Evaluation of a Community-Based Participatory Research Consortium From the Perspective of Academics and Community Service Providers Focused on Child Health and Well-Being

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Abstract

A process evaluation of a consortium of academic researchers and community-based service providers focused on the health and well-being of children and families provides empirical and practice-based evidence of those factors important for community-based participatory research (CBPR). This study draws on quantitative ratings of 33 factors associated with CBPR as well as open-ended questions addressing the benefits, facilitators, barriers, and recommendations for collaboration. Eight distinct but related studies are represented by 10 academic and 9 community researchers. Even though contextual considerations were identified between the academic and community partners, in large part because of their focus, organizational mandate and particular expertise, key factors for facilitating collaboration were found across groups. Both community and academic partners reported the following as very important for positive collaborations: trust and mutual respect; adequate time; shared commitment, decision making, and goals; a memorandum of understanding or partnership agreement; clear communication; involvement of community partners in the interpretation of the data and information dissemination; and regular meetings. The results are compared to current models of collaboration across different contexts and highlight factors important for CBPR with community service providers.

Keywords

Community-based participatory research (CBPR) is a collaborative approach to addressing real-world problems using both systematic inquiry and experiential knowledge. Principles of this research approach include equitable participation by both researchers and community members, a willingness to learn from each other, system development and capacity building, a focus on empowerment, participatory strategies, and concrete action (Israel et al., 2006). Essentially, CBPR involves different groups equitably working together toward a common goal to address concrete issues and problems (Currie et al., 2005; Minkler, 2005). The definition of *community* is also broad based and can influence how CBPR is conducted. Communities can be service agencies, groups based on a geographical location, citizen groups, advocacy groups, nonprofit groups, government departments, or individuals with a common interest. As well, in the past decade, academic partners typically include multidisciplinary groups of researchers. This diversity has stimulated a growing literature attempting to identify those factors that assist CBPR in different contexts.

Generally, important factors for facilitating CBPR include clear communication, trust, and respect among partners regardless of the type of partnership or context (Kone et al., 2000; Reed, Schumaker, & Woods, 2000; Thompson, Story, & Butler, 2003). However, recent research suggests that attention to contextual factors may also be important considerations for facilitating CBPR. For example, research in inner-city communities have shown that effective collaborations also require acknowledging the community's contribution, recruitment and training with local participants, power-sharing strategies, and valuing diversity (Kone et al., 2000). Thompson et al. (2003) also recommend local representation as well as using an asset-based needs assessment to increase motivation, broaden perspectives, and inspire collective will. Reed et al. (2000), in their study of urban revitalization, recommend that successful

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collaborations include a history of collaboration, simple organizational structure, informality and flexibility, a shared vision, visibility of the university partners, and integration of university resources. Collaborations centered on health promotion require honesty, transparency, and equity (Community-Campus Partnerships for Health, 2006).

Less is known about the important elements of partnerships and the processes that facilitate CBPR with community-service providers. King, Currie, Smith, Servais, and McDougall (2008) describe four interdisciplinary research models used at their pediatric rehabilitation center that promote the cocreation of knowledge between researchers and clinicians; provide clinicians with research support, education, and training; and facilitate knowledge sharing, program/treatment evaluations, and dissemination. Their review suggests that the processes facilitating collaboration include time, resource support, and immersion within a research-focused center. Shoultz et al. (2006) describe a CBPR consortium between academic nurses and four community health centers focused on intimate partner violence in multicultural and multilingual communities. Factors facilitating collaboration in this CBPR project included (a) a stable research team; (b) shared decision making; (c) available time; (d) accessible meeting places; (e) a communication strategy; (f) shared activity on the research design, data analysis, and oral dissemination; (g) meetings to ensure consistency in procedures across settings; (h) training in research ethics and CBPR methods; (i) a mission statement that identifies core values, common goals, and principles; (j) respect; (k) trust; (l) release time for academics; (m) payment for community researchers; (n) rotation for first place in publications; and (o) a memorandum of understanding that details principles and expectations. Although the Shoultz et al. (2006) study provides excellent recommendations for facilitating collaboration between academics and community service providers for a CBPR consortium, it focused on a single project across four sites that dealt with adults, not children. Alternately, the Currie et al. (2005) paper describes many different research projects that address child health using different methods but used a local and centralized research team. Furthermore, both papers present their findings based on the researchers' perspective.

