Development of Community-Based Participatory Research Competencies: A Delphi Study Identifying Best Practices in the Collaborative Process

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A gap exists in the counseling profession between research and practice. Community-based participatory research (CBPR) is one approach that could reduce this gap. The CBPR framework can serve as an additional tool for translating research findings into practical interventions for communities and counseling practitioners. Stronger community partnerships between researchers and practitioners will further improve treatment for our clients. The purpose of this study was to develop competencies that would provide the foundations for a training guideline in CBPR. Using the Delphi method, an expert panel achieved consensus on 153 competencies (knowledge, skills, attitudes, activities). Competencies are significant for the profession because they establish best practice, guidelines of service, and professional training.

Keywords: community-based participatory research, research competencies, Delphi method, community partnerships, best practices

The counseling profession has a gap between research and practice (Guiffrida, Douthit, Lynch, & Mackie, 2011; Murray, 2009; Peterson, Hall, & Buser, 2016; Wester & Borders, 2014). Thirty percent of counseling practitioners fail to use academic counseling research findings in their clinical practice (Wester & Borders, 2014). Erford et al. (2011) conducted an 8-year analysis of the *Journal of Counseling & Development* (*JCD*) author affiliation and found that the number of articles published in the *JCD* by non-academically affiliated authors (e.g., in private practice, K–12 schools) declined from 10% in 2002 to 5% in 2008. This decline is even more precipitous considering that 31% of the *JCD*'s publications between 1978 and 1993 were contributed by non-academic authors (Weinrach, Lustig, Chan & Thomas, 1998). Erford et al. suggested that this drop may be caused by a decline in collaboration between scientists and practitioners or counselors. Woolf (2008) and Wester and Borders (2014) suggested that counselors are apathetic about research because they are unprepared to translate research findings into clinical practice. Further, according to Guiffrida et al. (2011), practitioners may view research to be irrelevant to their work and their clients' needs. Peterson et al. (2016) indicated the gap may possibly exist between the research skills highlighted in counselor education and those applied in the field. Finally, Murray (2009) noted that researchers and counselors are disconnected from one another; therefore, research findings are not clearly and quickly disseminated to field-based counselors. Although the specific reasons for the researcher–practitioner disconnection vary among authors, there is a compelling need for counseling researchers and practitioners to work toward a common goal benefiting clients.

This gap comprises a problem for the profession because research should inform counselors' clinical interventions and supervisors' decisions (Lilienfeld, Ammirati, & David, 2012). When they do not, the gap between academic counseling researchers and counseling practitioners puts client well-being at risk. To provide the best outcomes for clients, counseling practitioners must be aware of and make

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use of current evidence-based treatments identified through academic research. Likewise, counseling researchers who fail to consider the clinical zeitgeist may promulgate lines of inquiry that are difficult to translate into clinical application. One way to minimize this gap is through stronger collaborations between academic counseling researchers and counseling practitioners who already serve clients in their communities. One rationale the authors offer is that although there might be a desire to collaborate, there are currently no agreed upon standards to establish parameters of those collaborations, making setting up partnerships more challenging for counseling researchers. Efforts to incorporate community-based participatory research (CBPR) approaches could further enhance treatment for clients by strengthening researcher–practitioner partnerships (Horowitz, Robinson, & Seifer, 2009).

Community-Based Participatory Research

CBPR (Israel, Eng, Schulz, & Parker, 2013) fosters partnerships between researchers, institutions, and communities (Lachance, Quinn, & Kowalski-Dobson, 2018; Poleshuck et al., 2018; Woods-Jaeger et al., 2018). CBPR is employed in conjunction with quantitative, qualitative, or mixed methods (Minkler & Wallerstein, 2008); serves as an additional tool for translating research findings into applicable clinical practice (Lightfoot, McCleary, & Lum, 2014; Minkler & Wallerstein, 2008); and improves communication between researchers and practitioners (Poleshuck et al., 2018).

CBPR rests on nine key principles that focus on the concept of *cultural humility* (Israel et al., 2013). Israel, Schulz, Parker, and Becker (1998) identified the first eight, which include the following principles:

> (1) recognizes the community as a unit of identity; (2) builds on strengths and resources within the community; (3) facilitates collaborative partnerships in all phases of the research; (4) integrates knowledge and action for mutual benefit of all partners; (5) promotes a co-learning and empowering process that attends to social inequalities; (6) involves a cyclical and iterative process; (7) addresses health from both positive and ecological perspectives; and (8) disseminates findings and knowledge gained to all partners." (pp. 178–180)

Minkler and Wallerstein (2008) added an important ninth CBPR principle: "(9) requires a long-term process and commitment to sustainability" (p. 11). Each of these principles relies on the researcher's dedication to the tenet of cultural humility, which is critical to building improved relationships between researchers and communities founded upon increased trust, respect, and accountability.

Hook, Davis, Owen, Worthington, and Utsey (2013) defined cultural humility as appreciating one's limitation with respect to what can be understood about another culture. It also is described as genuine concern for others, an absence of the power and dominance dynamic, a willingness to continue learning, an understanding of our own biases, and a dedication to self-reflection. Researchers who apply cultural humility tend to develop greater levels of trust, respect, and accountability within their communities, particularly with hard-to-reach communities. For example, Mannix, Austin, Baayd, and Simonsen (2018) utilized the principles of CBPR in their work with a Native American tribe and found that cultural training was the initial step toward community integration among researchers and the formation of equalizing partnerships. Sharing in one's role as the expert and valuing co-learning helps to reframe the community as equal partners within the collaborative research process. Nonetheless, Collins et al. (2018) advocated that the CBPR approach can be employed in collaboration with diverse types of communities, involving, for example, police officers, health care workers, and business management.

