

2019

Determining Mentoring Needs in Counselor Education Programs

Marcella D. Stark

Texas Christian University, m.stark@tcu.edu

Jennifer N. Boswell

University of Houston-Victoria, boswellj@uhv.edu

Angie D. Cartwright

University of North Texas, angie.wilson@unt.edu

Anthony J. Onwuegbuzie

Sam Houston State University, tonyonwuegbuzie@aol.com

Follow this and additional works at: <https://repository.wcsu.edu/jcps>



Part of the [Higher Education Commons](#), and the [Student Counseling and Personnel Services Commons](#)

Recommended Citation

Stark, M. D., Boswell, J. N., Cartwright, A. D., & Onwuegbuzie, A. J. (2019). Determining Mentoring Needs in Counselor Education Programs. *The Journal of Counselor Preparation and Supervision*, 12(1). Retrieved from <https://repository.wcsu.edu/jcps/vol12/iss1/9>

Determining Mentoring Needs in Counselor Education Programs

Abstract

This article describes the development and initial score validation of the Mentoring Needs in Counselor Education Scale (MNCES), designed to evaluate the mentoring needs of counselor education students and pre-tenured faculty. Exploratory factor analysis ($n = 278$) yielded a 32-item, five-component solution with strong score reliability as indicated by Cronbach's alpha values above .70: Career and Professional Development (.82), Research and Scholarship (.86), Growth and Support (.83), Multicultural and Environmental Issues (.84), and Practitioner Role (.72). The MNCES provides a tool for facilitating conversations regarding mentorship expectations between mentees and mentors in the field of counseling.

Keywords

mentoring needs, exploratory factor analysis, pre-tenured faculty, graduate students, counselor education

Mentoring is commonly used in many professional fields and higher education institutions as a means to connect those who are seasoned and knowledgeable in their prospective fields with new and upcoming professionals to promote career identification, development, and growth (Healy & Welchert, 1990). In the field of counseling, a mentor is described as “someone with experience and expertise in the counseling field who is willing to share knowledge and offer advice to foster professional development” (American Counseling Association [ACA], 2012, p. 68). Counselor educators are increasingly using and promoting mentoring relationships to help guide students, at both master’s and doctoral level, and new faculty members toward their professional and career goals. Over the past decade, research has begun to emerge about the need for and effectiveness of mentoring within counselor education programs in the United States (Buyukgoze-Kavas, Taylor, Neimeyer, & Güneri, 2010; Hammer, Trepal, & Speedlin, 2014; Lazovsky & Shimoni, 2007). In an effort to improve mentoring effectiveness, the purpose of this study was to develop a mentoring instrument that could assist mentors in better understanding and evaluating the specific needs of counselor education mentees at the master’s, doctoral, and pretenured faculty levels.

Review of Relevant Literature

In her seminal work, Kram (1985) identified two overarching functions stemming from the mentoring relationship: career and psychosocial domains. Kram suggested that the career domain is focused on career advancement and development along with skills needed to understand and to navigate professional climate and politics through the use of coaching, networking, exposure and visibility, and protection. Mentoring goals for this domain usually include: (a) skill enhancement and movement towards application of theory and knowledge to practice within the mentee’s chosen profession, (b) development of professional attitudes and identity, (c) mentee self-sufficiency and critical problem-solving skills, and (d) networking with other professionals (Ngara

& Ngwarai, 2012). In the psychosocial domain, Kram suggested that time be spent focused on the mentee's perceived roles and relationships within the profession via role modeling, friendship, and counseling interventions (Higgins & Kram, 2001). Accordingly, the more the mentor is able to address each of these domain functions, the more beneficial and helpful the mentoring relationship will be for the mentee (Chao, Walz, & Gardner, 1992).

Benefits of mentoring include: (a) a strengthening of communication, (b) critical thinking, (c) profession-specific skills, (d) a greater understanding of professional identity, and (e) an increased satisfaction with one's chosen degree and career path (Holland, Major, & Orvis, 2012; Taylor & Neimeyer, 2009; Vespia, 2006). Benefits to mentors include an enrichment of their own professional careers and research interests, the development of a new colleague with whom to collaborate, and "working with a person that has the potential to carry on the mentor's legacy" (Black & Zullo, 2008, p. 298).

Mentoring in Counselor Education

In the counselor education field, researchers and educators have begun to recognize the importance of the mentoring relationship and the impact that it has upon student growth. Mentorship programs are now seen at both the master's and doctoral levels to help students toward their career goals and aspirations. Both formal and informal mentoring programs and relationships are becoming more common in graduate counseling programs (Briggs & Pehrsson, 2008; Lazovsky & Shimoni, 2007; Rheineck & Roland, 2008; Taylor & Neimeyer, 2009), and the Council for Accreditation of Counseling and Related Educational Programs (CACREP, 2016) now requires counselor educators to address the role and use of mentoring in counselor education. In many counselor education programs, mentors are assigned to students through formal mentoring programs and initiatives, but students also may seek out more informal mentoring relationships

with other faculty members to which they have connections via similar personalities and career interests (Boswell, Wilson, Stark, & Onwuegbuzie, 2015). These formal and informal mentoring relationships can be especially helpful for students and faculty of color who face significant barriers and obstacles to completing their degrees and obtaining employment (Grant, 2012; Grant & Ghee, 2015).

Whereas much of the literature has focused on the benefits and functions (Briggs & Pehrsson, 2008; Farrell, 2007; Haizlip, 2012; Hill, 2004; Lechuga, 2011; Magnuson, Norem, & Lonneman-Doroff, 2009; Warren, 2005; Wilde & Schau, 1991) of mentoring in the counseling field, the research team identified only one research study that focused on what mentees in the counseling field need from their mentors. Specifically, in their qualitative research study, Boswell et al. (2015) explored the experiences and narratives of 30 counselor education students and pre-tenured faculty members and identified key mentoring needs for each of three developmental groups (master's, doctoral, and pretenured faculty). Boswell et al.'s (2015) findings echoed previous counselor education mentoring researchers. The mentor characteristics identified by the counselor education participants (i.e., being accepting, supportive, and encouraging) were similar to the mentor role suggested by Black and Zullo (2008).

