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Program Experiences Associated with Research Competencies Development of Doctoral-level Scholar-Practitioners in Counselor Education and Supervision Programs

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Program Experiences Associated with Research Competencies Development of Doctoral-level Scholar-Practitioners in Counselor Education and Supervision Programs

Abstract

This study examined how the program experiences of Counselor Education and Supervision doctoral students were associated with their research competency development as scholar-practitioners. Three hundred and thirty doctoral students completed a survey and data were analyzed with a regression analysis. The results demonstrated that program experiences including faculty-mentored research experiences, field-based experience with research application, opportunities to disseminate research, reflecting on identity development, and being in the dissertation phase were significantly associated students' development as scholars. These findings provide implications for program curriculum and intervention development.

Keywords

doctoral education, scholar-practitioner, research competency, counselor education

The Council for Accreditation of Counseling and Related Programs (CACREP, 2015) emphasized scholarly development as part of students' professional identity development, including but not limited to understanding the importance of research for practice and the profession, developing research knowledge and skill (e.g., quantitative, qualitative, and mixed research methods, program evaluation, and analysis), and disseminating research findings. Doctoral students enrolled in CACREP accredited doctoral programs are expected to develop as scholars, becoming 'creators of knowledge' (Gardner, 2008, p. 328; Lamar & Helm, 2017) and think 'like scholar(s)' (Lambie et al., 2014). Unfortunately, some counselor education and supervision (CES) doctoral students are graduating without well-developed scholar identities as part of their overall professional identities (Kaplan & Gladding, 2011). Decades of research have demonstrated that many CES doctoral students are not being adequately trained in research or are disinterested in research (Lambie & Vaccaro, 2011; Okech et al., 2006; Stoltenberg et al., 2000; Wester & Borders, 2014). Despite the plethora of literature on professional identity, little research has focused on doctoral students' scholar identity development (Anekstein & Vereen, 2018; Lamar & Helm, 2017; Reissetter et al., 2004). Moreover, educational practices for research within CES doctoral programs are only beginning to be examined, with a narrow focus primarily on skill development within coursework (Borders et al., 2014; Wester & Borders, 2014).

If CES doctoral students are to become scholars, a comprehensive understanding of their development is needed. Faculty teaching in CES doctoral programs further need to understand program factors that contribute to this development to improve curriculum and opportunities. Thus, the purpose of this correlational study is to examine the association between CES doctoral student's development of research competencies as scholar-practitioners and their experiences in

their doctoral programs. Drawing upon research from the professional doctorate literature, the development of research competencies as a scholar-practitioner in a CES program is defined as:

the process whereby a doctoral student develops a value of research, obtains research knowledge and skill, engages in applying and conducting research, and cultivates relationships with scholars in the field participating in scholarly discussion and dissemination to solve problems, improve practice, advocate for equity and social justice, and to transform the profession. (Rockinson-Szapkiw, 2018, pp. 55-56)

Scholar-Practitioners and Their Research Competencies

“All doctoral programs have in common a structure of formal requirements and informal expectations for students” to become scholars (Golde & Dore, 2001, p. 34). Some research doctorates emphasize scientific inquiry and aim to assist students in becoming independent researcher-scientists who contribute original groundbreaking theory and research. Whereas, professional doctorates emphasize the application of theory and applied research to solve problems of practice (Perry, 2015; Shulman et al., 2006; Southern et al., 2012). The latter programs train students to be scholar-practitioners and promote the development of research competencies to solve problems, improve practice, and advocate for equity and social justice (Perry, 2015; Rockinson-Szapkiw, 2018).

Accrediting bodies and researchers across disciplines have spent a considerable amount of time defining the scholar-practitioner and the research competency related to this identity (American Association of Colleges of Nursing [AACN], 2015; Perry, 2015; Shulman et al., 2006). According to the Carnegie Project on the Education Doctorate Consortium (2009; 2011), the professional doctorate prepares students to conduct and apply research to address professional problems (Maxwell, 2003; Perry, 2012). Through the program, students cultivate a value for

research and its role in improving practice (Perry, 2015; Shulman et al., 2006). Similarly, the AACN (2015) purported the aim of their professional doctorate is to prepare students to provide scientific evidence for nursing practice, utilize research for the improvement and transformation of care, and employ research methods to evaluate programs. In a national conference in which the professional doctorate for psychology (i.e., PsyD) was adopted, Korman (1974) noted that programs should emphasize the highest level of clinical practice and the application of research to evaluate and improve clinical services.

