask students to be a part of a research team, and cultural considerations (Benishek & Chessler, 2005). Benishek and Chessler (2005) recommended challenging the expected self and feared self of the individual who set out to become a faculty member. This would encompass an exploration and challenge of the expected self where an individual envisioned engaging in the production of high quality research. This would be explored in contrast to the feared self who would as a faculty member produce poor

quality research or become an unemployed counseling professional. This challenge was intended to encourage and increase the development of a researcher identity.

Lambie and Vaccaro (2011) explored research interest, research self-efficacy, and the research training environment of doctoral counselor education students in a quantitative inquiry (n = 89) utilizing the Research Self-Efficacy Scale (RSES), the Research Training Environment Scale-Revised (RTES-R), and the Interest in Research Questionnaire (IRQ). They found that a higher interest in research predicted higher levels of self-efficacy and those doctoral students that had a scholarly publication predicted higher levels of self-efficacy. This suggests that by research mentors promoting a strong interest in research and providing opportunities for scholarly publications, doctoral students would possess the confidence to facilitate their own researcher identity and potentially provide effective mentorship in the future (Lambie & Vaccaro, 2011). It is important to recognize that the individual who possess a strong interest in research, in conjunction with advanced research skill and self-efficacy could be likely to engage in scholarship and writing for publication on a more regular and consistent basis. while self-efficacy could be fostered through mentoring there is ultimately no means to infer causality within this study. Okech, Astramovich, Johnson, Hoskins, and Rubel (2006) examined the doctoral research training of counselor education faculty in a quantitative study utilizing a web based survey instrument (n = 167) and found that differences in their own doctoral research training such as not having a strong emphasis on qualitative research methodology throughout their doctoral programs limited their own research agendas. Therefore, it left them feeling unprepared to provide effective mentorship in the areas that were perceived to be lacking or not emphasized in their own doctoral programs. Additionally, Okech et al. also found a 93.7% agreement among pretenured faculty that there is a need for more research specific mentoring

across the curriculum within doctoral counselor education programs. The inherent research mentorship that takes place during the dissertation process needs to be expanded to provide a variety of research experiences at the doctoral level (Okech et al., 2006). Borders, Wester, Fickling, and Adamson (2014) analyzed the perceptions of faculty members (n = 38) in regard to the research training and doctoral level students' hands-on experience within programs accredited by the Council of Accreditation of Counseling and Related Educational Programs (CACREP). The faculty reported that in only about half of the programs (n = 21, 55.3%) doctoral students were involved in hands-on research experience within their first year. Magnuson et al.'s (2003) qualitative participatory and collaborative study of first year assistant professors (n = 8) emphasized that doctoral preparation and mentors were contributors to their scholarly productivity. The encouragement to write and consistent meetings with a quick rate of feedback return helped cultivate an environment that set the standards of scholarly productivity expectations at the doctoral level, therefore creating an easier transition to the pretenured faculty expectations (Magnuson et al., 2003).

### **Recommendations**

The existing literature supported researching mentoring relationships and indicated its critical role in the counseling profession (Briggs & Pehrsson, 2008; Borders et al., 2012; Magnuson et al., 2006; Magnuson et al., 2003; Okech et al., 2006). In the course of this literature, several suggestions have been made in regard to the relationship between research mentoring relationships and the productivity of pretenured faculty. These ideas could also be applicable to doctoral students. Similar to Hill's (2004) wellness-oriented suggestions, several recommendations will be identified in this section grounded in the current literature at the institutional, departmental, and individual level. In addition, suggestions for implementing a

formalized research mentorship program will be outlined that will illustrate how to incorporate many of the recommendations at each of these levels.

### **Institutional Level Recommendations**

Institutions could develop a university wide research mentoring orientation and program for students at the outset of doctoral study. This will provide an opportunity for all new doctoral students in every program on campus with the support of a faculty research mentor to meet and create relationships grounded in research mentoring. The orientation could serve as preview to their pending coursework in research and aid in the development of a research identity at the beginning of the doctoral experience. The program could include small mentoring group sessions with other disciplines such as the social science departments to foster the development of research identity, and create a climate of interdisciplinary collaboration. In addition, new doctoral students would be introduced to scholarly discourse while possibly facilitating building peer social support groups (Black & Helm, 2010) grounded in research and research mentoring.

Institutions could also implement annual or semi-annual writing and research weekends that would serve as an intentional venue for doctoral students and their research mentor to engage in the creative process (Hill, 2004). Many universities offer similar opportunities to pretenured faculty to provide a designated time and space to work on scholarly projects yet there is little to no connection to research mentoring. The inclusion of research mentoring in this experience could help to facilitate the growth process in this area. It could also facilitate a scholarly habit that could aid in the transition to advanced doctoral training as a scholar.

In addition, institutions could expand campus research symposium formats and opportunities to include the doctoral students and their assigned research mentor as a means of strengthening the opportunity for paired and interdisciplinary growth in this area. Many universities already have a research symposium forum for faculty and often times students to

showcase their current research in these domains. For example, doctoral students could bring a poster presentation from a conference or present preliminary data findings from a current project in addition to presenting with their mentor about the evolution of the research. This will provide an opportunity to have intentional focus on research and the mentoring process that could be involved. In addition, this may create opportunities for interdisciplinary research collaboration (Dollarhide et al., 2013).