This study attempts to add to the CBPR literature of factors important for facilitating collaboration between academics and community service providers by (a) directly evaluating the processes, benefits, barriers, and facilitators of collaboration; (b) gaining the perspective of both academic and community partners; (c) exploring a large number of different contexts, that is, eight distinct but related studies; and (d) providing recommendations for facilitating CBPR within studies, for a consortium, and within institutions. This evaluation provided a unique opportunity to explore collaborative research from the perspective of community service providers and university researchers working in a multitude of different contexts because of varied organizational mandates, the type of clients being served, the specific experiences and goals of participants, systematic issues such as funding and available support, and different study objectives. Of particular interest was identifying whether there were key factors important for collaboration in CBPR across all contexts or if different contexts influenced the collaborative partnership experience.

Method

Context and Participants

Eight distinct but related CBPR studies that participated in the *Consortium for Health, Intervention, Learning and Development* (the CHILD project) are represented. The overarching goal of the CHILD Project was to study early childhood development through a series of linked, interdisciplinary, multimethod, and longitudinal research projects. All research studies within the CHILD Project address this overall goal, albeit through different philosophical, disciplinary, and empirical lenses. Based on Bronfenbrenner's (1979) theory of the ecology of human development, the purpose of the consortium was to generate information on macrosystems (values, attitudes, and beliefs), exosystems (policy, legislation, and regulation), and microsystems of human development (families, neighborhoods, child care programs, and community-based early intervention programs). Through meetings, retreats, and communication, the consortium leader and staff promoted CBPR principles and values from the beginning of the 5-year project. An initial memorandum of understanding was signed by both primary academic and community partners of each study; detailing the opportunity for shared participation in all aspects of the research, opportunities for training, and reimbursement for participation.

Of the 10 studies in the CHILD project, 8 studies are represented in this evaluation (2 studies were unable to participate due to time constraints). From these 8 studies, 2 had multiple components headed up by different principal academic investigators and 1 study had two different community partners represented. Six of the 8 studies had representation from both academic and community partners. In total, 10 academic researchers and 9 community researchers participated in this evaluation. Table 1 lists the 8 studies represented in this sample, descriptions of the discipline or community organization of the participants, objectives of the study, and the methodology used. Please note, the academic research teams were multidisciplinary but only the affiliation of the primary investigator is presented. As Table 1 shows, the participants represented a heterogeneous sample from different backgrounds, experiences, and expertise, with the only common element being a focus on promoting child health and well-being using CBPR.

Table 1. The Studies, Academic Disciplines, Community Partners and Methods Represented From the CHILD Project

The studies and their main objectives	Academic discipline	Community partners	Research methods
The Income Assistance Study. To assess the impact of changes in income assistance policy on lone-parent families with young children	Women's studies	Social Planning and Research Council of BC; Canadian Centre for Policy Alternatives	Qualitative analyses of multiple interviews and focus groups with lone mothers on income assistance with preschool children. Also, documentary and econometric analyses of income assistance policies
The Child Care Policy Study. To investigate the impact of child care policy changes on communities, child care facilities, families, and children	Early childhood education; policy analysis	Westcoast Child Care Resource and Referral	Analyses of government policies and programs on child care use patterns and the accessibility, affordability, and quality of child care services
The Chilliwack Developmental Screening Study. To determine the effectiveness of a universal, community-based developmental screening program	Child development	Public Health Nursing	Administration and analyses of a battery of child development screening measures for all children in one municipality at ages 6, 12, 24, 36, 48, and 60 months
The Developmental Pathways Study. To follow the long-term development of highly at-risk infants	Neonatology	Infant Development Program of BC	Analyses of child development status of survivors of neonatal intensive care units using standardized child development outcome measures at ages 6, 12, 24, 36, 48, and 60 months
The Infant Neuromotor Screening Study. To explore the effectiveness of two types of training models for the early identification of children with neuromotor delays	Nursing	BC Centre for Ability	Screening infants, toddlers, and preschoolers for neuromotor delays/disorders using two different screening measures at ages 6, 12, 24, 36, 48, and 60 months. Also, an evaluation of two methods of training staff to administer these measures
The HIPPY in Aboriginal Communities Study. To explore the *Home Instruction for Parents of Preschool Youngsters* program as implemented in Aboriginal communities	Early childhood education	HIPPY Canada	Interviews and focus groups with Aboriginal parents, child care professionals, and elders in on-reserve Aboriginal communities on the impact of the HIPPY program in their communities. The administration of child development outcome measures to assess children's school readiness on completion of the program
The Parent Counseling Study. To assess the impact of counseling on parents whose children are at risk for apprehension by child protection authorities	Social work and family studies	Family Services of Vancouver	Interviews and focus groups with parents participating in a mandatory parent counseling program to prevent child abuse/neglect
The *Safe Spaces* Study. To examine the short- and long-term effectiveness of a preschool antibullying program	na	Westcoast Child Care Resource and Referral	Observing and evaluating children's levels of social and emotional development before, during, and after completing the *Safe Spaces* training program

Note: CHILD = *Consortium for Health, Intervention, Learning and Development*; na = not available.