Mentorship of master's-level counseling students. Developmentally, mentoring serves as a framework that helps novice counselors and students to attain the specific skills, knowledge, and professional identity needed to be successful (Brown, Daly, & Leong, 2009). For example, mentorship of master's-level students involves the development of core counseling and therapeutic alliance skills that allow students to develop meaningful relationships with their clients as they join with the client to facilitate positive growth and movement toward the client's identified counseling goals. As master's-level counseling students are being prepared for licensure to

practice in a multitude of settings such as community agencies, hospitals, K-12 schools, college and university settings, and private practice, mentorship should have a focus on the development of professional skills needed to be successful and effective in these settings.

According to Boswell et al. (2015), master's-level mentees identified their needs as having a mentor who was: (a) approachable, (b) encouraging and providing of advice and feedback, (c) suggesting of professional opportunities and resources that would help the mentee develop as a counselor, and (d) using an individual approach to mentorship. In contrast to the master's-level mentees' expressed needs of support and guidance for opportunities and resources, doctoral-level and pretenured faculty mentees desired more specific answers, advice, and direction from a mentor or multiple mentors. Further, Lazovsky and Shimoni (2007) reported that master's-level counseling interns desired mentors who were perceived as experienced, knowledgeable, and "well-established" professionals who were willing to be available to the mentee, provided helpful feedback and guidance, and cared about the mentee (p. 310).

Mentorship of doctoral level counseling students. Mentorship of doctoral-level students is tailored to the unique career needs and professional skills needed to work in counselor education training programs (Farrell, 2007; Magnuson et al., 2009), specifically guiding the mentee to find answers to questions surrounding research, scholarship, teaching pedagogy and skills, and navigating the employment and political climate of higher education (Boswell et al., 2015). Although academe is only one of many career options afforded to doctoral graduates, much of the mentorship literature has focused on the benefits and use of mentorship in educational settings, including preparing doctoral students to work in academic settings (Yob & Crawford, 2012). Sweitzer (2008) corroborated the view that mentorship of doctoral students prepares the mentee for their work in all aspects of their professional roles. Generally speaking, mentorship of doctoral

students aids the student in obtaining positive professional outcomes such as promotions, wage increases, and overall job satisfaction. Other authors point to the fact that doctoral student mentors not only prepare mentees for academic roles, but also they aid in general professional development and support via writing letters of recommendation and access to professional networks and organizations, as well as role-modeling appropriate professional behavior (Burgess, 2007; Davis, 2007; White & Tryon, 2007).

Murdock, Stipanovic, and Lucas (2013) examined the use of co-mentoring in counselor training programs. Their findings suggested that those doctoral students who became mentors for master's-level counseling students reported higher levels of professional identity, strengthened leadership skills, and stronger collegial relationships with other professionals and students. These skills then were transferrable not only to settings academic but also to other professional settings such as leadership and supervisory positions.

Mentoring during a graduate program leads to positive professional outcomes of scholarly productivity and the receipt of awards and honors (Buyukgoze-Kavas et al., 2010), as well as greater satisfaction with the educational training program (Clark, Harden, & Johnson, 2000). In addition to the benefits for students, new counselor educators also might reap many benefits of mentoring through increased productivity in scholarship and research (Lechuga, 2011) and understanding the process of tenure and promotion (Briggs & Pehrsson, 2008).

Mentorship of pretenured faculty in counselor education. Boswell et al. (2015) documented that pretenured faculty mentees preferred mentors who are approachable, personable, and willing to provide direct and honest feedback. Both doctoral-level students and pretenured faculty additionally preferred mentors who serve in dual roles (e.g., the mentor also served as the faculty member's department chair or the doctoral student's professor) because the dual role

created more opportunities for learning. Consistent with Boswell et al.'s discovery of doctoral students' and pretenured faculty's need for specific direction, Trepal and Stinchfield (2011) noted the importance for mentors to provide support and encouragement for women counselor educators, as well as women doctoral students preparing to enter the profession as faculty members, as they learned to balance family and professional responsibilities.

Mentoring Instruments

To date, two instruments have been created by counseling psychologists to measure mentoring relationships for students currently in counseling psychology programs. These two instruments, the Advisory Working Alliance Inventory (AWAI; Schlosser & Gelso, 2001) and the Research Mentoring Experiences Scale (RMES; Hollingsworth & Fassinger, 2002), were developed to measure the helpfulness of the overall mentoring relationship and the efficacy of a research mentor, or advisor, on student research self-efficacy and productivity from the student mentee's perspective. The AWAI was structured after Efstation, Patton, and Kardash's (1990) Supervisory Working Alliance Inventory (SWAI). Similar to the SWAI, the AWAI focuses on the three factors of rapport, identification, and task focus, all of which guide the working alliance.

The RMES is modeled after a similar instrument created for business education programs (see Noe, 1988) and consists of two subscales originating from Kram's (1985) seminal work: Psychosocial Mentoring and Career Mentoring. Both the AWAI and RMES focus on students at the doctoral level and the impact that mentoring has on the student mentee's level of understanding of research components, analyses, and findings. However, neither instrument allows for use with master's-level students. Additionally, both instruments were designed to be used to determine the effectiveness of the mentoring relationship on achievement and/or self-efficacy upon termination

of the mentoring relationship, rather than identifying and understanding the specific needs of the mentee before initiation of the mentoring relationship.

In 2002, Hollingsworth and Fassinger noted:

Further efforts to develop and refine instruments to assess faculty mentoring are particularly needed. Several well-established instruments that describe the mentoring relationship and mentoring roles for both the mentor and mentee exist in business settings, but few attempts have been made to create comparable measures for academic settings. (p. 329)

Currently, there are two mentoring instruments specifically designed to evaluate a mentor's role and function within counselor education programs: (a) the Mentor Functions Scale (Black, 1998) and (b) the Mentoring Function Scale (MFS), originally created by Noe (1988) for business settings; later modified by Tepper, Shaffer, and Tepper (1996) for educational settings; and most recently, modified for use in counselor education by Farrell (2007). The scales of both Black (1998) and Farrell (2007) featured the functions of mentoring rather than the needs of mentees, and both studies included only doctoral-level student participants. Surprisingly, the research team found no instruments that specifically address the mentoring needs of graduate students and/or pretenured faculty within the counselor education field. Therefore, the researchers sought to fill this void by developing a mentoring instrument that could be used by counselor education mentors better to understand and to evaluate the specific needs of mentees at the master's, doctoral, and pretenured faculty level. Although the developmental needs of each group are distinctively different, much overlap exists with regards to mentorship and matriculation through counselor education and the counseling profession (Boswell et al., 2015).

