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Counselor Research Preparation: A Delphi Study

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Abstract

The present study explored the perspectives offered by counseling professionals as to the current state of doctoral level research preparation and the future of counseling and research. Counseling professionals provided recommendations for enhancing doctoral research training and productivity. Results of the study revealed that counselor research preparation is largely a contextual and systemic area of inquiry. Implications for counselor education and supervision as well as future research are provided.

Keywords: research, counselor preparation, research training

The differentiation of a professional identity is largely influenced by its professional knowledge and research base (Hanna & Bemak, 1997). However, the relative lack of counselor research productivity has gained increasing attention within counseling-related literature in the last two decades (e.g., Bishop & Bieschke, 1998; Gallassi, Stoltz, Brooks, & Trexler, 1987; Gelso, 1979; O'Brien, 1995; Okech, Atramovich, Johnson, Hoskins, & Rubel, 2006; Reissetter, Korcuska, Yexley, Bonds, Nikets, & McHenry, 2004; Wester & Borders, 2014). Encompassed within the counseling literature is trepidation related to counselor research training. The enhanced consideration regarding preparation has derived largely from the visible discrepancy found in the research productivity of counselors that received doctoral level training grounded within empirical inquiry (Royalty & Reising, 1986).

Attentiveness placed on empiricism, as a vehicle of academic training, emphasizes the underlying reciprocal role that practice and research share (Murdock, 2006). This integral relationship attempts to illustrate the practical link between theory and practice, which serves to inform the professional community as well as the preparation of future practitioners (Murdock, 2006). Within the same vein, the empirical inquiry model of doctoral training emphasizes the contribution research plays in conjunction with the counseling profession (American Psychological Association, 1952;

Reisetter et al., 2004). Consequently, this model of training has served as a cornerstone of professional counselor development and identity.

However, several researchers have observed a marked decrease of counseling related manuscript submissions and low frequencies of reported peer-reviewed publications (Fong & Malone, 1994). Additionally, a number of past and present editors of professional counseling journals (e.g., *Journal of Counseling and Development*, *Counselor Education and Supervision* and *Journal of Humanistic Counseling, Education, and Development*) have dedicated editorials toward the quality and integrity of research-based manuscript submissions as well as the inherent research identities of such journals (e.g., Kline, 2003; McGowan & Scholl, 2004). Moreover, Fong and Malone (1994) analyzed research submissions for *Counselor Education and Supervision* and found that approximately 40% of manuscripts have significant errors that invalidate empirical claims. Such concerns illustrate the professional community's cognizance of the relative lack of counselor research productivity.

Factors contributing to the lack of counselor research productivity have been suggested to stem from the humanistic identity inherent in counseling (Reisetter et al., 2004; Royalty & Reising, 1986). For example, the positivist research traditions have been conceptualized as being antithetical to the emphasis placed on understanding and acceptance of clients (Ponterotto, 2005; Reisetter et al., 2004). That is, previous research models do not inform counseling practices and procedures (Lundervold & Belwood, 2000; Murdock, 2006; Robinson, 1994). These discrepancies may lead to the further estrangement of practitioners from traditional methods of epistemology and therefore may lead to lower levels of counseling research productivity (Murdock, 2006; Reisetter et al., 2004).

Several researchers have attempted to explore the various factors (e.g., research training environments, personality variables, etc.) associated with research productivity as well as research preparation of counseling students (e.g., Brown, Lent, Ryan, & McPartland, 1996; Gelso, 2006; Gelso, Mallinckrodt, & Judge, 1996; Mallickrodt & Gelso, 2002). Findings suggest that the interplay amongst research-related variables have been illustrated through a suggested person and environment fit.

Present Study

In light of these areas, the author of this study developed a coordinated effort in order to address the lack of counselor research productivity. The study employed the efforts of experts within the counseling profession to provide solutions for the noticeable lack of counselor research productivity. The study utilized a Delphi study in order to develop ideas, gain consensus, and identify convergence pertaining to best practices in doctoral counselor research training.

Research Questions

The present study gathered the views of experts regarding counselor research preparation and training in order to respond to the following research questions:

- (1) What is the current state of affairs regarding doctoral-level counselor research training?
- (2) What is necessary for improving doctoral-level counseling research preparation?

- (3) What is the forecasted future for counseling research preparation and research productivity?
- (4) What other areas pertaining to counseling and research are important for consideration?