While there are not currently separate classifications for research-focused versus professional-focused doctoral degrees in counseling as there are in other disciplines (e.g., Ed.D. vs. Ph.D. in education; D.N.P. vs. Ph.D. in nursing), the argument has been made for this distinction (Southern et al., 2012). In light of CACREP (2015) emphasizing the importance of scholarly development to improve practice, some counselor educators (Southern et al., 2012) argue that many CES doctoral programs often turn the traditional research paradigm around as doctoral students within these programs are trained to identify problems in their practice and to apply rigorous scientific methods to address the problems. Given that there is often a focus on training CES doctoral students to use research to understand and improve the complexities of clinical practice, this research focuses on the development of CES doctoral students as scholar-practitioners rather than research-scientists.

Rockinson-Szapkiw (2018) proposed that scholar-practitioners need to develop research competencies in five areas during their doctoral programs. These are similar to the abilities and skills Aarons and colleagues (2011) identified in discussing CES doctoral student development, and include (1) a value of research, (2) the ability to evaluate and apply knowledge from empirical sources, (3) knowledge about the research methods and analysis approaches, (4) skills to plan and

conduct a research inquiry in practice, and (5) the ability to disseminate research findings to key stakeholders. Scholar-practitioners have a value of research (Rockinson-Szapkiw et al., 2017), understanding the importance of research in improving practice and promoting social justice. As Aarons et al. (2011) noted, doctoral students in CES programs need to develop skills to evaluate the efficacy of therapeutic interventions. As scholar-practitioners, they need to have knowledge and skills to critique literature and research methods about which they read in empirical studies (Lee et al., 2000; Shulman et al., 2006; Taylor & Maxwell, 2004). Moreover, scholar-practitioners have the competencies to design inquiries and conduct program evaluations to solve clinical problems (Johnson & Hathaway, 2004; Taylor & Maxwell, 2004) and research studies to create evidenced-based approaches (Aarons et al., 2011). Finally, while scholar-practitioners may not seek to publish in peer reviewed journals, they need to communicate their research knowledge and findings to other professionals and stakeholders. Therefore, they have an interest in and engage in the dissemination of research to transform professional knowledge in clinical environments and advocate for social justice (Rockinson-Szapkiw, 2018).

Factors Associated with Scholar-Practitioner Development

Qualitative studies examining the scholar-practitioner development of doctoral students have begun to provide insight into factors associated with this development. Rockinson-Szapkiw et al. (2017), in a grounded theory study, focused on women's identity development as scholar-practitioners in professionally-focused doctoral programs. They concluded that students, through coursework and participation in scholarship (e.g., presenting, writing) with faculty and peers, develop as scholars, which includes developing a value of research, competence in research skills, and confidence to conduct research in practice. Significant factors in solidifying students' development also involved faculty mentorship and integrating the newly formed scholar identity

with other salient identities, supported by Anekstein and Vereen (2018) and Kuo and colleagues (2017). Similarly, in a qualitative study, Baker and Pifer (2014) purported that doctoral students assume scholar identities as part of their professional identities through three stages, (a) knowledge consumption, (b) knowledge creation, and (c) knowledge enactment. “[S]tudents seek legitimacy and membership in the scholarly community by engaging in practices and behaviors learned during their... doctoral training” (Baker & Pifer, 2014, p. 140). That is, developing as a scholar-practitioner is facilitated by engagement in behaviors such as presenting professional workshops, writing research reports for stakeholders, and attending professional conferences. In a phenomenological study, Lamar and Helm (2017) found that CES doctoral students’ research skills and knowledge are developed through course work and may be a part of scholarly development but is not sufficient. They also found that scholar identity is developed through participation in mentored and individual research opportunities. Like Rockinson-Szapkiw et al. (2017), Lamar and Helm (2017) also noted that owning the scholar identity requires CES doctoral students to engage in a struggle to internalize and integrate it with other salient identities (e.g., counselor, mother, women of color). Reissetter et al. (2004), also using a phenomenological approach, examined six CES doctoral students and concluded exposure to a qualitative research course influences identity development as a scholar and competencies as a researcher. Students purported that participating in qualitative research served as a catalyst for viewing research as an integral part of their professional practice. In sum, themes drawn from these qualitative studies suggest that scholar-practitioner identity and research competencies may be developed throughout CES doctoral programs as students participate in research and analysis coursework, engage in scholarly behaviors (e.g. presenting, writing), collaborate on research projects, receive faculty support and mentorship, and struggle to integrate the scholar-practitioner identity with other identities.