The research serves as a first step toward the development of a scale to measure the mentoring needs of individuals studying and working in counseling programs. After additional investigation, it is the research team's hope that the Mentoring Needs in Counselor Education Scale (MNCES) may become an evaluative tool for counselor education mentors to identify the specific needs of their mentees. In its current form, the researchers offer it as a tool for facilitating discussion between mentors and mentees, so that expectations of all parties may be more fully addressed and made clear. The research questions were as follows: (a) What items yield valid scores for measuring the mentoring needs of students and pre-tenured faculty in counseling programs? and (b) What is the factor structure of the MNCES?

Method

Participants

Participants ($N = 278$) were master's- and doctoral-level students and pretenured faculty in counselor education programs across the United States. This number exceeds Comrey and Lee's (1992) minimum sample size of 200 for conducting an exploratory factor analysis, and it was within the recommended minimum sample size ranging between 150 and 250 that Hogarty, Hines, Kromrey, Ferron, and Mumford (2005) identified from an extensive review of textbooks and research articles wherein an exploratory factor analysis was used. Participants ($N = 278$) comprised master's- ($n = 176$; 63.3%) and doctoral-level ($n = 51$; 18.3%) students and pretenured faculty ($n = 50$; 18%) in counselor education programs across the United States. One participant did not report educational status. Because chain sampling (i.e., recruitment emails with survey link were forwarded by department and program chairs) and recruitment via listserv were used, a response rate could not be calculated. Although mentoring needs might differ to some degree based on developmental level, the research team inferred from earlier research (see Boswell et al.,

2015) that many mentoring needs are applicable to both graduate students and pretenured faculty. The largest percentage of participants resided in the Southern Association for Counselor Education and Supervision (SACES) region (44.6%), followed by North Atlantic (20.5%) and North Central (14.4%) regions. Of the 50 faculty participants, nine faculty members previously had worked in a tenure-track position at another institution. More than one half (51.4%) of the participants reported being in a CACREP-accredited program; 29.5% reported being in a non-CACREP program, and 19.1% were not sure. Awareness of CACREP status was less clear among the master's-level participants ($n = 48$) than among the doctoral-level ($n = 3$) and faculty ($n = 2$) participants.

The majority of participants identified themselves as being women (84%) and White (65.8%). The remaining ethnic groups comprised Black (14%), Latino/a (6.8%), Asian/Pacific Islander (5%), Multiple Heritage (5.4%), and Native American (1.4%) individuals; three participants listed "Other" or did not respond. Further, the distribution of their age ranges was as follows: 21-29 (35.6%), 30-39 (27%), 40-49 (10.8%), 50-59 (2.9%), and 60-69 (1.4%). Two participants declined to provide their age ranges. More than 45% of the participants reported being married or partnered, and 28.9% of participants reported having children under their care.

Instrument and Procedure

Onwuegbuzie, Bustamante, and Nelson's (2010) Instrument Development and Construct Validation (IDCV) process served as the framework for this study. To conceptualize the construct of mentoring needs (Phase 1), the researchers conducted a review of the mentoring literature in counselor education as well as in other disciplines in academe. The literature review informed the creation of a list of 56 mentoring needs (Phase 2). The research team developed items for the initial instrument using this list (Phase 3). Then, the research team obtained feedback from a panel of seven experts who had multiple publications related to mentoring to establish construct-related

validity, as well as to ensure that the items were culturally sensitive. Based on feedback that some items included two different needs, the researchers increased the instrument to 59 items, and piloted the instrument (Phase 4) to a sample of 42 participants (i.e., 24 master's-level students, 12 doctoral students, and 6 untenured faculty).

Pilot participants were provided instruction to indicate the importance of each mentoring need using a Likert-format rating scale (i.e., non-issue, important to some of my peers but not to me personally, somewhat important, very important). In addition to responding to the items themselves, the pilot participants provided feedback on the esthetics of the instrument, clarity of instructions, length of time needed, and relevancy and cultural appropriateness of items. Based on the pilot feedback, the researchers reduced the number of items to 35 and revised the instrument for field testing (Phase 5). Due to the length of time needed for items on the pilot survey, the research team decided that a shorter survey would be more likely to be completed by research participants and more valuable for future use. Worthington and Whittaker (2006) recommended that researchers limit efforts toward convergent validity in early stages of development and advised researchers to keep the survey length as short as possible. The pilot participants found some of the items to be confusing (e.g., *finding collaborators for community engagement, facilitates interpersonal reflection*) or too broad (e.g., *navigating politics, resolving conflicts with colleagues and/or administrators*). These and other removed items (e.g., *is a particular sex, shares opportunities to gain clinical experience, obtaining grants for research*) had a low relevance average compared to other items.

After identifying universities that offered both a master's and a doctoral counselor education program listed in the CACREP directory, an Internet search was conducted to identify non-CACREP counseling programs from the same geographic regions. Upon reviewing

procedures for appropriate research standards and receiving approval from the lead researcher's institutional review board, the researchers asked counselor education department chairs and/or program directors from the identified programs to forward an email to their students. The emailed message asked for their participation and provided a link to the MNCES, which had been created via the Qualtrics™ (2015) online software program. The researchers reviewed each program's website to identify assistant professors (i.e., pretenured faculty) and sent similar recruitment emails directly to potential faculty participants in an effort to avoid any coercion by those making tenure decisions. Pretenured faculty also were recruited via the CESNET listserv for counselor educators. As an incentive to participate, all participants who provided an email contact were entered into drawings for 16 Amazon gift cards. Gift cards in the amount of \$50 were awarded to student participants (6 master's- and 6 doctoral-level, respectively), and \$100 gift cards were awarded to four faculty participants. Finally, the researchers conducted statistical analyses to score-validate the revised instrument (Phase 6).