Method

Participants

The study utilized a purposive sample from the individuals in the counseling profession. Potential participants in the study were selected based on the following criterion: (1) Published articles in peer-reviewed counseling or psychological journals related to counseling research preparation and identity, (2) Reviewed peer-reviewed research related to counselor research training and identity, (3) Presently serve or have served on American Counseling Association (ACA) and/or APA research, publication, or knowledge committees and or divisions, (4) Are actively developing research organizations in their universities, and (5) Are presently enhancing and or revising research curriculum in their respective counseling departments.

Participatory invitations were sent to 30 potential panelists. Of the 30 potential panelists, 16 agreed to participate and all members completed the first round; however, only 14 of the panelists were able to complete the second round. The final panel of participants was composed of counselor educators and counseling psychologists from diverse geographic locations in the country. Participation consisted of individuals in either counselor education or counseling psychology departments. With respect to participation, seven experts were female and nine were male. Of the participants, 15 identified themselves as Caucasian and one identified as both Hispanic and Caucasian. Sixteen members of the panel were actively serving as assistant, associate, professor, or chairs of their respective departments as well as in private clinical practice and professional organizational involvement.

Moreover, the range of professional service was from 3 to 34 years, with an average of 16.5 years. Panelists' ages ranged from 29 to 61, with an average age of 51. Of the 16 members, five identified as having a PhD in Counselor Education, three with an EdD in Counselor Education, five with a PhD in Counseling Psychology, and three with a PhD in Educational Psychology. With respect to professional affiliations, 10 members identified affiliations with ACA, three with APA, and three identified as having affiliations in both ACA and APA. Furthermore, the 16 panelists reported specialized affiliations within seven ACA and APA divisions.

Instruments

The study employed an open-ended Delphi questionnaire and participant-created Delphi questionnaire. Below are the descriptions of each instrument.

Open-ended Delphi questionnaire. The open-ended Delphi questionnaire was provided to panelists in order to generate responses and feedback for the development of a Delphi questionnaire. The questionnaire consisted of four open-ended questions, which were created based upon previous areas of counselor research preparation and productivity literature. The open-ended questions were as follows: (1) What is the current state of affairs regarding doctoral-level counselor research training? (2) What is necessary for improving doctoral-level counseling research preparation? (3) What is the

forecasted future of counseling research preparation and productivity? (4) What other areas pertaining to counseling and research are important for consideration? The utilization of four open-ended questions provided panelists the opportunity to explore and react to each area and provide responses that they felt were significant to the areas of inquiry.

Participant-created Delphi questionnaire. The Delphi questionnaire was developed based on panelists' responses to the open-ended questions of the first Delphi round. The Delphi questionnaire was derived from a systematic content analysis of panelists' feedback. The systematic content analysis was conducted based on frequency and prominence of responses. Analyses of responses were concluded when saturation occurred with respect to member responses. The questionnaire consisted of three sections derived from the aforementioned open-ended questions (i.e., Concerns Related to Current Research Training, Recommendations for Necessary Improvement, and Future Directions of Counseling and Research). There were a total of 16 item-statements in the Concerns Related to Research Training, 17 item-statements in the Recommendations for Research Training Improvement, and 10 item-statements in the Future Directions in Counseling and Research Preparation. All item-statements employed Likert-type scoring procedures.

The questionnaire was provided to panelists with a set of instructions that prompted them to answer all items to the best of their ability. Responses ranged from Strongly Agree (1) to Strongly Disagree (4). Each section of the questionnaire produced an individual score as well as contributed to a composite index score of responses. The Delphi questionnaire additionally provided respective narrative sections in order to provide panel members with the opportunity to provide feedback and or comments related to sections or item-statements.

Reliability of Delphi questionnaire. To evaluate the reliability of the Delphi questionnaire, a reliability coefficient (alpha) was calculated for the composite instrument and respective sections (i.e., Concerns Related to Current Research Training, Recommendations for Necessary Improvement, and Future Directions of Counseling and Research). The reliability coefficient for the composite Delphi questionnaire was .81. An item analysis was conducted and the removal of a particular item-statement did not significantly increase the internal reliability. The reliability coefficient for the Concerns Related to Current Research Training section was .81 and was increased to .83 with the removal of one item-statement (i.e., Item Number 11; "University financial support determines quality of the research training environment"). The reliability coefficient for the Recommendations for Necessary Improvement section was .73. Lastly, the reliability coefficient for the Future Directions of Counseling and Research section was .73. Consequently, the questionnaire's composite and section reliability was sound.