CBPR's benefits are well documented across disciplines (e.g., Collins et al., 2018; Green, 2007; Lightfoot et al., 2014; Lindamer et al., 2008; O'Brien et al., 2018; Yuan et al., 2016). These benefits include

researchers' ability to utilize research outcomes to advocate for clients (Gray & Price, 2014; Horowitz et al., 2009; McElfish et al., 2015), advance health disciplines (O'Fallon & Dearry, 2002; Israel et al., 2013), increase participant contributions (Case et al., 2014; Wagstaff, Graham, Farrell, Larkin, & Tatham, 2018), address multifaceted client issues (Corrigan, Pickett, Kraus, Burks, & Schmidt, 2015), improve mental health services (Case et al., 2014), and foster interprofessional relationships (Hergenrather, Geishecker, Clark, & Rhodes, 2013). Despite CBPR's acceptance as a research tool and demonstrated benefits for increasing the effectiveness of researcher–practitioner communication, the counseling literature lacks counseling research specific to CBPR competency training guidelines.

The purpose of this study was to address this paucity by developing CBPR competency training guidelines. Consistent with the profession's approach to competency development commonly seen in the profession (e.g., Ratts, Singh, Nassar-McMillan, Butler, & McCullough, 2016), the authors organized CBPR competencies into the following areas: knowledge, skills, attitudes, and activities. The development of CBPR competencies sets the stage for counseling research to become more understandable, accessible, and applicable to counselors and their communities, thus diminishing the gap between research and practice. Competencies are significant for the profession because they establish best practice, guidelines of service, and professional trainings (Toporek, Lewis, & Crethar, 2009).

Method

The authors employed the Delphi method to identify CBPR throughout the study. The Delphi method is an empirical approach that elicits expert opinion on research results and validation of content (Garson, 2013; Jorm, 2015; Ross, Kelly, & Jorm, 2014). It is an iterative process that progresses through consecutive survey rounds. This approach provides a reliable method for gathering structured expert insight to improve professional training and typically includes a minimum of two rounds (Garson, 2013). Experts' responses are blinded to one another. Rigor and validity of the Delphi method relies on the knowledge and experience of an expert panel (Garson, 2013). There is no set number of experts that should serve on a Delphi panel, but researchers agree that a minimum of eight to 12 experts is sufficient and appropriate for Delphi studies (Novakowski & Wellar, 2008). The authors decided upon the Delphi method because we see it as the best model for identifying additional content not reflected in the current counseling literature for use in the development of a training guideline for counselors.

An online survey platform was used to collect data. Online survey tools can provide an effective means of conducting Delphi studies (Ross et al., 2014; Weise, Fisher, & Trollor, 2016). Online data collection techniques are economical for researchers and convenient for participants, especially when experts live apart geographically. These techniques provide anonymity and facilitate the equal inclusion of expert feedback where group dynamics might preclude such participation in a face-to-face setting (Garson, 2013).

Expert Panel Formation

According to Mead and Moseley (2001), establishing expertise, and by extension experts, is a context-based process that depends on a number of criteria, which may include their position, recognition by a stakeholder community, or established specialization. The prospective panel of experts was initially identified using a review of publication records (Garson, 2013), and augmented with the recommendations. The authors required that participant experts demonstrate both knowledge of and experience with carrying out CBPR. Twenty prospective expert participants were identified and recruited with an email that explained the nature of the study and contained a link to the Delphi study. CBPR is rarely found in the counseling literature; therefore, the authors also relied upon snowball

sampling to recruit CBPR expert counselor educators (Jorm, 2015). Finally, the authors extended the invitation to participate to public health professionals with evidenced CBPR expertise, identifying them through a review of public health literature, where the CBPR framework originated and is now well established (Lightfoot et al., 2014; Minkler & Wallerstein, 2008). Moreover, counselors and public health professionals are similarly committed to advancing wellness among the communities they serve (Kaplan & Gladding, 2011). Of those 20 invited experts, 17 (85%) met the study's inclusion criteria, which centered on relevant publications and knowledge of or professional experience with CBPR. Three (15%) indicated they were not qualified to participate. Another three declined to participate. The 14 remaining experts completed all facets of the Delphi study. Nine participants (64.3%) were identified through their publication records. The final five (35.7%) came from peers' recommendations.

Eleven experts (78.6%) reported experience with CBPR in a university setting, eight (57.1%) in a non-profit organization, four (28.6%) in an agency setting, four (28.6%) in a health system (e.g., hospital, clinic), four (28.6%) in a K–12 school setting, one (7.1%) in a community-wide setting, and one (7.1%) in international projects. One expert (7.1%) did not identify a work setting. Five (35.7%) experts reported having more than 10 years of experience conducting CBPR research, including four with 18–21 years and one with 11 years of experience. Three (21.4%) stated that they had 4–5 years of experience, and another four (28.6%) reported 2–4 years of experience. One (7.1%) expert did not respond to the question. Thirteen experts (92.9%) listed their highest educational level as a PhD, and one expert (7.1%) indicated the highest degree was a master's degree. Participants' ages ranged from 30 to over 60 years. Four experts (28.6%) reported their age to be 30–39, two (14.3%) 40–49, seven (50%) 50–59, and one (7.1%) over 60. When asked to report their racial affiliation, 10 (71.4%) identified as European American, one (7.1%) as Hispanic, one (7.1%) as Asian/Pacific Islander, and two (14.3%) selected Other/Mixed. Finally, 10 identified as female (71.4%) and four identified as male (28.6%).

Procedure

Stage 1: Preparing items for the questionnaire. The authors conducted a literature review to compile content statements (Sivell, Lidstone, Taubert, Thompson, & Nelson, 2015) about the knowledge, skills, attitudes, and activities (competency domains) commonly used in CBPR. These content statements were used to create an online questionnaire for the Delphi study's first round (Ross et al., 2014; Sivell et al., 2015; Weise et al., 2016).