### **Departmental Level Recommendations**

Departments could implement a peer-mentoring program in which an upper level doctoral student would be paired with an incoming doctoral student (Borders et al., 2011) as a means of peer support. The upper level doctoral student should have completed at least one year in the program and at least one research course. If possible, the pairing should have similar research interests. This will provide an opportunity for mentoring, social support, and create opportunities for research collaboration.

Departments could also through theses research mentoring experiences have students develop a research portfolio. The portfolio would allow the individual student and his or her mentor to have visual representation of the not only the progress of the research but an indicator of if the mentoring is meeting the productivity goals of the dyad. Within this context is the opportunity to assess the context of the mentoring relationship. Each semester, the doctoral student could complete a part of the portfolio such as writing a research grant proposal much like the CV is revised regularly. This would represent an intentional design to assess the doctoral student's progress and could in turn lead to a discourse on efficacy related to research and research mentoring. For some this could be a precursor to the life and roles of being a pretenured faculty member (Cobia, Carney, & Buckhalt, 2005).

## **Individual Level Recommendations**

Individual doctoral students could choose a faculty mentor within the first semester at their current institution based on perceived similar research interests or past work experiences. This will provide an opportunity for the doctoral student to receive research mentorship at their own university from the beginning of their program and create an expectation of working a trusted mentor within research mentoring relationships as a mentee and eventually as a mentor (Magnuson et al., 2009).

Individual doctoral students could also continue to work with faculty from their master's program or cultivate relationships with faculty at other institutions. This will provide an opportunity for consistent mentoring experiences based on established relationships (Sambunjak et al., 2006), which could increase their level of research productivity. In addition, by having faculty relationships outside of their doctoral institution, it could enhance their perspective in regard to other university research expectations.

## **Formalized Research Mentorship Program**

Protivnak and Foss's (2009) qualitative study indicated a need for formal mentoring of doctoral students. This section aims to establish a formalized research mentorship protocol that will assist doctoral programs with this need. Although doctoral programs vary in timelines of expected completion, these recommendations could be adapted to fit the needs of many doctoral student preparation programs. For others, it could serve as a model for the development of such a program based on developmental and programmatic need.

Prior to the first week of school, incoming doctoral students would be required to attend a new doctoral student orientation where they would be paired with a faculty mentor and a peer mentor. In alignment with the proposed institutional recommendations, the orientation could include other program disciplines to facilitate peer support and potential interdisciplinary

research relationships (Black & Helm, 2010). If the orientation were just limited to the program department, it would also be beneficial by providing an opportunity for the doctoral students to learn about departmental research practices and mentoring expectations.

The second semester and into the second year would encompass development of the mentoring relationship and subsequent experiences based on the variables such as efficacy, interest, and skill of the doctoral student. Because there is such variability across these domains for each individual it would be imperative that the student be allowed and encouraged to take an active role in the relational and tangible aspects of the research mentoring process. For example, this could include the co-creation of a research study where collaboration with the research mentor and or research team would lead to the development and execution of a study. For some this would also entail the writing of the findings for presentation or publication. The outcome would be developed by the dyad of student and mentor in collaboration. For others, attending writing weekends could create a regular opportunity for scholarly productivity and mentoring (Hill, 2004). Research mentors could include faculty from other institutions with the primary person to be one who is considered to be a trusted mentor (Magnuson et al., 2009). At some point in their program, the doctoral student could choose their research mentor to assume one of the roles in their dissertation experience. These are but a few examples of experiences that could occur at or after the second semester of study. For other doctoral students, their efficacy, individual need, and circumstance could facilitate but not be limited to: co-creation of a research study of a topic of interest to the student, write national, regional, and local conference proposals on topics that are of interest to the student, or assist a faculty member write-up a research grant proposal (Smith et al., 2006).



The third year would continue to expand and increase the amount of research related tasks that the doctoral student will complete. The student could be required to create or co-create a research grant with peer(s) and work with their research mentor for any additional assistance. At this point in their program, the doctoral student may be working on their dissertation. The dissertation should not be the only type of research productivity for the doctoral student such as continuing to present at national, regional, or local conferences. Examples of third year and future year tasks could be but are not limited to: create a qualitative research study, implement the study, and write-up the findings for publication, write-up a national research grant proposal, and begin to or continue to create a specialized research agenda.

### **Discussion**

This article provides several important recommendations grounded in the literature to support doctoral students at the institutional, departmental, and individual levels. In addition, it illustrates recommendations for a formalized mentorship program that could be adapted for many universities to provide a variety of research experiences at the doctoral level (Okech et al., 2006). These recommendations could increase the hands-on experience of doctoral students needed in their first year (Borders, Wester, Fickling, & Adamson, 2014). Additional long-term implications of these recommendations have the potentiality to eliminate some of the struggles that pretenured and tenured faculty members face in academia. Therefore, our profession must continue to explore the research mentoring experiences of students at the doctoral level and of the counselor educator mentors to expand the empirical support for these practices. This could increase the level of productivity of doctoral students, and in turn impact the field of counselor education by further legitimizing and advancing the profession.

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