However, due to the qualitative nature of these studies, it is difficult to surmise the predicative validity and association that each of these factors may play in the overall research development of a scholar-practitioner in a CES doctoral program. Thus, quantitative research is needed to extend the qualitative findings and to better facilitate scholar-practitioner development in CES doctoral students.

It is also important to note that previous quantitative literature has focused on concepts such as research self-efficacy, research interest, research training environment, and research productivity in counseling and counseling psychology students (Benishek & Chessler, 2005; Kahn & Scott, 1997; Lambie & Vaccaro, 2011), and this research has not necessarily focused on experience or program factors influence on these variables. Studies have primarily focused on the relationship among these variables and their association with faculty mentorship. Moreover, much of the research has been conducted in counseling psychology rather than CES doctoral programs. For example, Kahn and Scott (1997) found doctoral counseling psychology students' research self-efficacy predicted their interest in conducting research. Kahn (2001) later investigated students' self-efficacy and research activity and found a positive association between the variables. Likewise, Lambie and Vaccaro (2011) found CES doctoral students ($N = 89$) with high research self-efficacy were more interested in research and more likely to engage in behaviors such as publishing manuscripts than students with lower self-efficacy. Doctoral students in their third year also had higher research self-efficacy than students in their first and second year. Bard and colleagues (2000) also found an association between doctoral counseling psychology students' research self-efficacy levels and research interest scores. They concluded that "faculty modeling may be crucial to developing and fostering students' research interests" (p. 54). This finding was supported by Love and colleagues (2007) noting that counseling psychology students who have

research mentorship are more likely to engage in research activities than those without such relationships. While these studies provide insight on the factors associated with CES and other doctoral students' research interest, self-efficacy, and productivity, there is a need to understand the association among various program experiences and their ability to predict the development of the student as a scholar-practitioner.

Methods

Research Method and Design

Therefore, this study sought to extend the research and provide further examination of CES doctoral students' research competency development as scholar-practitioners through the employment of quantitative methods. Specifically, a correlational study using a regression analysis was employed to examine the association between CES doctoral students' research competency development as scholar-practitioners and their experiences during their doctoral programs. The following research question was answered, "While controlling for the demographic variables of sex and ethnicity, what CES doctoral students' experiences significantly predict their research competency development as scholar-practitioners?"

Sampling and Procedures

After receiving institutional review board approval, the researchers used snowball sampling to elicit participation from doctoral students enrolled in CES doctoral programs across the United States that noted in their mission statements the aim of developing scholar-practitioners, practitioner-scholars, or expert practitioners. Programs were offered in an online, blended, or in-residence format. Emails were sent to CES program directors and faculty at seven CACREP-accredited institutions; the email requested that the faculty and administrator forward an invitation to students in their programs, which requested student participation in an online survey. The email

also encouraged individuals to forward the invitation to anyone eligible to participate. Invitations were also posted on professional association graduate student listservs, including the Counselor Education and Supervision Network Listserv (CESNET-L) and the American Educational Research Association (AERA). Potential participants used the link embedded in the invitation to access the online survey, consisting of the *Scholar-Practitioner Research Development Scale* (Rockinson-Szapkiw, 2018) and experience and demographic questions.