Stage 2: Administer Round 1. The authors sent an email to the identified experts with a URL link to the study (Sivell et al., 2015). Experts then used a 5-point Likert scale response range to assess participants' degree of agreement with each CBPR competency statement (Sivell et al., 2015; Vázquez-Ramos, Leahy, & Hernández, 2007). Additionally, experts provided their own answers to four open-ended survey questions that reflected the coding frame (i.e., competency domains) used in this study. Additional questions included: (1) What knowledge is required for counseling researchers to effectively carry out community-based participatory research? (2) What skills are considered essential for counseling researchers to carry out community-based participatory research? (3) What attitudes are essential for counseling researchers to develop community-based participatory research? and (4) What activities are necessary for counseling researchers to experience when engaging in community-based participatory research?

Stage 3: Prepare and administer Round 2. Next, the authors employed the qualitative content analysis software program, NVivo, to analyze the 161 statements that participants contributed. Statements about which the experts did not agree were removed. Round 2's statements (n = 112) were

solely those that were contributed to the open-ended questions posed to the experts in Round 1. The experts evaluated the revised questionnaire in the same manner as in Round 1.

Stage 4: Finalize competencies. The authors compiled the final list of competencies based on expert consensus. In accordance with other Delphi study practices (Keeney, Hasson, & McKenna, 2011; Weise et al., 2016), consensus was achieved when at least 70% of the experts either agreed or strongly agreed with the statement and the statement's median score was 2.5 or lower. The authors chose to further strengthen consensus results by ensuring that a given statement also achieved an interquartile range (IQR) of less than or equal to 1 (Wester & Borders, 2014). Following Ross et al.'s (2014) suggestion, we sent a follow-up email with a final draft of the competencies to each participant. The email contained each of the final 153 statements (Appendix). The authors asked the participants to offer their final remarks about the statements and requested that they respond within a week and received no modifications.

Data Analysis

Descriptive quantitative analysis. The review of the Delphi process started upon the experts' completion of Round 1 and was completed following Round 2. One part of the analysis involved quantitative feedback. SPSS was used to measure expert consensus. The data included frequency outputs on the percentage of overall responses to each statement, median, and IQR. According to Dalkey and Helmer (1963), the median response for each statement is a central statistic involved in Delphi processes. IQR is a measure of variability that is less susceptible to outliers than the range. IQR allowed the authors to further increase objectivity and rigor in the validating process to determine final expert statements (Wester & Borders, 2014). IQR also allowed researchers to assess the variability in responses. An IQR of less than or equal to 1 on a 5-point Likert scale indicates a low variability in responses, whereas a score greater than 1 signifies a higher range of variability.

Content analysis. Participants' contributed statements were used to enhance the level of expert consensus with the follow-up questionnaire. The researchers conducted a qualitative content analysis (QCA) for these contributions (Weise et al., 2016). The QCA clearly and systematically categorized statements within the range of the study's nine CBPR principles. Using NVivo, the authors coded the experts' statements using the domains of the theoretical coding framework (Schreier, 2012): knowledge, attitudes, skills, and activities. The authors then assigned each of the frame-coded statements to one of the nine CBPR principles.

Results

The results from Round 1 and Round 2 are presented in the Appendix. A total of 64 statements were omitted between Rounds 1 and 2 because they either did not reach consensus (meeting all three criteria) or represented a repeated item. Of the final 153 competencies, 49 relate to the knowledge domain, 43 relate to the attitudes domain, 31 relate to the skills domain, and 25 relate to the activities domain. These statements were further subcategorized according to the nine CBPR principles (P1–P9) or themes that emerged from the content analysis: 15 statements were related to P1, 12 statements were related to P2, 25 statements were related to P3, 28 statements were related to P4, 18 statements were related to P5, 12 statements were related to P6 and P7, seven statements were related to P8, and 14 statements were related to P9.

Certain statements did not fit within the nine CBPR principles. Additionally, there were statements that seemed to fit within multiple categories. Some themes that the authors did not expect emerged

from the open-ended responses. These included seven statements related to core traits and three statements related to mentoring, which are also presented in the Appendix. The following discussion will further describe the results.

Discussion

The aim of the study was to develop competencies that emphasize knowledge, skills, attitudes, and activities that would provide the foundations for a training guideline in CBPR for the counseling profession. A growing number of counseling researchers highlight researcher and community collaboration (Bryan, 2009; Guiffrida et al., 2011; Wester & Borders, 2014); however, comprehensive training guidelines that outline the competencies required to foster such partnerships do not exist in the counseling literature. We argue that by providing access to this emerging approach to building researcher–community partnerships within the community (particularly practitioners), the clients/communities' well-being will be enhanced. CBPR emerged in recent years as the most promising researcher–community approach to research (Lawson, Caringi, Pyles, Jurkowski, & Bozlak, 2015; Lightfoot et al., 2014). The CBPR competencies identified through this study could provide further guidance to researchers for building these relationships in the community. Researchers that advocate for researcher–practitioner partnerships emphasize their potential for advancing treatment for clients (Teachman et al., 2012). These partnerships improve communication and allow research findings to be translated into more practical interventions. We anticipate that by offering a standardized approach for a training guide to fostering researcher–community partnerships, future counseling researchers will receive more consistent and effective training in CBPR practices.