Delphi inter-rater reliability. To assess the reliability of responses across panelists, a reliability coefficient (alpha) was calculated for the composite questionnaire as well as respective sections. The inter-rater reliability for the composite questionnaire was .86. With respect to the Concerns Related to Current Research Training section, the inter-rater reliability was .48; however, an item analysis revealed that the removal of one respondent would increase the reliability to .57. The inter-rater reliability for the Recommendations for Necessary Improvement section was .78 and was increased to .80 with the removal of one respondent. Lastly, the inter-rater reliability for the Future Directions of Counseling and Research section was .91.

The inter-rater reliability analysis was performed in order to determine the consistency of respondents per item-statement. Furthermore, the reliability analysis of respondents provided the opportunity to view the amount of reported agreement between panelists as well as the potential divergence. The analysis revealed that the composite, as well as the Recommendations for Necessary Improvement and Future Directions of Counseling and Research section reliabilities, were sound. Conversely, the Concerns Related to Current Research Training section produced moderate reliability. The moderate inter-rater reliability related to this section illustrated a significant amount of divergence reported by panelists.

Procedures

The study consisted of two rounds of data collection and utilized both quantitative and qualitative analysis. Panel members were provided in the first round with response instructions and the electronic Delphi questionnaire, which consisted of four open-ended questions. The four open-ended questions encompassed areas of counselor research training and preparation that have appeared in peer-reviewed literature surrounding the area of inquiry. After Delphi panelists responded to the first round of open-ended questions and returned the electronic form, the lead researcher identified the content of the responses. The researcher analyzed responses through a frequency coding and prominence system. Responses were categorized according to each open-ended question as well as the overall questionnaire. The categorization of responses and the frequencies in which they occurred resulted in the determination of a threshold point for the exclusion of recurrent panelist responses. After all responses were coded, the researcher clustered and organized participant responses into a Delphi questionnaire.

The second round of the Delphi study presented panelists with the instrument created by their responses. Panelists were e-mailed the second questionnaire and were required to respond to sections and respective item-statements. The Delphi questionnaire consisted of three sections derived from panelists' responses to the four open-ended questions (i.e., Concerns Related to Current Research Training, Recommendations for Necessary Improvement, and Future Directions of Counseling and Research). Each section contained a number of item-statements that were to be rated by panel members ranging from Strongly Agree (1) to Strongly Disagree (4). Panel members were also provided with a narrative section in the questionnaire in order to provide feedback or comments.

Panelist responses were entered and analyzed by statistical software (i.e., SPSS). A final Delphi questionnaire was analyzed through inter-rater reliability in order to determine areas of panelists' consensus as well as divergence. In addition, the questionnaire's items were individually analyzed through interquartile ranges, mean and median values, and standard deviations. After individual item-statements were evaluated, an average of the interquartile range, mean, median, and standard deviation values for the entire questionnaire and respective sections were assessed in order to determine an appropriate level of composite as well as sectional consensus. The determination of an appropriate level of convergence was based on item and composite values which had lower standard deviation dispersions and interquartile ranges that were in the 50th percentile of responses. The average mean and median of the questionnaire was

additionally assessed in order to determine panelists' level of agreement or disagreement pertaining to each item and overall questionnaire.

Results

Open-Ended Questionnaire Analyses

1. What is the current state of affairs regarding doctoral-level counselor research training? The following question was posed to expert panelists in order to gain their insight into the current situation relating to doctoral-level counselor research training (Table 1). Panelists' responses for this question illustrated a tremendous amount of variation with respect to the current state of training affairs. Analysis of responses revealed that panelists approached this question by addressing concerns related to current doctoral-research training, various factors that influence the quality of research preparation, and positive practices employed within academic settings. With respect to expressed concerns, panelists' responses were organized into research training inadequacies, counseling research relevancy, student characteristics, and faculty influences.