After completing an informed consent, participants were asked to verify their eligibility to participate in the survey by answering “yes” to the following questions, “I am a doctoral student or candidate who is enrolled in a CES doctoral program that purports a program goal or mission of developing scholar-practitioner who use research to improve practice (rather than research scientists). Or, I am enrolled in a program where the focus is to train students to be scholars of clinical practice and education rather than a research scientist in the academy.” The latter part of this statement was drawn from the work of Southern et al. (2012) who advocated for the professional doctorate in counseling. The survey was open for a period of three weeks in Spring of 2018; three hundred and thirty students participated.

Participants

The participants ($N = 330$) were men ($n = 118$, 35.76%) and women ($n = 212$, 64.24%) enrolled in CACREP-accredited CES doctoral programs. The majority of participants frequently reported being between the ages of 30 to 50 ($n = 231$, 70%). They reported their racial/ethnic identity as White ($n = 225$, 68.2 %), African American ($n = 76$, 23%), American Indian ($n = 7$, 2.1%), Asian ($n = 9$, 2.8%), Hispanic or Latino ($n = 11$, 3.3%), and other ($n = 2$, .6%). The predominately white sample of women is reflective of the demographics of individuals enrolled in CACREP-accredited programs (Shin et al., 2011).

The participants fell into two categories: 1) doctoral students in the coursework phase of their doctoral programs ($n = 190, 57.57\%$) or 2) doctoral candidates ($n = 140, 42.43\%$) working on their dissertations. Two hundred and thirty-one (70%) participants completed a research or analysis course, and a number of them reported having had the opportunity to work with a faculty member to collaboratively investigate a clinical problem through research ($n = 119, 36\%$). Some participants engaged in a field-based experience that required an analysis of a clinical problem and development of an empirical based solution ($n = 146, 44.24\%$). In a comment section on the survey, a number of students noted that they were required to conduct case conceptualization and treatment planning during internship and practicum experiences; however, a review and application of empirical literature was not emphasized or required in their programs. Some students also had the opportunity to disseminate research ($n = 89, 26.96\%$). Providing a rating on a five-point Likert-type scale (i.e., 5= strongly agree), participants reported that they found their program faculty to be supportive in their development as a scholar-practitioner ($M = 4.30, SD = .86$); however, they struggled to integrate their developing scholar-practitioner identity into pre-existing identities (e.g., female, male, professional counselor, etc.) ($M = 4.46, SD = .73$).

Instrumentation

Demographic and Experience Questions

The online survey consisted of questions eliciting general demographics such as age, sex, and race/ethnicity. Participants were also asked to describe their doctoral experience through a series of five questions. Each question serves as a predictor variable in the analysis. They were asked to answer “yes” (dummy coded as 1) or “no” (dummy coded as 0) or on a five-point Likert-type scale (i.e., 5= strongly agree, 4= agree, 3= neutral, 2=disagree, 1=strongly disagree) (see Table 1).

Table 1
Experience Variables

Variable	Question	Response
Collaborative Research Faculty	During my doctoral program, I have collaboratively worked with a faculty member to investigate a clinical problem through research or to implement a program evaluation project	Yes (1) No (0)
Dissemination	During my doctoral program, I have disseminated my work (e.g., literature review, research study) to stakeholders within an organization or to professional counselors through a written report, article, or presentation.	Yes (1) No (0)
Field-based Experience Research Application	During my doctoral program, I have engaged in a field-based experience (e.g., practicum, internship community partnership) that required me to conduct, and in turn apply, a review of literature to solve a problem I identified in practice. I was required to identify a problem, use a review of literature and theory to develop and justify multiple solutions, implement a solution, analyze the solution, and develop a report or presentation about it. Note. This could be a case conceptualization and treatment planning project during an internship that required a review of the literature or creating a professional development program to solve a personnel issue in a practice.	Yes (1) No (0)
Taking a Research or Analysis Course	During my doctoral program, I have taken a research or analysis course.	Yes (1) No (0)
Being in Dissertation Phase Faculty Support	I am currently in the dissertation phase of my doctoral program. I have found my program faculty to be supportive in my development as a scholar-practitioner. That is, in my development of the value of research as a way to solve problems, improve practice, advocate for equity and social justice, and to transform the counseling profession; my research knowledge and skill; and my ability to apply and conduct research in order to participate in scholarly discussion and solve counseling problems I face.	Yes (1) No (0) Strongly agree (5) Agree (4) Neutral (3) Disagree (2) Strongly disagree (1)
Struggling with Identity Integration	As I have developed as a scholar-practitioner through my doctoral program, I have found it difficult to integrate this identity with other salient identities related to my sex, ethnicity/race, profession, etc.).	Strongly agree (5) Agree (4) Neutral (3) Disagree (2) Strongly disagree (1)