CBPR Competencies

Consistent with previous literature, all 14 experts agreed that CBPR is about relationships and relationship building. They further allowed that a CBPR framework fosters conversations between partners within the community. The experts also endorsed CBPR as a complementary, not competing, approach to research. Although the results of this study confirm the necessary knowledge components of the CBPR framework, they move beyond making the argument that CBPR is a necessary practice, demonstrating how researchers might effectively implement such practices. Thus, we offer key insights from the remaining categories understood as necessary for competency in a given practice (Toporek et al., 2009) with the aim of identifying best practices and means of implementation for community partnerships. Competency in this framework will enhance methodological choices made by researchers and their partner communities. The following section highlights statements categorized by domain with high expert consensus (100% of the expert panel indicated they either strongly agree or agree).

Knowledge. All experts agreed that the knowledge required for counseling researchers to effectively carry out CBPR includes understanding that the term "CBPR Researchers" applies to both academic and community partners (extended to counseling practitioners). Experts also agreed that academic CBPR researchers need to know or be willing to learn about the community's issues, concerns, and strengths. When researchers include community partners in the research process, it helps to develop trust and respect between these two groups and potentially leads to a deeper interpretation of the findings. Likewise, experts acknowledged the importance of inviting community partners to participate in dissemination of research findings. Finally, CBPR can be effective in bringing community partners together to determine priorities.

Skills. The experts agreed that practicing CBPR requires effective and reflective listening skills, group facilitation skills, and the ability to create strong partnerships (e.g., negotiating, collaborating,

networking, liaising). Researchers should practice cultural humility and be willing to work across the varying needs of communities with different cultures and identities. Therefore, researchers can help community partners recognize the strengths and resources already embedded in the current structure of their own communities. Finally, the experts agreed that CBPR researchers should communicate findings in ways that make skillful use of technology and are concise, clear, and appropriate so that the community may participate in the interpretation of results.

Attitudes. The experts identified cultural humility, flexibility, and persistence as essential CBPR attitudes. This required that researchers share power—for example, implementing shared decision-making in their projects with their community partners. It is imperative that researchers recognize that every community has its own unique strengths. Likewise, CBPR researchers make a commitment to collaboration by sharing expertise, being accountable, and giving credit to their community partners for their contributions to knowledge production. This entails researchers valuing power sharing with their community partners, including shared decision-making in their projects, while still upholding scientific rigor. Moving beyond shared decision-making, CBPR researchers also recognize the importance of working together to find innovative ways of disseminating research results. At times, researchers will need to commit to building continued relationships and networks within the community beyond a particular project or funding phase.

Activities. Finally, the findings confirm that carrying out CBPR necessitates particular experiences for counseling researchers. For instance, experts agreed that in order to foster effective partnerships, they need to practice deep listening and undertake participant observation at many different stages of their research. Other activities that experts consistently agreed were integral to the CBPR approach include frequent meetings, spending in-depth time getting to know the community, and collecting and analyzing data in collaboration with community partners. Counseling researchers commit to inviting community partners to participate throughout the research process, including organizing and planning meetings, data collection, data interpretation, findings dissemination, and even training or mentoring in research methods. All of these activities require a willingness to be educated about the community by the community members during the CBPR process.

Implications for Counseling Practice and Counselor Education

The CBPR competencies developed in this study serve to foster relationships between researchers and counseling practitioners in the community. Through these relationships, researchers, practitioners, and the communities they represent can work to reduce the gap between research and practice through enhanced community–researcher communication (Teachman et al., 2012; Wagstaff et al., 2018) and the translation of research outcomes into counseling practice (Wester & Borders, 2014). One aim of identifying the CPBR competencies was to provide mentoring to community partners, particularly counseling practitioners, on how to use research results to create effective community interventions. The goal is to close the gap between research and practice to improve treatment for our clients and improve communities.

A common language for interprofessional collaboration. This study brought together experts from two key fields whose efforts resulted in 153 competency statements that reflect the knowledge, skills, attitudes, and activities necessary to successfully carry out CBPR research. These CBPR competencies provide researchers with a vehicle to facilitate interprofessional work toward a common vision of community well-being. For instance, all experts on the panel for the present study agreed that CBPR researchers understand that when the community puts forth a common effort and agrees on common goals, trusting relationships are established, leading to enhanced social networks and better use of

resources. Thus, community–researcher partnership outcomes include the enhancement of access to, delivery, and quality of mental health services for communities (Collins et al., 2018), particularly hard-to-reach communities (Brookman-Frazee et al., 2016; Nieweglowski et al., 2018; O'Brien et al., 2018), and culturally appropriate interventions (Cox, 2017; Doll & Brady, 2013). Community-based research can facilitate efforts geared toward increasing the relevance of intervention methods.

Identifying competencies for training and proficiency in CBPR. The CBPR competencies identified in this study can serve as the basis for developing a training guideline for counseling practitioners, counselor–researchers, and counselors-in-training. Such a guideline allows stakeholders to maintain awareness of current and emerging research practices such as CBPR and enhances their professional responsibility (American Counseling Association, 2014, Standard C.2.f; Council for Accreditation of Counseling and Related Educational Programs, 2015, Section 6.4.d). Identifying competencies for training and proficiency is one approach to curriculum development (Mason & Schwartz, 2012) that we believe can be particularly effective. This study not only identified the necessary competencies for best practices in CBPR, but organized the competencies into meaningful categories that pertain to the four critical domains of proficiency in a given practice: knowledge, skills, attitudes, and activities. The sequence we have provided can be a useful map to the nine principles of the CBPR approach. This study lays a foundation for an effective training guideline that highlights how each CBPR domain builds upon the next. Having a CBPR training guideline will help standardize best practices in the collaborative process, thus enhancing researcher–practitioner engagement.