Table 1

Current State of Doctoral-Level Counselor Research Training

| <i>Respondents (n=16)</i> | <i>n</i> | <i>Frequency</i> |
|--------------------------------------|----------|------------------|
| <u>Reported Concerns</u> | | |
| Total research preparation | 6 | 38% |
| Research design analysis & rationale | 7 | 44% |
| Knowledge of paradigms | 3 | 19% |
| Professional writing skills | 3 | 19% |
| Research and counseling practices | 8 | 50% |
| <u>Influential Factors</u> | | |
| University expectations | 4 | 19% |
| Student characteristics | 2 | 13% |
| Funding opportunities | 2 | 13% |
| Faculty mentoring | 3 | 19% |
| Faculty expertise | 2 | 13% |
| <u>Positive Practices</u> | | |
| Early research involvement | 3 | 19% |
| Research teams | 3 | 19% |
| Presentation of research | 3 | 19% |

Research training inadequacies represented an area of concern in which members articulated that existing instructional practices are not rigorous as well as lacking a clear connection between research training and counseling practices. Panelists commented as to the inadequate training received by counseling doctoral students in quantitative, qualitative, and mixed methods design and analysis. In this same vein, members reported

that students lack the ability to clearly develop appropriate research design selection, methods, and analysis and sufficiently communicate ideas through professional writing. Moreover, Delphi members communicated that doctoral students are not instructed in the philosophical underpinnings of research and its relevancy to counseling practices. The lack of research rationale and logic in design, analysis, and presentation of findings was suggested as largely contributing to students' lack of interest in conducting quality research.

Student characteristics illustrated an area of responses that members suggested was also influential in the quality of a program's research preparation. Members reported that doctoral students, in general, lack a genuine interest in research as well as its relationship to counseling practices. In addition, panelists suggested that variations in students' personality (e.g., investigative, social, artistic), as well as the program's expectations of research involvement, significantly affect the quality of preparation. With respect to faculty influences, panelists reported that due to faculty time demands (e.g., course loads, service obligations), they were unable to provide the necessary mentoring and positive research modeling that is needed to involve doctoral students in research-related activities. Furthermore, members responded that a majority of counseling faculty members lack the proper training in research and therefore are unable to adequately prepare counselors in empirical inquiry as well as the philosophical nature of research. Consequently, research that is published is more opinion-oriented and lacks strong empirical grounding.

Corresponding to the concerns expressed by panelists with respect to current doctoral research training, members also reported external influences that affect the quality of the research training environment. Specifically, individuals suggested that research training and the quality of such preparation is largely determined by the university's expectations of the counseling department, faculty, and students. Moreover, the availability of funding (e.g., assistantships, fellowships, grants, faculty research teaching exceptions) provided by one's college or university significantly influences the quality of research training and subsequent productivity of the department. These factors were suggested by panelists as shaping the identity of the counseling program and its involvement in research-related activities.

Lastly, members shared positive practices currently employed within their doctoral research training environments. Panelists reported a variety of research-related activities that doctoral students are required to participate in during their coursework. For example, in certain programs, students are required to present research projects or ideas every semester. In addition, these students are encouraged to join research teams early on in their studies. Panelists felt that the early involvement and exposure to research through coursework, personal research, and research teams greatly increased students' involvement and efficacy in conducting research. Furthermore, the early involvement in these areas was suggested to increase the students' ability to appropriately integrate research design and analysis to current counseling practices and outcomes.

2. What is necessary for improving doctoral-level counseling research preparation?

The following question was presented to members in order to acquire pragmatic recommendations for enhancing the quality of research preparation (Table 2). Panelists' responses to this question were organized into three sections consisting of instructional recommendations, enhancement of the research training environment, and professional

organizational support. The categorization of these areas was determined by the frequency with which they were reported as well as the specific areas they addressed. With respect to instructional recommendations, members strongly communicated the necessity of increasing the quality of research courses and materials. Specifically, panelists reported that coursework in quantitative, qualitative, and mixed method design and analysis should be enhanced as well as connected to counseling processes and outcomes. Members reported that counseling processes and outcomes are infrequently examined in doctoral training and due to the empirical nature of the counseling profession, students should receive rigorous training in these areas.