Note. This table provides the experience variables from the study, which consisted of five questions that served as predictor variables in the analysis.

SPRD

The *Scholar-Practitioner Research Development Scale* (SPRD; Rockinson-Szapkiw, 2018) is a 24-item measure that was used to assess doctoral students' research competency development of scholar-practitioners,

which is inclusive of the attitudes (e.g., view, evaluation), knowledge (e.g., know, understand), skills (e.g., ability, capability), and behavior (e.g., action) to apply, conduct, and disseminate research appropriately and effectively to solve problems of practice, to improve practice, and to advocate for social justice and equity. (Rockinson-Szapkiw, 2018, p. 74)

The assessment consists of five subscales: (a) value of research, (b) evaluation and application skills, (c) research knowledge, (d) research skills, and (e) research dissemination. However, in this study, only the composite score was analyzed. Averaged scores on the overall scale ranged from one to five, with higher scores indicating better research development as a scholar-practitioner. Participants responded to the items using a five-point Likert scale (e.g. 1 = strongly disagree to 5 = strongly agree). Example questions from the measure include, "I can evaluate empirical resources to solve problems in my professional practice." and "I can develop implications for practice based on the results of a research investigation I conduct." Rockinson-Szapkiw (2018) reported the SPRD to have strong internal reliability with a Cronbach's alpha of .93 with construct and content validity. Cronbach's alpha for the current study was .92.

Results

A hierarchical multiple regression (HMR) was used to examine the association between counseling doctoral students' research development as scholar-practitioners and their experience in their doctoral program. Sex and racial/ethnic identity served as control variables. This analysis was chosen because the researchers wanted to understand the relationship between program factors and research development (Warner, 2013). The score on the SPRD served as the criterion variable. Support of faculty, struggle with identity integration, conducting collaborative research with faculty, field-based experience with research application, dissemination, taking a research or analysis course, and being in the dissertation phase were considered experience variables and served as the predictor variables. The demographic variables of sex and race/ethnicity served as control variables. Descriptive statistics for the predictor, control, and criterion variables are reported in Table 2.

Table 2
Descriptive Statics for Variables

Variable	<i>M</i>	<i>SD</i>
SPRD (Criterion Variable)	4.43	.38
Support of Faculty (Predictor Variable)	4.30	.86
Struggle with Identity Integration (Predictor Variable)	4.46	.73
	Yes	No
Race/Ethnicity (White) (Control Variable)	225 (68.2 %)	106 (31.8%)
Sex (Female) (Control Variable)	212 (64.24%)	118 (35.76%)
Collaborative research with faculty (Predictor Variable)	119 (36%)	210 (74%)
Dissemination (Predictor Variable)	89 (26.96%)	240 (73.04%)
Field-based Experience with Research Application (Predictor Variable)	146 (44.24%)	183 (57.76%)
Taking Research or Analysis Course (Predictor Variable)	231(70%)	99 (30%)
Being in Dissertation Phase (Predictor Variable)	140 (42.43%)	190 (57.57%)

Note. This table provides descriptive statistics for the predictor, control, and criterion variables. SPRD = *Scholar-Practitioner Research Development Scale score.*

The results of the correlation analyses demonstrated (e.g., Pearson's *r*, point-biserial correlation) that a significant association existed between each predictor or control variable and the criterion variable (see Table 3). While most of the bivariate correlation coefficients between

the predictor variables were significant, the majority had small to moderate effect sizes based on Cohen's (1992) conventions, indicating that multicollinearity was not a problem.