Data Analysis

All data were directly downloaded from the Qualtrics™ program into SPSS for analysis. The researchers first viewed descriptive statistics for each item (e.g., mean, mode, skewness, kurtosis), as well as item-to-item correlations. The last item (*One mentor is insufficient. I need access to multiple mentors to provide guidance in different areas*) was determined to be inconsistent with other items (i.e., the item was not an actual need) and removed from further analysis. Based on a noted negative skew (i.e., violation of the normality assumption), the research team used a principal axis factoring method of extraction to conduct an exploratory factor analysis (EFA) on the remaining 34 items. Following Tabachnick and Fidell's (2007) recommendations for determining a rotation strategy, the researchers began with an oblique (i.e., oblimin with Kaiser

normalization) rotation and kept it after noting four factor intercorrelations above .32. The correlation matrix of extracted factors is presented in Table 1. A review of inter-item correlations further supported this decision. A parallel analysis (O'Connor, 2000) was conducted to determine the number of factors to retain and compared to the initial scree test. The researchers identified pattern coefficients of .32 or higher, also in keeping with Tabachnick and Fidell's (2007) recommendations, and interpreted the factors conceptually. Upon removing two items, a second EFA was conducted using the same parameters to confirm the same factor structure. Each factor was statistically assessed using Cronbach's alpha as an indicator of score reliability.

Table 1
Intercorrelations Between Factors and Means and Standard Deviations

Factor		# of items	<i>M</i>	<i>SD</i>	1	2	3	4	5
1. Career Professional Involvement	and	8	25.16	4.86	---	---	---	---	
2. Research Scholarship	and	6	19.12	3.99	.054	---	---	---	
3. Growth and Support		6	21.94	2.65	.375	.126	---	---	
4. Multicultural Environmental Issues	and	7	20.09	5.10	.354	.073	.231	---	
5. Practitioner Role		5	13.39	3.79	-.320	-.339	-.223	-.296	---

Results

Given the lack of previous research measuring the mentoring needs of counselor education students and faculty, the researchers deemed exploratory factor analysis to be the most appropriate first step. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was .84 (which exceeded the acceptable limit of .5; Field, 2009), and Bartlett's test of sphericity ($X^2[561] =$

4,400.03) indicated a statistical significance level of $p < .001$, meeting the minimum standard for an exploratory factor analysis (UCLA Institute for Digital Research and Education, n.d.).

Eight factors had eigenvalues above 1.0 (Kaiser, 1958): 8.35, 3.40, 2.67, 1.92, 1.55, 1.33, 1.23, and 1.14, respectively, and accounted for 65.25% of the variance. However, retaining all eight factors could produce an overestimate due to sampling error (Dimitrov, 2012). Moreover, the parallel analysis indicated a five-factor structure, which fit the number of factors indicated by the scree plot. The five-factor structure explained 47.1% of the variance, which is lower than the percentage explained with similar instruments (e.g., 57% for AWAI, 56% for MFS). The five factors were labelled as follows: *Career and Professional Involvement* (8 items, explaining 23.00% of the variance); *Research and Scholarship* (6 items, explaining 10.41% of the variance); *Growth and Support* (6 items, explaining 6.42% of the variance); *Multicultural and Environmental Issues* (7 items, explaining 4.17% of the variance); and *Practitioner Role* (5 items, explaining 3.11% of the variance). All five items contained in the *Practitioner Role* factor represented a negative pattern and structure coefficients, whereas all other items in the remaining four factors had a positive pattern and structure coefficient. Communality and pattern coefficients are presented in Table 2.

Table 2
Factor Pattern Matrix

	<u>Factor 1</u>	<u>Factor 2</u>	<u>Factor 3</u>	<u>Factor 4</u>	<u>Factor 5</u>	h^2
Factor 1: Career and Professional Involvement						
6_involvement in professional organizations	.699 (.693)	-.035	-.092	.012	-.116	.513
5_professional networking	.699 (.687)	-.020	.021	-.091	-.061	.489
30_introduce me to the academic/professional community	.668 (.701)	.038	.243	-.093	.115	.542
14_job search	.582 (.594)	-.068	.121	.192	.135	.480
12_career transitions	.449 (.471)	-.052	.058	.157	-.061	.328
7_developing my leadership skills	.411 (.412)	-.036	-.033	.008	-.305	.325

15_developing my negotiation skills	.366 (.385)	.006	.005	.161	-.148	.275
13_transition to independent practice	.362 (.361)	-.023	.089	.176	.009	.241
Factor 2: Research and Scholarship						
2_developing my research knowledge/skills	.001	.796 (.794)	-.071	-.022	.004	.621
1_writing and publishing	-.140	.763 (.749)	-.049	.074	.043	.576
3_developing a research agenda	.011	.744 (.712)	-.105	.160	.000	.582
33_enhances and inspires my work in research and scholarship	-.009	.677 (.715)	.155	-.109	-.212	.644
32_share opportunities for research and scholarship/writing	-.120	.585 (.609)	.218	-.044	-.252	.569
34_model scholarly values and research integrity	.048	.440 (.476)	.282	-.035	-.106	.370
Factor 3: Growth and Support						
26_use relationship skills that communicate empathy, positive regard, and genuineness	-.047	-.110	.802 (.806)	.093	-.005	.648
25_provide encouragement/validation/support	-.058	.045	.763 (.772)	.075	.038	.579
28_prepare me for what to expect in the future	.078	-.088	.721 (.715)	-.122	-.050	.543
27_challenges me/encourages me to grow	-.009	.029	.696 (.698)	-.008	-.038	.497
29_anticipates needs I may have in the future	.225	.035	.545 (.535)	-.079	.031	.410
24_provide frequent and specific feedback on my work	.037	.225	.379 (.381)	.142	.034	.268
Factor 4: Multicultural and Environmental Issues						
21_cultural issues	-.019	.095	-.046	.820 (.824)	.040	.648
22) issues of spirituality	.151	.061	.027	.694 (.682)	.126	.548
20_gender-specific questions/discussion	-.031	.038	-.098	.651 (.646)	-.232	.532
17_self-care and work-life balance issues	.019	-.263	.304 (.327)	.503 (.494)	-.141	.515
16_managing stress	.144	-.240	.235	.467 (.459)	-.177	.528
19_understanding environmental factors that impact job satisfaction	.003	.055	.040	.466 (.458)	-.283	.411
23_current trends and politics in the counseling field	.306	.123	.048	.411 (.403)	.063	.372
Factor 5: Practitioner Role						
10_managing conflict with students	-.067	.014	.001	.045	-.783 (-.804)	.611
9_developing my academic teaching skills	.062	.243	.048	-.017	-.580 (-.570)	.533
11_gate-keeping for the profession/managing nonacademic concerns with students	.057	.071	.012	-.027	-.509 (-.506)	.305
8_developing my administrative skills	.242	-.004	-.046	.054	-.479 (-.466)	.370