Table 2

Recommendations for Improving Doctoral-Level Counseling Research Preparation

| <i>Respondents (n=16)</i> | <i>n</i> | <i>Frequency</i> |
|--|----------|------------------|
| <u>Instructional Recommendations</u> | | |
| Research paradigm course enhancement | 9 | 56% |
| Counseling processes & outcome research | 5 | 31% |
| Professional writing course availability | 3 | 19% |
| Grant writing course availability | 2 | 13% |
| <u>Research Training Environment</u> | | |
| Faculty research activities | 4 | 25% |
| Positive faculty research modeling | 5 | 31% |
| Faculty research mentoring | 2 | 13% |
| Financial support | 3 | 19% |
| Research team development | 4 | 25% |
| Student research involvement | 5 | 31% |
| <u>Organizational Support</u> | | |
| Interuniversity research collaboration | 4 | 25% |
| National organizational advocacy | 4 | 25% |

Furthermore, respondents reported that the entire research paradigm (i.e., design selection, statistical and qualitative analysis) as well as the philosophical nature of empiricism should be greatly enhanced within counseling departments. Respondents also emphasized that students should receive rigorous training in professional writing, publication procedures, and the ability to critique professional contributions. The enhancement of these factors was suggested by panelists as necessary for the development of competent producers and consumers of research. Members suggested that if doctoral training increases the quality of the delivery of research instruction and creates a stronger connection between personal interest and utility in research, then students will develop a more clear understanding of why and how to conduct research.

Research training environment enhancement was reported by panelists as greatly contributing to the quality of doctoral research preparation. Members endorsed the prospective role that faculty members have in shaping the research interests and involvement of doctoral students. In this vein, respondents suggested that positive

attitudes possessed by faculty members toward research, as well as having active and productive research agendas, would significantly increase student research activity. The ability of counseling faculty to consistently provide research mentoring for students, as well as involve students in ongoing projects, would greatly enhance the research environment. Through research mentorship and early involvement, faculty members would have the opportunity to expose doctoral students to the research process and assist them with shaping and developing their own research agendas and ideas.

Furthermore, the quality of the research training environment, as endorsed by panelists, would be greatly increased through university-level support. Respondents reported that the provision of adequate assistantships, fellowships, and grants would enhance the quality of doctoral research training as well as increase faculty research involvement. In this manner, panelists felt that the support of the university would decrease the time demands placed on faculty members and subsequently increase mentoring and productivity opportunities. In addition, panelists reported that university and departmental assistance in the development of organized research teams and/or organizations would also enhance the quality of the research training environment.

Support provided by professional organization affiliations were reported by members as necessary to supply departments, faculty, and students with the opportunity to be involved in research at a local, regional, and national level. Respondents conceptualized the influential as well as potentially supportive role that counseling accrediting bodies (i.e., Council for Accreditation of Counseling and Related Educational Programs) and organizations (e.g., ACA and Association of Counselor Education and Supervision) have in developing nationally-informed training standards and research organizations. Panelists suggested that professional advocacy for increasing research training standards, as well as developing clearer guidelines for preparation, would greatly reduce the variation in doctoral programs. Respondents suggested that through national, inter-university, and interdisciplinary collaborations, the quality of doctoral counseling research preparation as well as productivity would increase. Several members felt that the counseling profession is not effectively utilizing technological capabilities, which may serve as a catalyst for these needed changes.

3. What is the forecasted future of counseling research preparation and productivity? The following question was presented to panelist members to provide them with the opportunity to contemplate and respond, as they saw relevant, to the future directions of counseling and research (Table 3). Panelists' responses were categorized into both departmental structural changes and the role of research in counseling. With respect to departmental changes, members proposed that upgrading faculty research skills and instruction is imperative to improve the quality of training. Several respondents reported that the retiring and rehiring phases of counseling faculty will provide the opportunity for departments to recruit stronger and more effectively trained researchers. Panelists conveyed that for doctoral programs to have effective as well as rigorous research preparation, faculty members that have received inadequate training will either have to retire or work toward enhancing their skills. Respondents communicated that for departments to genuinely change current research practices, a systemic approach would have to be employed by department chairs and university administrators to ensure that faculty members were properly supported as well as prepared to conduct quality research.