Promoting experiential learning opportunities for students. Counselor educators can connect emergent research and experiential learning in their curricula. The competencies highlighted by the current study may support project-based learning activities in courses that require students to approach community members and partake in a collaborative endeavor. The expectation is that the CBPR competencies would provide counselor educators and counselors-in-training with standardized guidelines for best practice in community-based research that they can apply when ready to pursue a project of their own. The emphasis in this case would be to prepare future counselors for community–researcher partnerships. The benefit of engaging students at the training level in CBPR research through the use of these competencies is that it exposes students to an awareness of the collaborative process by moving beyond knowledge components and learning the skills, attitudes, and activities necessary to initiate a partnership. This could require that a project be spread out over two or three semesters as a component in a field-based practicum or internship. The competencies can be used to structure such courses as well. For example, course objectives for one semester's internship might include the knowledge, skills, attitudes, and actions aimed at principles one, two, and three, whereas another semester may cover principles four, five, six, and so on. Alternatively, counselor educators might choose to design their research projects through interdisciplinary or interprofessional collaborations across campus that account for CBPR principles (McElfish et al., 2015; Talley & Williams, 2018), which students may be able to join as a component of training.

Limitations of the Study

One limitation of the study reflects the emergent nature of CBPR approaches in the counseling literature, which is that some CBPR researchers may be limited in their years of formal experience with the practice. For instance, four of the expert participants reported having less than four years of experience conducting CBPR projects. Although years of experience can be an important factor in attributing expertise, several studies have also highlighted that expert status is contingent upon many contextual factors, including recognition by other experts and stakeholders (Mead & Moseley, 2001). In this case, because CBPR is still a new practice in counseling research, peer recommendation was an identifying factor.

Another limitation of this study is the number of rounds conducted. Typically, a Delphi study will include two to eight rounds, with three as the median (Garson, 2013). The aim of the third round typically involves experts providing additional feedback about the items. Although we initiated a third round of the study, experts had little to no feedback to offer, meaning that the final statements were accepted with minimum revision. Although the authors interpreted this lack of feedback as validation of the final outcomes, one might otherwise argue that the lack of feedback better reflects other factors such as expert availability and time.

Suggestions for Future Research

We suggest that future researchers apply the Rasch model to the results of the Delphi study in order to test whether or not the competencies can be quantified in a meaningful way (Bond & Fox, 2015). The main question is whether the structure of the construct is qualitative or quantitative. If quantitative, then the Rasch model will unveil the extent to which the competency statements fall on a continuum. If they do not, that does not undermine the meaningfulness of the Delphi work or the content therein; rather, it would provide evidence that the competencies have a qualitative structure, and descriptive statistics are more appropriate for summarizing responses to them.

If the competencies can form a quantitative linear variable, then validating the results from this Delphi study against further measures will help the researchers translate the competencies into an assessment tool, where it is justifiable to sum up responses, report a total score, and perform statistical analyses. This assessment tool could then be used to identify and assess the counselors' own knowledge, skills, attitudes, and activities toward using the CBPR approach in a quantifiable way. Thus, the Rasch model is not an alternative to the Delphi study. Rather, it is a model that can test the extent to which it is justifiable to transform the statements gathered through the Delphi model into measurable variables; strengthening the efficacy of the competency statements guides instrument development to strengthen the results. Under the Rasch model, researchers can pilot the competency items to the counselors, who can be understood as the consumers of the instrument, and not to the experts who developed the competencies.

Conclusion

In conclusion, the results of the study provide an outline of evidence-based competencies derived from an empirical Delphi method that combined a wide-ranging literature review with expert feedback. This study comprises the beginning stages of the development and validation of CBPR competencies in counseling that may be utilized for training, practice, and further research. The findings of the present study provide awareness and initial competencies necessary to carry out CBPR research. Finally, the authors consider increasing the number of researcher–community partnerships to be key in bridging the gap between scientists and practitioners and advancing the profession. Ultimately, the aim is to improve the well-being of our clients and communities.

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Appendix

Final CBPR Competencies (Round 1 and Round 2 Results)

Domain	Sub-Category	Statement	%	Md	IQR
		Round One (Statements: Review of the Literature)			
K	P1	S.2 CBPR partnerships define the parameters of community	78.6	2.00	0.50
K	P1	S.3 Community could be described as geographic entity, a group that shares a common vision and/or identity	78.6	2.00	0.75
A	P1	S.4 CBPR is a research orientation, rather than a method, that aims at building community partnerships	92.9	2.00	1.00
A	P1	S.6 CBPR researchers must recognize the limits of their knowledge about their community partners	85.7	1.00	1.00
A	P1	S.7 CBPR researchers should work toward cultural competency	85.7	1.00	1.00
A	P1	S.8 CBPR researchers should value cultural humility	92.9	1.00	1.00
S	P1	S.9 CBPR researchers need to acquire appropriate tools and approaches for interacting with community partners	100	1.00	1.00
S	P1	S.10 CBPR researchers must be capable of negotiating and consulting with potential community partners	100	1.00	1.00
S	P1	S.12 CBPR researchers need to be skilled at problem solving that might arise when making decisions and negotiating	92.9	2.00	1.00
K	P2	S.16 CBPR researchers strive to recognize and develop on assets and relations presently within the community	100	1.00	1.00
K	P2	S.18 CBPR researchers understand that when the community puts forth a common effort and agrees on common goals, trust is established, which leads to enhanced social networks/relationships and better implementation of resources	92.9	2.00	0.00
A	P2	S.19 Every community has its own unique strengths	100	1.00	0.00
A	P2	S.20 CBPR frameworks foster conversations between partners within the community	100	1.00	1.00
S	P2	S.21 CBPR approaches also help community partners recognize the strengths and resources already embedded within the current structure of their own community	100	1.00	1.00
S	P2	S.22 CBPR researchers must acquire an ability to identify community assets within the community	92.9	1.00	1.00
AC	P2	S.24 CBPR researchers will engage with the community in order to learn more about what resources are already available within the community	92.9	1.00	0.25
K	P3	S.26 CBPR approaches aim to level the power differences between researchers and community partners by having them engage in an equal partnership	92.9	1.00	1.00
K	P3	S.27 CBPR researchers encourage and invite community partners to engage in each research phase	92.9	1.00	1.00
K	P3	S.28 Researchers and community partners should co-analyze and co-interpret research results	100	2.00	1.00
K	P3	S.29 When community partners are involved in the research process, deeper interpretation of findings may occur	100	1.00	1.00