18_understanding environmental climate of my department or university relative to parenting	-.031	.050	.089	.233	-.444 (-.425)	.353
Removed Items						
4_developing my conference proposal and presentation skills.	.379	.427	-.062	.034	-.094	.393
31_share opportunities for teaching	.195	.260	.295	-.032	-.222	.392
Eigenvalue	8.353	3.990	2.660	1.918	1.561	
Variance	23.00%	10.41%	6.42%	4.17%	3.11%	
Cronbach's alpha	.815	.860	.829	.842	.765	

Note. Parentheses include significant coefficients based on 32 items, after removal of Items #4 and #31.

All of the items had communality coefficients above .20 (Child, 2006). However, an examination of pattern coefficients raised issues. One item (*Shares opportunities for teaching*) had no practically significant pattern coefficients (i.e., > .32) on any of the five factors and, thus, was removed from the final factor solution (See Appendix A). Further, one item (*Developing my conference proposal and presentation skills*) had multiple pattern coefficients above .32. With respect to the pattern matrix, this item cross-loaded on Factor 1 and Factor 2; with regard to the structure matrix, this item loaded on Factor 2 and Factor 5. Due to this inconsistent set of cross-loadings, this item also was removed from the final factor solution. Examination of the structure matrix revealed similar coefficients (i.e., the same items loaded on the same factors with one exception). *Shares opportunities for teaching*, along with 17 other items, had multiple loadings in the structure matrix. A second EFA, conducted after the removal of these two items, confirmed the factor structure with similar coefficients. Significant coefficients for this second EFA also are provided in Table 2. All five factors (excluding the two aforementioned items) were significantly indicated to have yielded reliable scores (i.e., had critical alpha values of .70 or higher; Lavrakos, 2008), with the following Cronbach's alpha values: *Career and Professional Involvement* (.82; 95% confidence interval [CI] = .78, .85), *Research and Scholarship* (.86; 95% CI = .83, .88),

Growth and Support (.83; 95% CI = .80, .86), *Multicultural and Environmental Issues* (.84; 95% CI = .81, .87), and *Practitioner Role* (.72; 95% CI = .72, .81).

Discussion

The goal for this research was to develop a scale measuring the mentoring needs of individuals in counseling programs. Even though there is a substantial, and growing, body of mentoring literature specific to the counseling field, there are limited evaluative tools that mentors and mentees can use effectively to assess specific mentoring needs of students and faculty. The Mentoring Needs in Counselor Education Scale (MNCES) can be used to assess the needs of students and faculty, in addition to providing a starting point for mentorship conversations. The use of concepts and findings pertaining to mentoring research from the extant literature, as well as the consultation of experts in the field, provide content-related validity for the MNCES, and the high importance ratings provide evidence for its face validity.

Due to some inter-item correlations, it was anticipated that the factors of the instrument might be correlated. Although highly correlated items could be eliminated, the researchers opted to keep several correlated items in this early stage of research because the items might be useful in conversations between mentors and mentees. Thus, a total of three items were eliminated from the initial MNCES. First, the item related to multiple mentors is not an actual mentoring need. Although the researchers propose that having more than one mentor is beneficial, a high score on this item (i.e., *One mentor is insufficient. I need access to multiple mentors to provide guidance in different areas*) would not reveal what the mentee needs from any given mentor. Second, the *sharing opportunities for teaching* item had low pattern coefficients, but had multiple loadings on the structure matrix. This inconsistency seriously problematized this item. Finally, *developing my conference proposal and presentation skills* was removed due to cross-loadings on both the *Career*

and Professional Involvement and *Research and Scholarship* factors with respect to the pattern matrix and the *Research and Scholarship* and *Practitioner Role* factors with regard to the structure matrix. Thus, 32 items were determined to yield reliable and valid scores for measuring the mentoring needs of students and pretenured faculty in counselor education programs.

The exploratory factor analysis yielded a five-component solution. The first two factors, *Career and Professional Involvement* and *Research and Scholarship*, explain approximately one third of the variance and align with Kram's (1985) career domain of mentoring. *Career and Professional Involvement* contains items that are applicable to counselors in any setting (e.g., professional networking, job search), whereas *Research and Scholarship* pertains specifically to counseling students and faculty. Although three of the other factors have application for master's-level, doctoral-level, and faculty participants alike, this second factor includes opportunities to develop a pertinent skill set for success in academe and might not be applicable to all students. The third factor, *Growth and Support*, relates directly to Kram's psychosocial domain in which an encouraging relationship is paramount for students and faculty alike. This finding supports previous research suggesting that pre-tenured faculty members want a mentor with whom they have a personal connection and who provides direct, honest feedback (Boswell et al., 2015). *Multicultural and Environmental Issues*, the fourth factor, also falls under the psychosocial domain related to navigating professional climate and politics. Trepal and Stinchfield (2011) remarked on the importance of support for women faculty members and doctoral students who are learning to balance personal and professional roles. Additionally, previous researchers revealed that mentees appreciated being able to speak with their mentors about gender issues and found mentoring between women to be helpful in navigating political situations professionally (Boswell et al., 2015; Casto, Caldwell, & Salazar, 2005). The items of this fourth factor delineate areas personal to them

(e.g., issues of spirituality and culture) that mentees want to be able to discuss openly with their mentors.

Practitioner Role presents the most challenging factor for interpretation. According to Mertler and Vannatta (2005), names of factors with negative coefficients should represent the opposite of its items. The items making up this factor all pertain to issues experienced in academic environments that are unrelated to research. Therefore, these items could be skipped when working with master's-level and some doctoral-level mentees. This final factor, in particular, warrants further research. Nevertheless, high Cronbach's alpha coefficients pertaining to scores generated by all five factors indicated that all five subscales yielded reliable scores.