Table 3

Forecasted Future of Counseling Research Preparation and Research Productivity

| <i>Respondents (n=16)</i> | <i>n</i> | <i>Frequency</i> |
|--|----------|------------------|
| <u>Structural Changes</u> | | |
| Faculty research skills | 2 | 13% |
| Innovative instructional methods | 2 | 13% |
| Departmental research support | 4 | 25% |
| New faculty recruitment | 3 | 19% |
| <u>Counseling and Research</u> | | |
| Evidenced-based practices & research | 3 | 19% |
| Empirical investigation quality | 5 | 31% |
| Conceptualization of research productivity | 2 | 13% |
| Interdisciplinary research & publications | 2 | 13% |
| Accreditation standard revisions | 2 | 13% |

The future of research and counseling practices was an area suggested by respondents as being in need of clarification and refinement. Members reported that given the emergence of evidence-based practices, counselors will be expected to increase their research productivity. In this same vein, panelists suggested that if the counseling profession is to grow and gain in stature, the need to conduct quality empirical investigations rather than research quantity is essential. Moreover, individuals reported that the definition of research productivity and its relevancy to counseling practices should be broadened in order to communicate to students the importance of their involvement in research-related activities (e.g., program evaluation, national presentations, editorial member service). Members suggested that emphasis should be placed on alternative research designs (e.g., case studies, advanced quantitative analyses) that may have greater relevancy to practice. It is important to note that although alternative research methodologies and relevancy were endorsed by panel members, the ability to empirically document practices was equally supported.

Furthermore, members strongly encouraged that the counseling profession focus on publishing research within other disciplines in order to support credible, usable, transferable, and transparent research. One panelist member referred to this pursuit as an attempt to not “publish to the choir.” Members reported that for the counseling profession to support a professional identity, standards of practice, and knowledge base, it is imperative to utilize empirical methods and place research into other disciplines.

4. What other areas pertaining to counseling and research are important for consideration? The following question was posed to panel members in order to provide the opportunity for additional narrative comments related to the area of counseling and research (Table 4). Responses provided by panel members were similar to the responses generated within the three aforementioned research questions. Panelists reasserted that the integrity of research training environments needs to be enhanced through faculty involvement and university support. Members reported that faculty members need to have clear and well-defined research agendas ongoing research projects. Furthermore,

panelists strongly suggested that faculty mentoring, as well as the early involvement of students in research-related activities, is essential for improving the current state of affairs.

Table 4

Areas Pertaining to Counseling and Research Important for Consideration

| <i>Respondents (n=16)</i> | <i>n</i> | <i>Frequency</i> |
|---|----------|------------------|
| <u>Research Training Enhancement</u> | | |
| Faculty involvement & mentoring | 3 | 19% |
| University-level support | 3 | 19% |
| Departmental support | 2 | 13% |
| Faculty research skill enhancement | 5 | 31% |
| Technological advances | 2 | 13% |
| Professional writing enhancement | 3 | 19% |
| Grant writing availability | 3 | 19% |
| Interuniversity research collaborations | 2 | 13% |
| <u>Research Paradigms</u> | | |
| Qualitative methodologies | 3 | 19% |
| Research methods & counseling practices | 6 | 38% |

Panel members additionally reported that a needed paradigm shift related to counseling research and productivity is greatly contingent upon the research skills of faculty members, especially within the area of qualitative methods. Members reported that qualitative research presents itself as a congruent method of inquiry that may effectively strengthen the relationship between research methods and counseling practices. Conversely, panelists suggested that until research-deficient faculty members will have to either retire, re-educate themselves, or are replaced, the necessary research paradigm transformation will be delayed.

Discussion

Results of the study revealed that doctoral-level counselor research preparation and the future of training are conceptualized within contextual and systemic vantage points. Panelists recommended that consideration be provided for the individual preparatory program, as well as professional organizational and accreditation standards, in order to alter and enhance current research training. The opportunity to potentially increase counselor research preparation was suggested by panelists as being accomplished through the systematic and cooperative efforts of counseling leaders, faculty members, university administrators, and doctoral students. These collective endeavors were recommended by respondents as being necessary for addressing the current state of counseling research training as well as securing and improving the future of counseling and research preparation.

The consensus reached by panel members and the subsequent development of the Delphi questionnaire revealed that the issue of counselor research preparation be viewed

within distinct, but interdependent areas of inquiry. These areas consisted of Concerns Related to Current Research Training, Recommendations for Necessary Improvement, and Future Directions of Counseling and Research. The sections rated by panelists revealed that counseling professionals were able to reach consistent levels of moderate to strong agreement, which is indicative of the ability of panelists to agree as to the areas in which are important for consideration in counselor research preparation.