Table 3

Correlation Matrix

	1	2	3	4	5	6	7	8	9	10
1	-	.140*	.020	.604**	-.358**	.342**	.321**	.373**	.133*	.177**
2	-	-	.060	.076	.042	.063	.063	.076	.009	.078
3	-	-	-	.020	-.042	.058	-.031	-.038	-.024	.137*
4	-	-	-	-	-.209**	.123*	.194**	.151**	-.037	-.036
5	-	-	-	-	-	-.092	-.037	-.127*	-.039	-.113*
6	-	-	-	-	-	-	.338**	.330**	.318**	.424**
7	-	-	-	-	-	-	-	.361**	.065	.047
8	-	-	-	-	-	-	-	-	.137*	.173**
9	-	-	-	-	-	-	-	-	-	.563**

Note. This table provides the results of the correlation analysis; a significant association existed between each predictor or control variable and the criterion variable. 1=SPRD (Criterion Variable), 2= sex (female), 3=race/ethnicity (White); 4 = Support of Faculty, 5 = Struggle with Identity Integration; 6 =Collaborative Research with faculty; 7= Dissemination; 8 = Field-based Experience with Research Application; 9 = Taking a Research or Analysis Course; 10 = Being in Dissertation Phase.

* Correlation is significant at the 0.05 level

** Correlation is significant at the 0.01 level

Prior to conducting the HMR, assumption testing was completed. No major assumption violations were found, indicating that the HMR was an appropriate analysis to analyze the data set. When examining the demographic variables of sex and race/ethnicity, results of the HMR indicated that the linear combination of these variables (Model 1) significantly predict CES doctoral students' development as scholar-practitioners, $R^2 = .019$ (adjusted $R^2 = .013$), $F(2,327) = 3.17$, $p = .04$. Sex made an individual significant contribution in explaining the variance in this development, $p = .014$. That is, men ($M = 108.22$, $SD = .95$) tended to report better research development as scholar-practitioners than women ($M = 105.08$, $SD = .76$).

When the experience variables were considered in addition to the demographic variables, the HMR results demonstrated that the linear combination of all the variables (Model 2) provided a better predictive model than the demographic variables alone. The demographic and experience variables significantly predicted CES doctoral students' development as scholar-practitioners, $R^2 = .551$ (adjusted $R^2 = .538$), $F(9,230) = 43.58$, $p > .001$. Moreover, the addition of experience variables to the model led to a statistically significant increase, R^2 change of .532, $F(7,320) = 54.10$, $p < .001$. While the first model (Model 1) explained 1.9% of the variability in students' development as scholar-practitioners, the second model (Model 2) explained 55.1 % of the variance in this criterion variable. Table 4 demonstrates that each experience variable, with the exception of taking a research or analysis course, made significant individual contributions to the model explaining the variance in a doctoral students' research development as a scholar-practitioner. Working with a faculty member on a research project, disseminating research, and participating in a field-based experience that required research application improved the likelihood CES students would develop the research competencies of a scholar-practitioner during their doctoral programs. Participating in the dissertation process also helped students in this

development process. Moreover, the significant positive association between the faculty support variable and the criterion variable, indicates that the more support students perceive they receive from faculty, the better their development. Whereas, the significant negative association between the identity struggle variable and the criterion variable indicated that the more students struggle to integrate the developing scholar-practitioner identity with other salient identities, the poorer their research development.

Table 4

Individual Contributions of Predictor Variables (N= 330)

Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>	<i>p</i>	Zero-order	Part
Sex	1.22	.86	.05	1.41*	.04	.13*	.05
Race/Ethnicity	.15	.90	.00	.17	.86	.02*	.01
Support of Faculty	7.56	.59	.50	12.79*	>.001	.61*	.47
Struggling with Identity Integration	-2.88	-.50	-.22	-5.76*	>.001	-.35*	-.21
Collaborative Research with Faculty	2.32	1.02	.10	2.27*	.02	.34*	.08
Dissemination	2.61	1.02	.10	2.55*	.01	.31*	.09
Field-based experience with Faculty	3.63	.91	.16	3.97*	>.001	.37*	.14
Research Application							
Taking Research or Analysis Course	.55	1.10	.02	.51	.61	.12	.01
Being in Dissertation Phase	2.70	1.09	.12	2.47*	.014	.17*	.09

Note. This table demonstrates that each experience variable, with the exception of taking a research or analysis course, made significant individual contributions to the model explaining the variance in a doctoral students' research development as a scholar-practitioner. B = unstandardized beta, SE B = standard error for B , β = standardized beta, t = t-test statistic, p = probability value.