Limitations and Recommendations for Future Research

Despite promising findings, the MNCES and its five factors should be interpreted with caution given the study's limitations. This study was intended as an initial step in instrument development. Therefore, these limitations can serve as guides for future score-validation and research on the MNCES. First, although many research studies involve the use of smaller participant-to-item ratios, a confirmatory factor analysis with a larger sample likely would provide incremental score-validity of the MNCES, and might lead to revised versions of this instrument. A confirmatory factor analysis also could be used to assess the invariance of the five factors (i.e., factorial invariance) with respect to the three subgroups. If factorial invariance is established, then it can be concluded that the MNCES is measuring the same construct across the three subgroups. Additionally, master's students made up more than 63% of the current sample. Although the percentages of the three groups are representative of what is found in counselor education programs, Boswell et al. (2015) suggested that differences in mentoring needs might be based on developmental level. A larger sample would yield adequate statistical power for comparing

master's students, doctoral students, and pretenured faculty with respect to the five factors underlying the MNCES.

Second, the five items on the fifth factor (i.e., *Practitioner Role*) yielded negative pattern coefficients, whereas the remaining 27 items yielded positive pattern coefficients. Thus, particular attention should be paid to this factor in future score-validation studies to determine its stability and utility. Third, the research team utilized the first six phases (ending with *Validate Revised Instrument: Quantitative Analysis Phase*) of the 10-phase IDCIV process—a comprehensive mixed methods research process to develop and to validate instruments (Onwuegbuzie et al., 2010). Systematically, the four remaining phases should be the subject for future research in order to score-validate the MNCES, thereby further increasing its utility to the profession. Lastly, future validation studies might enhance the score reliability and score validity of the instrument by focusing on one of the three groups (i.e. master's students, doctoral students, or pretenured faculty), conducting a power analysis, and analysis including validity coefficients. Implementing these suggestions might bolster the overall efficacy of the instrument and provide more of a rationale for counselor educators to utilize the MNCES with their mentees. Notwithstanding, the MNCES in its current form offers insight into the mentorship needs of persons in counselor education programs.

Conclusion and Implications for Counselor Education

Given the limited literature on mentoring needs in counselor education, the proposed instrument represents an important contribution to the field. The opportunity to assess the mentorship needs of individuals in counselor education programs is explored through the MNCES and the preliminary findings. Once mentees and prospective mentees complete the MNCES by rating the importance of each item, totals for each of the five subscales should be obtained. The

subscale with the highest number indicates the mentee's highest need. The authors encourage mentors to initiate a discussion of expectations within the areas of highest need (e.g., Multicultural & Environmental Issues, Research & Scholarship) and to use items to guide collaborative goal-setting with their mentees.

The implications for counselor educators and students in counselor education programs are many. First, The MNCES may be utilized as an instrument for mentees and mentors to detail any changes in developmental needs as one matriculates through counselor education. For instance, as mentees matriculate through their master's programs, their mentoring needs might shift depending on their professional aspirations. Mentees who desire to work as clinicians might have different professional development and networking needs in comparison to mentees who are interested in applying for doctoral programs. The MNCES may be used as a way to gauge differing needs and might help facilitate conversation on the needs and expectations of the mentee. Additionally, the MNCES can be used for more appropriate matching of mentee/mentor relationships in programs where the assignment of mentorship dyads occurs. For example, mentees with higher scores on the Research & Scholarship subscale could be paired with faculty who lead research teams. Finally, in both voluntary and assigned relationships, the MNCES can be used as an exploratory method for exploring differences between mentees and mentors and might provide direction for an intervention if a relationship is tumultuous. Problems in the mentoring relationship could be due to differences in expectations, and the instrument may be used for clarification. Indeed, the MNCES in its current form provides a catalyst for conversations regarding mentorship expectations between mentees and mentors. When mentees are transparent about their needs, mentors are able better to assist them, and conversations regarding expectations may take place. Furthermore, the MNCES might assist mentees with exploring their mentoring

needs and might prompt thought and insight into what they are seeking to gain from their mentorship relationships. Although further investigation is warranted, the MNCES in its current form offers good psychometric properties, and its use has the potential to make an important contribution to the counseling profession.

References

- American Counseling Association. (2012, March). ACA Graduate Student Committee launches mentorship initiative. *Counseling Today*, 54, 68-69.
- Black, L. (1998). The development and validation of the mentor functions scale for counselor education. (Doctoral dissertation, University of Northern Colorado, 1998). *Dissertation Abstracts International*, 59-08, 2864.
- Black, L. L., & Zullo, E. (2008). Mentoring. In T. L. Frederick, E. M. Leong, & B. D. Johnson (Eds.), *Encyclopedia of counseling: Changes and challenges for counseling in the 21st century* (pp. 269-299). Thousand Oaks, CA: Sage.
- Boswell, J. N., Wilson, A. D., Stark, M. D., & Onwuegbuzie, A. J. (2015). The role of mentoring relationships in counseling programs. *International Journal of Mentoring and Coaching in Education*, 4, 168-183. doi:10.1108/IJMCE-03-2015-0007
- Briggs, C. A., & Pehrsson, D. (2008). Research mentorship in counselor education. *Counselor Education and Supervision*, 48, 101-113. doi:10.1002/j.1556-6978.2008.tb00066.x
- Brown, R. T., Daly, B. P., & Leong, F. T. L. (2009). Mentoring in research: A developmental approach. *Professional Psychology: Research and Practice*, 40, 306-313. doi:10.1037/a0011996
- Burgess, K. (2007). Mentoring as a holistic online instruction. *New Directions for Adult & Continuing Education*, 2007, 49-56. doi:10.1002/ace.246
- Buyukgoze-Kavas, A., Taylor, J. M., Neimeyer, G. J., & Güneri, O. Y. (2010). The mentoring relationship: A comparison of counselling students in the United States of America and Turkey. *Counselling Psychology Quarterly*, 23, 387-398. doi:10.1080/09515070.2010.529677
- Casto, C., Caldwell, C., & Salazar, C. F. (2005). Creating mentoring relationships between female faculty and students in counselor education: guidelines for potential mentees and mentors. *Journal of Counseling and Development*, 83, 331-336. doi:10.1002/j.1556-6678.2005.tb00351.x
- Chao, G. T., Walz, P. M., & Gardner, P. D. (1992). Formal and informal mentorships: A comparison of mentoring functions and contrast with nonmentored counterparts. *Personnel Psychology*, 45, 619-636. doi:10.1111/j.1744-6570.1992.tb00863.x
- Child, D. (2006). *The essentials of factor analysis* (3rd ed.). New York, NY: Continuum International Publishing.
- Clark, R. A., Harden, S. L., & Johnson, W. B. (2000). Mentor relationships in clinical psychology doctoral training: Results of a national survey. *Teaching of Psychology*, 27, 22-31. doi:10.1207/S15328023TOP2704_04
- Comrey, A. L., & Lee, H. B. (1992). *A first course in factor analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.
- Council for Accreditation of Counseling and Related Educational Programs (2016). *2016 standards for accreditation*. Alexandria, VA: Author.
- Davis, D. (2007). Access to academe: The importance of mentoring to Black students. *Negro Educational Review*, 58(3/4), 217-231.
- Dimitrov, D. M. (2012). *Statistical methods for validation of assessment scale data in counseling and related fields*. Alexandria, VA: American Counseling Association.