A	P3	S.30 CBPR researchers make a commitment to collaboration by sharing expertise, being accountable, and giving credit to their communities' partners for their contributions to knowledge production	100	1.00	0.25
A	P3	S.31 CBPR researchers recognize the value of sharing power with community partners	100	1.00	1.00
A	P3	S.32 CBPR researchers are flexible and accommodating	92.9	1.00	1.00
S	P3	S.33 CBPR researchers must be persistent and tolerant, especially when faced with obstacles in the research plan or environment	85.7	1.00	0.25
S	P3	S.34 CBPR researchers must be able to collaborate with community partners in the interpretation of results	100	1.00	1.00
S	P3	S.35 Facilitate interpretation of results into practice	92.9	1.50	1.00
S	P3	S.37 CBPR researchers must be willing to mentor community partners to develop skills in participating in the research project	92.9	1.00	1.00
AC	P3	S.38 CBPR researchers create time for reflection and self-awareness	85.7	1.00	1.00
AC	P3	S.39 CBPR researchers schedule meetings with community partners to converse and clarify viewpoints of stress/difficulties encountered	100	1.00	1.00
AC	P3	S.40 CBPR researchers provide community partners the opportunity to be part of the research project from start to finish	100	1.00	1.00
K	P4	S.41 CPBR starts with a research area that is significant to the community	92.9	1.00	1.00
K	P4	S.42 The CBPR research agenda is co-developed with community partners	92.9	1.00	1.00
K	P4	S.43 CBPR encourages community partners to identify local impediments/barriers and unite community assets to work toward community well-being	92.9	1.50	1.00
K	P4	S.44 Including community partners in the research process helps develop trust and respect between researchers and community	100	1.00	1.00
A	P4	S.45 CBPR researchers value the contributions of community partners	100	1.00	0.00
A	P4	S.46 CBPR researchers encourage community partners to share vital perspectives and beliefs	100	1.00	0.00
A	P4	S.47 CBPR researchers welcome shared responsibilities in the research process	100	1.00	1.00
A	P4	S.48 CBPR researchers are prepared to learn about the community through the lens of the community partner	92.9	1.00	0.00
A	P4	S.49 CBPR researchers respect local knowledge and cultural perspectives	100	1.00	0.00
S	P4	S.50 CBPR researchers practice deep listening in order to learn from their community partner	100	1.00	1.00
S	P4	S.51 Effective communication and management skills are critical to engaging with community stakeholders to form partnerships	100	1.00	1.00
S	P4	S.52 CBPR researchers are willing to negotiate and make compromises with community partner	100	1.00	1.00
AC	P4	S.54 CBPR researchers engage in consistent and open communication	100	1.00	0.25

AC	P4	S.56 CBPR researchers educate community partners on the research process	92.9	1.50	1.00
AC	P4	S.57 CBPR researchers and community partners must make a joint effort to decide upon task roles and allocate time for future meetings: a consistent two-way communication	85.7	2.00	1.00
K	P5	S.58 CBPR researchers aspire to promote science while at the same time providing local interventions/strategies to attend to local matters in the community	92.9	1.50	1.00
K	P5	S.59 CBPR integrates knowledge and action intending to enhance community well-being	92.9	1.00	1.00
K	P5	S.60 CBPR researchers should include the interpretation of research results into practice, thus benefiting community partners	85.7	1.00	1.00
A	P5	S.61 One aim of CBPR is to provide mentoring to community partners on how to use research results in order to create effective community interventions	92.9	2.00	1.00
A	P5	S.62 CBPR researchers understand that this framework does not require researchers to give up scientific rigor	100	1.00	1.00
S	P5	S.63 CBPR researcher must know how to demonstrate the direct benefits of the research project to community partners	85.7	1.00	1.00
AC	P5	S.64 CBPR researcher will assist community partners in developing interventions/programs based on research findings	85.7	1.00	1.00
K	P6	S.65 CBPR researchers attend to issues that are of importance to the community partners involved	100	1.00	0.00
K	P6	S.66 The CBPR approach stresses the environmental influences that can cause health issues such as social, economic, cultural, and historical and political realms	92.9	1.00	1.00
K	P6	S.68 CBPR researchers attend to physical, mental, and social well-being, taking into account individual, family, and community contexts	92.9	1.00	1.00
S	P6	S.70 CBPR researchers possess advocacy skills to bring awareness to community partners and/or other stakeholders of the contributing factors of health problem	85.7	2.00	1.00
S	P6	S.71 CBPR researchers gather data from multiple sources to assess community priority issues	85.7	1.00	1.00
AC	P6	S.72 CBPR researchers and community partners problem-solve and take a course of action to reduce disparities in the community	92.9	1.00	1.00
K	P7	S.76 CBPR can be effective in bringing community partners together to determine priorities	100	1.00	1.00
A	P7	S.79 CBPR researchers are persistent and flexible	100	1.50	1.00
A	P7	S.80 CBPR researchers are prepared for further collaboration than initially anticipated, depending on community needs	100	2.00	1.00
S	P7	S.82 CBPR researchers apply problem-solving abilities in this process	100	1.50	1.00
AC	P7	S.83 CBPR researchers continue to assess and reevaluate throughout the project rather than wait until the end of the research phase	100	1.00	1.00