* significant at the 0.05 level.

Discussion

The findings of this study cohere with and extend the previous qualitative research (e.g., Lamar & Helm, 2017; Reisetter et al., 2004; Rockinson- Szapkiw et al., 2017) that suggested internalizing and integrating identities, exposure to research opportunities, and faculty support are imperative for scholar-practitioner identity development. In this study, predictors examined included the experience variables of (a) collaborating with a faculty on a research project; (b) disseminating research; (c) participating in a field-based experience that required application of empirical research; (d) taking a research or analysis course; (e) working on the dissertation; (f) receiving support of faculty; and (g) struggling to integrate the developing scholar-practitioner identity into pre-existing identities (e.g. female, male, professional counselor, etc.); the control demographic variables examined included (a) sex and (b) racial/ethnicity. When examining the control variables, results indicated the model containing the two variables significantly predicted CES doctoral students' research competency development as scholar-practitioners. Sex significantly and individually contributed to the variance in development. Men tended to report better research development as scholar-practitioners than women. This is not surprising as research (Alexander-Albritton & Hill, 2015; Trepal & Stinchfield, 2012) clearly documents that women "face more difficulty balancing family commitments, academics, work, and personal lives, as well as have less satisfaction in their ability to balance work and life" (Stimpson & Filer, 2011, p. 69). They often feel guilty and struggle to integrate their scholarly identity with their identities as

mothers, daughters, and wives as social and cultural norms often dictate these identities as incongruent (Rockinson- Szapkiw et al., 2017; Stimpson & Filer, 2011). These results may also be explained by the “confidence gap,” in that, men appear to be more confident than women in their competencies related to research, math, and science (Eccles, 1994).

When the experience variables were analyzed in addition to the demographic variables, the results demonstrated that the entire model consisting of the experience variables significantly predicted CES doctoral students’ research competency development as scholar-practitioners. Moreover, each experience variable, with the exception of taking a research or analysis course, made significant individual contributions in explaining the variance in doctoral students’ development. The non-significant individual contribution of the coursework variable affirms Lamar and Helm (2017) conclusion that research and analysis coursework alone are not sufficient if students are going to transform into scholars. Doctoral students need to have additional systematically planned research opportunities throughout their programs (Anekstein & Vereen, 2018). The findings of this study demonstrated that this includes working with faculty members on research projects, perceiving faculty as supportive of scholar-practitioner development, disseminating research, and having field-based opportunities to identify problems and apply empirical-based solutions. Additionally, this research supports previous research (Lamar & Helm, 2017; Rockinson-Szapkiw et al., 2017) demonstrating that the owning the scholar-practitioner identity is related to integrating it with other salient identities (e.g., counselor, mother, women of color) and working on a dissertation increases the likelihood students develop the research competencies of scholar-practitioners.

Implications

The research findings provide implications for CES doctoral faculty. Lovitts (2008) and Okech et al. (2006) suggested that doctoral students' success, including their development, is partially dependent upon the program and its faculty. Other researchers have purported that doctoral faculty are vital in doctoral students' transition from student to scholar-practitioners (Barnes et al., 2010; Halse & Malfroy, 2010; Kuo et al., 2017; McAlpine & Amundsen, 2012). Thus, faculty have the responsibility to employ strategies, mentor, and design curriculum to promote scholar-practitioner development (Borders et al., 2012). The present study findings support the planning and implementation of specific research experiences in CES doctoral programs that focus on scholar-practitioner development.