- Efstation, J. F., Patton, M. J., & Kardash, C. M. (1990). Measuring the working alliance in counselor supervision. *Journal of Counseling Psychology, 37*, 322-329. doi:10.1037/0022-0167.37.3.322
- Farrell, R. L. (2007). *Personal experiences of mentoring among doctoral students in counselor education*. (Doctoral dissertation). Retrieved from Proquest Dissertations and Theses database. (UMI No. 3258798).
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). London, England: Sage.
- Grant, C. M. (2012). Advancing our legacy: A Black feminist perspective on the significance of mentoring for African-American women in educational leadership. *International Journal of Qualitative Studies in Education, 25*(1), 101-117. doi:10.1080/09518398.2011.647719
- Grant, C. M., & Ghee, S. (2015). Mentoring 101: Advancing African-American women faculty and doctoral student success in predominantly White institutions. *International Journal of Qualitative Studies in Education, 28* 759-785, doi:10.1080/09518398.2015.1036951
- Haizlip, B. N. (2012). Addressing the underrepresentation of African-Americans in counseling and psychology programs. *College Student Journal, 46*, 214-222.
- Hammer, T., Trepal, H., & Speedlin, S. (2014). Five relational strategies for mentoring female faculty. *Adultspan Journal, 13*, 4-14. doi:10.1002/j.2161-0029.2014.00022.x
- Healy, C. C., & Welchert, A. T. (1990). Mentoring relations: A definition to advance research and practice. *Educational Researcher, 19*(9), 17-21. doi:10.2307/1176974
- Higgins, M. C., & Kram, K. E. (2001). Reconceptualizing mentoring at work: A developmental network perspective. *The Academy of Management Review, 26*, 264-288. doi:10.5465/amr.2001.4378023
- Hill, N. R. (2004). The challenges experienced by pretenured faculty members in counselor education: A wellness perspective. *Counselor Education and Supervision, 44*, 135-146. doi:10.1002/j.1556-6978.2004.tb01866.x
- Hogarty, K. Y., Hines, C. V., Kromrey, J. D., Ferron, J. M., & Mumford, K. R. (2005). The quality of factor solutions in exploratory factor analysis: The influence of sample size, communality, and overdetermination. *Educational and Psychological Measurement, 65*, 202-226. doi:10.1177/0013164404267287
- Holland, J. M., Major, D. A., & Orvis, K. A. (2012). Understanding how peer mentoring and capitalization link STEM students to their majors. *The Career Development Quarterly, 60*, 343-354. doi:10.1002/j.2161-0045.2012.00026.x
- Hollingsworth, M. A., & Fassinger, R. E. (2002). The role of faculty mentors in the research training of counseling psychology doctoral students. *Journal of Counseling Psychology, 49*, 324-330. doi:10.1037//0022-0167.49.3.330
- Kaiser, H. F. (1958). The varimax criterion for analytic rotation in factor analysis. *Psychometrika, 23*, 187-200. doi:10.1007/BF02289233
- Kram, K. E. (1985.) *Mentoring at work: Developmental relationships in organizational life*. Glenview, IL: Scott, Foresman.
- Lavrakos, P. J. (2008). *Encyclopedia of survey research methods* (Vol. 2). Thousand Oaks, CA: Sage.
- Lazovsky, R., & Shimoni, A. (2007). The on-site mentor of counseling interns: Perceptions of ideal role and actual role performance. *Journal of Counseling and Development, 85*, 303-316. doi:10.1002/j.1556-6678.2007.tb00479.x
- Lechuga, V. M. (2011). Faculty-graduate student mentoring relationships: Mentors' perceived roles and responsibilities. *Higher Education, 62*, 757-771.