K	P8	S.84 CBPR encourages researchers to consider how to apply the knowledge acquired through their collaborations to directly benefit the community being studied	100	1.00	1.00
K	P8	S.85 An important element of CPBR is inviting community partners in the dissemination of research findings	100	1.00	1.00
A	P8	S.86 CBPR researchers recognize the importance of including community partners in sharing the results with the community	100	1.00	1.00
A	P8	S.87 CPBR researchers recognize the importance of finding innovative ways in partnering with community partners in disseminating research results	100	1.00	1.00
A	P8	S.88 CBPR researchers understand the importance of having research results readily available	92.9	2.00	1.00
S	P8	S.89 CBPR researchers have the ability to communicate findings in a way that could be understood by the community (e.g. being concise, clear, and using appropriate language)	100	1.00	1.00
AC	P8	S.90 CBPR researchers share results in community settings such as town hall meetings, presentations at local venues, community newsletters, and brochures	92.9	1.00	1.00
K	P9	S.92 Sustainability in CBPR means the community must desire the project to continue	85.7	2.00	1.00
K	P9	S.93 CBPR research actions produce preliminary accomplishments, which, in turn, improve community trust and create sustainability	85.7	2.00	1.00
A	P9	S.95 CBPR researchers commit to continued relationships and networks within the community beyond a particular project or funding phase	100	1.00	1.00
A	P9	S.96 CBPR researchers understand that the community partnership may not end when the project ends	92.9	1.00	1.00
S	P9	S.97 CBPR researchers, in collaboration with community partners, have the ability to create a long-term vision	92.9	1.50	1.00
AC	P9	S.99 CBPR researchers take the initiative to form and sustain trust through continuous community involvement	92.3	1.00	1.00
AC	P9	S.101 CBPR researchers strive for a wide range of outcomes that may include impacting local policy, relational changes, sustainability, cultural awareness, reducing health disparities, and/or improved health outcomes	92.9	1.00	1.00

Round 2 (Expert Contributed Statements)

K	P1	S.1 The term "CBPR Researchers" applies to both academic and community partners	85.7	1.5	1.00
K	P1	S.3 There is no one way to engage in CBPR	92.9	1.00	1.00
K	P1	S.4 CBPR researchers need to know about what projects or plans have and have not worked in the past	85.7	1.50	1.00
K	P1	S.5 CBPR is a philosophy that guides how a researcher engages a community in a respectful, honoring, and professional way	100	1.00	1.00
S	P1	S.7 Researchers must practice cultural competence and be willing to work across different cultures, community identities, and varying needs	100	1.00	0.25

K	P1	S.8 CBPR researchers need to know strategies for identifying and engaging relevant community partners	100	1.00	1.00
K	P2	S.9 CBPR researchers need to know and/or be willing to learn about the community's issues, concerns, and strengths	100	1.00	0.25
K	P2	S.10 CBPR researchers need a strengths-based concept of skills	100	1.00	1.00
S	P2	S.11 CBPR researchers should make skillful use of technology	100	2.00	0.50
A	P2	S.12 CBPR researchers need to recognize that communities have strengths, assets, intelligence, history, wisdom, and perspectives that matter	100	1.00	0.00
A	P2	S.13 CBPR researchers should be open-minded, better at listening than talking, and should know how to link project partners in meaningful ways	100	1.00	0.25
K	P3	S.14 CBPR researchers need to be aware of personal biases	100	1.00	0.25
K	P3	S.15 CBPR researchers need to know how to build trust and rapport with partners	100	1.00	0.00
S	P3	S.16 Carrying out CBPR requires researchers to pay attention to power differentials that may emerge in the work	100	1.00	0.00
S	P3	S.19 Carrying out CBPR requires researchers to be effective and reflective listeners	100	1.00	0.25
S	P3	S.20 Carrying out CBPR requires researchers to have group facilitation skills	100	1.00	1.00
S	P3	S.21 Researchers will demonstrate strong partnership skills (negotiating, collaborating, networking, liaising)	100	1.50	1.00
A	P3	S.23 Carrying out CBPR projects requires researchers to be non-judgmental	92.9	2.00	1.00
A	P3	S.24 CBPR researchers need to be willing to share power and control	100	1.00	1.00
A	P3	S.25 CBPR researchers need to be honest and able to navigate academic and community settings with ease and transparency	92.9	1.00	1.00
A	P3	S.26 CBPR researchers should value egalitarianism	92.9	1.00	1.00
A	P3	S.27 CBPR researchers should be cognizant of systems of oppression and privilege	100	1.00	0.25
AC	P3	S.29 CBPR researchers need to experience shared decision-making in their projects	100	1.00	1.00
K	P4	S.30 Researchers must be knowledgeable about the principles of CBPR in order to decide with the partner community which of those principles will guide their work together	85.7	2.00	1.00
K	P4	S.31 CBPR researchers need the ability to collaborate with community stakeholders by trusting them as experts in the research process	92.9	1.00	1.00
K	P4	S.32 CBPR researchers need to understand that CBPR is about relationships and relationship building	100	1.00	1.00
K	P4	S.33 CBPR researchers must learn about current community processes	92.9	1.50	1.00
S	P4	S.34 Carrying out CBPR requires flexibility	100	1.00	0.00
S	P4	S.36 CBPR projects require strong communication skills (including clarity, openness, deep listening, curiosity, cultural humility)	100	1.00	0.25