Faculty may design courses to promote research skill and knowledge. However, the current findings, in alignment with previous research (Gelso & Lent, 2000; Lamar & Helm, 2017), suggest that building research skill and knowledge through course work may not be sufficient for promoting the research development of scholar-practitioners. Faculty in CES doctoral programs cannot, as some have done in the past (Borders et al., 2014), rely solely on research courses to support scholar-practitioner development among their students. Additional research experiences, planned and provided in a developmentally appropriate manner (e.g., Anekstein & Vereen, 2018; Borders et al., 2014; Briggs & Pehrsson, 2008; Gelso, 2006; Kuo et al., 2017) are needed. This involves faculty inviting students to participate in faculty-led applied research projects. To ensure all students have the opportunity to engage in a faculty-led research project, program faculty may consider adding a context analysis and problem-solving research course requirement to the curriculum. Within the course, comprised of five to eight students, one faculty member can guide students through a semester long research project to solve a problem in a local practice or investigate a counseling intervention. A scholarly community requirement (e.g., Amrein-

Beardsley et al., 2012; Olson & Clark, 2009) could also be part of the CES doctoral program, in which students are required to participate in a community led by their faculty advisor, where they meet regular (e.g., twice a semester) with the faculty and other advisees to develop research and inquiry ideas for dissertation as well as support each other cognitively, socially, and emotionally.

Findings also suggest that faculty need to intentionally design assignments within practicum and internship courses that require students to construct and apply empirical knowledge to not only cases but other problems identified in practice. Solutions based on empirical knowledge then need to be implemented and evaluated, so students develop a value of research for making a difference in the lives of their clients, for whom they serve, and their organizations. CES doctoral students should also be encouraged and mentored by faculty to write about research and present it to stakeholders, at conferences, and in workshops (Anekstein & Vereen, 2018; Borders et al., 2014; Briggs & Pehrsson, 2008; Kao et al., 2017). Writing and presenting can be integrated into the curriculum as course assignments or be integrated into program required professional development plans that each student creates to map out their professional development through the program. An annual program research conference may also be developed (Mertler & Henriksen, 2018), in which first and second year students have the opportunity to describe research in which they have been involved or ideas for dissertation research. At these annual events, third year students could present their dissertation proposals or findings. It is also important for faculty leading students in research projects and through the dissertation process to remember to show overt support through verbal encouragement and questions, and timely feedback.

Finally, the findings indicate that time for deep reflection on scholar-practitioner identity development and its integration with other identities is vital. This may be especially important for women who often struggle with integrating various identities (Rockinson-Szapkiw et al., 2017;

Stimpson & Filer, 2011) and, according to this study, are less likely than men to report development of research competencies as a scholar-practitioner. Unfortunately, graduate and doctoral students are not often prompted to or provided with the opportunity to do this (Austin, 2002; Lamar & Helm, 2017), so faculty need to be intentional to assign identity reflections using strategies such as online discussions, journaling, and group sessions. According to Gelso and Lent (2000) and Gelso (2006), faculty can also take time to openly share about their own identity development as their openness serves as a model and impetus for doctoral students' reflection during their training, and thus, their development as a practitioner-scholar.

Limitations and Future Research

While this study provides insightful findings and implications for CES doctoral faculty and their role in supporting their doctoral students, it is important to acknowledge that this is a correlational study. Thus, only associations among variables can be asserted. Further research is needed to examine the cause-and-effect relationship between specific experiences and the development of research competencies of scholar-practitioners. In future research, experiences should be designed using best practices and instructional design principles. Then, experimental studies need to be developed to examine their efficacy for developing research competencies.

Additionally, it is acknowledged that the research competency development of scholar-practitioners was measured using a self-report instrument. When assessing traits or experiences, participants, as indicated by the relatively high mean score, may have had the tendency to skew responses to avoid negative judgments or even simply agree with the statements more often than they disagree (Couch & Keniston, 1960). The results could be biased, and thus, future research should explore ways to more objectively measure the research competency development of scholar-practitioners. Future research may also consider the differences in development based on

gender and medium of program delivery (e.g. online, residential, or blended). It is important to continue to explore various ways that research competencies and, ultimately, the scholar-practitioner identity development of diverse populations of CES doctoral students can be supported.

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