doi:10.1007/s10734-011-9416-0

- Magnuson, S., Norem, K., & Lonneman-Doroff, T. (2009). The 2000 cohort of new assistant professors of counselor education: Reflecting at the culmination of six years. *Counselor Education and Supervision, 49*, 54-71. doi:10.1002/j.1556-6978.2009.tb00086.x
- Mertler, C. A., & Vannatta, R. A. (2005). *Advanced and multivariate statistical methods: Practical application and interpretation* (3rd ed.). Glendale, CA: Pyrczak.
- Murdock, J. L., Stipanovic, N., & Lucas, K. (2013). Fostering connections between graduate students and strengthening professional identity through co-mentoring. *British Journal of Guidance and Counselling, 41*, 487-503. doi:10.1080/03069885.2012.756972
- Ngara, R., & Ngwarai, R. (2012). Mentor and mentee conceptions on mentor roles and qualities: A case study of Masvingo teacher training colleges. *International Journal of Social Science and Education, 2*, 461-473.
- Noe, R. (1988). An investigation of the determinants of successful assigned mentoring relationships. *Personnel Psychology, 41*, 457-479. doi:10.1111/j.1744-6570.1988.tb00638.x
- O'Connor, B. P. (2000). SPSS and SAS programs for determining the number of components using parallel analysis and Velicer's MAP test. *Behavior Research Methods, Instruments, and Computers, 32*, 396-402. doi:10.3758/BF03200807
- Onwuegbuzie, A. J., Bustamante, R. M., & Nelson, J. A. (2010). Mixed research as a tool for developing quantitative instruments. *Journal of Mixed Methods Research, 4*, 56-78. doi:10.1177/1558689809355805
- Qualtrics. (2015). Qualtrics. [Computer software]. Provo, UT: Qualtrics.
- Rheineck, J. E., & Roland, C. B. (2008). The developmental mentoring relationship between academic women. *Adultspan Journal, 7*, 80-93. doi:10.1002/j.2161-0029.2008.tb00048.x
- Schlosser, L. Z., & Gelso, C. J. (2001). Measuring the working alliance in advisor-advisee relationships in graduate school. *Journal of Counseling Psychology, 48*, 157-167. doi:10.1037/0022-0167.48.2.157
- Sweitzer, V. (2008). Networking to develop a professional identity: A look at the first-semester experience of doctoral students in business. *New Directions for Teaching & Learning, 113*, 43-56. doi:10.1002/tl.307
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn & Bacon.
- Taylor, J. M., & Neimeyer, G. J. (2009). Graduate school mentoring in clinical, counseling, and experimental academic training programs: An exploratory study. *Counseling Psychology Quarterly, 2*, 257-266. doi:10.1080/09515070903157289
- Tepper, K., Shaffer, B. C., & Tepper, B. J. (1996). Latent structure of mentoring function scales. *Educational and Psychological Measurement, 56*, 848-857. doi:10.1177/0013164496056005013
- Trepal, H. C., & Stinchfield, T. A. (2011). Experiences of motherhood in counselor education. *Counselor Education and Supervision, 51*, 112-126. doi:10.1002/j.1556-6978.2012.00008.x
- UCLA Institute for Digital Research and Education. (n.d.). *Annotated SPSS output: Factor analysis*. Retrieved from <http://ats.ucla.edu>
- Vespi, K. (2006). Integrating professional identities: Counseling psychologist, scientist practitioner and undergraduate educator. [Electronic version]. *Counseling Psychology Quarterly, 19*, 265-280. doi:10.1080/09515070600960555

- Warren, E. S. (2005). Future colleague or convenient friend: The ethics of mentorship. *Counseling and Values, 49*, 141-146. doi:10.1002/j.2161-007X.2005.tb00260.x
- White, S., & Tryon, J. (2007). How to find and succeed as a mentor. *American Journal of Health-System Pharmacy, 64*(12), 1258-1259. doi:10.2146/ajhp060486
- Wilde, J. B., & Schau, C. G. (1991). Mentoring in graduate schools of education: Mentees' perceptions. *The Journal of Experimental Education, 59*, 165-179. doi:10.1080/00220973.1991.10806559
- Worthington, R. L., & Whittaker, T. A. (2006). Scale development research: A content analysis and recommendations for best practices. *The Counseling Psychologist, 34*, 806-838. doi:10.1177/011000006288127
- Yob, I. M., & Crawford, L. (2012). Conceptual framework for mentoring doctoral students. *Higher Learning Research Communications, 2*(2), 34-47. doi:10.18870/hlrc.v2i2.66

Appendix A

Mentoring Needs in Counselor Education Scale

Please indicate the importance of each mentoring need using the following scale.

Nonissue Important 1	Important to some of my peers but not to me personally 2	Somewhat important 3	Very 4
<i>I need my mentor to provide . . .</i>			
1) writing and publishing 1	2	3	4
2) developing my research knowledge/skills 1	2	3	4
3) developing a research agenda 1	2	3	4
4) professional networking 1	2	3	4
5) involvement in professional organizations 1	2	3	4
6) developing my leadership skills/taking on leadership 1	2	3	4
7) developing my administrative skills (e.g., creating a budget, effectively using student assistants) 1	2	3	4
8) developing my academic teaching skills (e.g., technical aspects, classroom climate dynamics) 1	2	3	4
9) managing conflict with students 1	2	3	4
10) gate-keeping for the profession/managing nonacademic concerns with students 1	2	3	4
11) career transitions 1	2	3	4
12) transition to independent practice (and/or independent teaching/research) 1	2	3	4
13) job search (e.g., application, interview) 1	2	3	4
14) developing my negotiation skills (e.g., salary and promotion negotiations, negotiating expectations and work load with supervisor and/or colleagues) 1	2	3	4

15) managing stress				
1	2	3	4	
16) self-care and work-life balance issues				
1	2	3	4	
17) understanding environmental climate of my department or university relative to parenting (e.g., taking parental leave, temporarily stopping tenure clock, working part-time, using flexible scheduling)				
1	2	3	4	
18) understanding environmental factors that impact job satisfaction (e.g., position flexibility, discrimination experience, level of support)				
1	2	3	4	
19) gender-specific questions/discussion				
1	2	3	4	
20) cultural issues				
1	2	3	4	
21) issues of spirituality				
1	2	3	4	
22) current trends and politics in the counseling field				
1	2	3	4	
<i>I hope my mentor is/will...</i>				
23) provide frequent and specific feedback on my work (e.g., administrative, clinical, teaching, research)				
1	2	3	4	
24) provide encouragement/validation/support				
1	2	3	4	
25) use relationship skills that communicate empathy, positive regard, and genuineness				
1	2	3	4	
26) challenges me/encourages me to grow				
1	2	3	4	
27) prepare me for what to expect in the future				
1	2	3	4	
28) anticipates needs I may have in the future				
1	2	3	4	
29) introduce me to the academic/professional community				
1	2	3	4	
30) share opportunities for research and scholarship/writing				
1	2	3	4	
31) enhances and inspires my work in research and scholarship				

1	2	3	4
32) model scholarly values and research integrity			
1	2	3	4

Subscales

Career & Professional Development, $\alpha = .82$ (Survey Items: 4, 5, 6, 11, 12, 13, 14, and 29)

Research & Scholarship, $\alpha = .86$ (Survey Items: 1, 2, 3, 30, 31, and 32)

Growth & Support, $\alpha = .83$ (Survey Items: 23, 24, 25, 26, 27, and 28)

Multicultural & Environmental Issues, $\alpha = .84$ (Survey Items: 15, 16, 18, 19, 20, 21, and 22)

Practitioner Role, $\alpha = .77$ (Survey Items: 7, 8, 9, 10, and 17)