The ability of professionals to generate convergent responses to open-ended and structured questions relating to the field of counselor research preparation is indicative of the profession to address the concerns related to the area of inquiry, provide solutions to identified problems, and present directions for the counseling field. The collective endeavors of counseling professionals have provided additional insight into the realm of counselor research preparation, which expands the area of interest from a person-environment fit into a more holistic conceptualization of the issue. Furthermore, the results of the study provide pragmatic recommendations and tangible solutions for altering and enhancing the research preparation of doctoral students as well as counseling departments and the profession. The sections below provide detailed discussion areas for each section of the study created by the expert panelists.

Implications

Results from the study indicated that counselor research preparation illustrates a contextual and systemic area of inquiry. The contextual and systemic features of research training expound certain concerns, recommendations, and future directions not otherwise accounted for in previous counseling literature. The presence of these influential factors indicates that traditional conceptualizations of the person-environment fit, as it relates to counselor research preparation and productivity, may be greatly enhanced by taking into consideration the micro- and macro-level of advocacy and support. The aforementioned findings produced by Delphi panelists provide the counseling profession with the opportunity to address the concerns of counselor research preparation at both departmental and national levels.

Moreover, the implications of the study may serve as a guide for counseling departments to actively restructure or enhance current training standards and opportunities. Proponents of such enhancement may benefit greatly from the instructional recommendations and research training environment suggestions provided by panelists. These convergent recommendations provide the opportunity to systematically alter and enhance the research experiences of doctoral students as well as support the research endeavors of faculty members. Increases in support and positive experiences may begin to support a more congruent and active research identity possessed by counselors and counselor educators.

In addition, professional organizational support of research training quality and suggested components of such preparation may lead to the development of a national training model as well as an organization that supports the research identity of the profession. The creation and support of a national counselor education research network may provide the profession the necessary tool for addressing the importance of conducting and supporting quality research endeavors by the individual counseling faculty members and students as well as the profession as a whole. The advocacy for such development has wide-reaching implications for the support of a professional identity,

differentiation, and knowledge-bases. Furthermore, the counseling profession's commitment to practice accountability is greatly influenced by the quality of the research it produces. Therefore, by enhancing training practices of doctoral students, the field may work toward supporting and cultivating a productive and relevant knowledge base.

Limitations

The findings and implications of the present study should be viewed within the context of the Delphi study. The Delphi methodology is intended to gather the views and opinions of identified experts in the field of inquiry. Therefore, the resultant generalizations and inferences reported in the present study should be interpreted with prudence as they may not be relevant to certain doctoral-level counseling programs or presently utilized research-related curriculum. Moreover, the recommendations generated by the Delphi panelists were intended to address doctoral-level counselor research preparation within ACA and APA programs; therefore, findings may not be appropriate for master's-level counseling programs and or programs that do not identify with the aforementioned professional organizations.

Future Research

The results of the present study provide the opportunity for researchers to systematically examine and control the longitudinal effects of a positive research training environment (RTE) on both faculty and doctoral counseling students. The exploration of the long-term influences and perceptions of the RTE may be accomplished through the development of organized counseling research organizations at a university and national level. Furthermore, the examination of these research organizations may reveal to the counseling profession alternative research training models that are intended to enhance the competency and productivity of faculty and doctoral students. These training models may also provide researchers with the opportunity to compare and contrast the similarities and differences between research-based counseling organizations and current research curricula in programs.

In this sense, researchers would have the ability to develop studies in which present research training models are compared to alternative preparatory paradigms with respect to research self-efficacy, perceptions of the RTE, attitudes toward research, and research productivity. Consequently, the ability to demonstrate and document the efficacy of quality RTEs through longitudinal and cross-sectional designs may lead to enhanced cognizance of the systemic and contextual influences of such environments. In addition, the examination of environmental features and the ways in which they interact with personal variables as related to research preparation and productivity, may illustrate the effects of the RTE.

Moreover, future empirical inquiries with respect to counselor research preparation and productivity may encompass national surveys of doctoral-level programs and current research training models. The employment of national inquiries and larger sample sizes may yield results that are more generalized and relevant to global counselor preparation. In this sense, researchers would have the opportunity to identify research curricula variations as well as similarities. These attempts may reveal areas of counselor preparation that would be enhanced by more structured RTEs and lucid training components.

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