A	P4	S.38 CBPR researchers must recognize what they do not know or that they may not be the most knowledgeable about the community within which they work, rather than insisting on their own expertise	100	1.00	1.00
A	P4	S.39 CBPR requires valuing co-learning	92.9	1.00	0.25
A	P4	S.40 CBPR requires that we leave our academic egos at the door and allow the community to fully "own" the project	92.3	1.00	1.00
AC	P4	S.41 Researchers need to spend time listening to the community in which they work in order to build trust and rapport	100	1.00	0.00
AC	P4	S.42 Researchers should practice deep listening as a means of gathering qualitative data from engagement activities	100	1.00	0.00
AC	P4	S.43 Carrying out CBPR requires interactive community involvement	100	1.00	0.00
AC	P4	S.44 Carrying out CBPR requires a willingness to be educated about community by community members	100	1.00	1.00
K	P5	S.45 CBPR researchers need knowledge about participatory research	100	1.00	1.00
K	P5	S.46 CBPR researchers need to know how to conduct qualitative and quantitative or mixed methods research designs	100	2.00	1.00
K	P5	S.48 CBPR researchers need to know or learn how to do culturally responsive research	100	1.00	0.25
A	P5	S.50 Researchers should be able to balance providing structure with knowing when to let go and let the group process prevail	100	1.00	1.00
S	P5	S.52 Carrying out CBPR requires flexibility	100	1.00	1.00
S	P5	S.53 CBPR projects require strong communication skills (including clarity, openness, deep listening, curiosity, cultural humility)	100	1.00	0.25
A	P5	S.55 CBPR researchers must recognize what they do not know or that they may not be the most knowledgeable about the community within which they work, rather than insisting on their own expertise	100	1.00	1.00
K	P6	S.62 CBPR researchers should be aware of the strengths and barriers of the community	91.7	1.00	1.00
K	P6	S.63 The notion of "effective" in CBPR research is community-specific	85.7	1.00	1.00
K	P6	S.65 CBPR researchers need cultural competency with respect to the community in which the research is conducted	100	1.00	1.00
S	P6	S.67 Community partners should be advocates for change	85.7	1.00	1.00
A	P6	S.68 Researchers need to be committed to an ecological approach	85.7	1.00	1.00
K	P6	S.70 CBPR researchers need to know or learn how to do culturally responsive research	100	1.00	0.00
K	P7	S.72 CBPR researchers need knowledge of the parameters of CBPR	85.7	1.50	1.00
K	P7	S.73 CBPR researchers should know how to conduct nonlinear, cyclical research studies that inform policies, strengthen communities, and reduce disparities	92.9	1.00	1.00
A	P7	S.74 CBPR researchers understand that process matters	100	1.00	1.00

A	P7	S.75 CBPR researchers must be flexible and adaptable	78.6	1.00	0.25
AC	P7	S.76 CBPR researchers need to be flexible and persistently observing	100	1.00	0.25
S	P8	S.77 Successful CBPR projects will involve researchers who can communicate in lay language that a wide range of stakeholders will understand	100	1.00	1.00
S	P8	S.78 CBPR researchers need to be able to translate scientific and research writing into plain language, and multiple languages if necessary	100	1.00	1.00
K	P9	S.79 CBPR researchers need knowledge about how to broker the administrative aspects of CBPR (e.g., community subcontracts)	100	2.00	1.00
K	P9	S.80 CBPR researchers need knowledge about academic institutional barriers to CBPR and how to overcome them	100	2.00	1.00
K	P9	S.83 CBPR researchers need to know about the specifics of the CBPR process (e.g., how to form an advisory board) prior to beginning	85.7	1.50	1.00
S	P9	S.86 Researchers need to be skilled in project management	78.6	2.00	0.25
AC	P9	S.88 CBPR researchers need to spend in-depth time getting to know the community	100	1.50	1.00
AC	P9	S.90 Carrying out CBPR projects requires organizing and planning meetings, data collection, data analysis, and training of others in research methods	92.9	1.00	1.00
AC	P9	S.91 Carrying out CBPR projects requires frequent meetings and other forms of communications with partners	92.9	1.50	1.00
A	CT	S.93 Carrying out CBPR requires a researcher to have a positive outlook about the project	78.6	2.00	0.50
A	CT	S.96 Carrying out CBPR requires researchers to be flexible	100	1.00	1.00
A	CT	S.97 Carrying out CBPR requires researchers to be persistent	92.9	2.00	1.00
A	CT	S.98 Carrying out CBPR requires researchers to be patient	92.9	1.00	1.00
A	CT	S.100 Self-reflection is central to CBPR	85.7	1.50	1.00
A	CT	S.101 Humility is central to CBPR	92.9	1.50	1.00
A	CT	S.103 Beneficence is central to CBPR	100	1.50	1.00
K	M	S.104 Researchers need to acquire knowledge about how to frame CBPR work in their promotion, tenure materials, and IRB submissions	92.9	1.00	1.00
K	M	S.105 Researchers need knowledge about the availability of resources to support CBPR	92.9	2.00	1.00
K	M	S.106 Researchers would benefit from training or workshops in CBPR process	100	1.00	1.00

Note. Final list of CBPR competencies only includes statements that met criteria for present study: (1) the statement had 70% of experts agree (responding 'Agree' or 'Strongly Agree'); (2) the statement scored a 2.5 or less for the median; and, (3) the statement achieved an IQR of less than or equal to 1. Domain/Categories include: K = Knowledge, S = Skills, A = Attitudes, AC = Activities. Subcategories include: P1 = CBPR Principle 1; P2 = CBPR Principle 2; P3 = CBPR Principle 3; P4 = CBPR Principle 4; P5 = CBPR Principle 5; P6 = CBPR Principle 6; P7 = CBPR Principle 7; P8 = CBPR Principle 8; P9 = CBPR Principle 9; CT = Core Trait; M = Mentoring; S = Statement; Md = Median; % = Percentage; IQR = Interquartile Range.

nbcc