Measures

This evaluation used a mixed methods approach that included both a quantitative assessment of factors associated with CBPR and a qualitative open-ended interview. This approach was chosen to explore the importance of factors identified with collaboration in CBPR studies as well as tap into participants' perspectives in depth (Creswell, 2003; Johnson & Onwuegbuzie, 2004). As Yoshikawa, Weisner, Kalil, and Way (2008) explain, "examining behavior and belief systems requires both quantitative and qualitative approaches to research: quantitative methods to understand the prevalence of particular practices, behaviors, and beliefs, and qualitative methods to understand meanings, functions, goals and intentions" (p. 346).

Community-Based Participatory Research Rating Scale. Developed for this evaluation, the Community-Based Participatory Rating Scale was based on previous process research (Pivik, 1997, 2006), surveys of CBPR participants (Pivik & Weaver, 1997; Weaver & Pivik, 1997a, 1997b), a survey of health consumers (Pivik, Rode, & Ward, 2004), and extensive reviews of the CBPR literature (2004a). Thirty-three factors were identified as potentially affecting CBPR and included the following main categories: level of community involvement, relational issues, community access factors, mobilizing the collaboration; training, educational, and information support; process methods and fostering the collaboration (see Table 2 for a list of each factor). All participants were asked to rate the importance of each factor on a 10-grade Likert-type scale ranging from 1 (*not at all important*) to 10 (*extremely important*). They were asked to consider the importance of these factors to *their* current CBPR study and not from a hypothetical viewpoint.

Structured interview. Open-ended questions followed the rating scale, which asked both community and academic researchers to discuss the benefits, facilitators, barriers, and recommendations for facilitating collaboration within their study, at their place of employment, and within the consortium. As well, participants were asked about the importance of a partnership agreement or memorandum of understanding for conducting CBPR and whether they would become involved in another CBPR project in the future.

Coding and Plan of Analyses

The quantitative data were analyzed using SPSSX version 10. Because of the 10-point format of the rating scale, the data were treated as continuous, with corresponding descriptive statistics performed (Göb, McCollin, & Fernada Ramalhoto, 2007). Descriptive statistics (means and standard deviations) were computed for the 33 rating factors and grouped as academic or community researcher. Factors were then compared between groups using the Mann-Whitney U test. Although theoretically, the samples were related in that an academic and a community researcher were evaluating the same study, the more stringent test for independent samples was used because only 6 of the 8 studies met this condition. The Mann-Whitney U test is a nonparametric test for assessing whether two independent samples of observations come from the same distribution and was chosen because the sample sizes were less than 30.

The qualitative data were transcribed verbatim and then coded and analyzed using the qualitative software, NVivo7. Using content analysis, the data were coded into categories, which represented common ideas, trends, and patterns, based on each interview question (Haney, Russell, Gulek, & Fierros, 1998; Stemler, 2001). The primary author and a colleague developed a checklist of categories using emergent coding, that is, allowing themes or patterns to emerge from the data. The data were then independently coded by both raters, resulting in a .82 Cohen's kappa score. Discrepancies between raters were resolved through discussion. Finally, the number of occurrences identified for each theme was examined across and between the academic and community researchers.

Procedure

The primary academic and community researcher from each study was contacted to participate in the interview. Participants were contacted by email and/or telephone for a total of three contacts. The majority of the interviews were conducted in person; however, 6 of 19 participants opted for a telephone interview. The interview guide was e-mailed to the participant in advance and both in-person and telephone interviews lasted between 1 and 1½ hours. All interviews were audiotaped with permission and transcribed verbatim. The telephone interviews were audiotaped through the speakerphone system. The rating scale was completed at the time of the interview and verified with the transcripts. All transcripts were sent back to the participants to ensure accuracy. Two participants added additional information to their responses. This evaluation received ethical clearance from the University of British Columbia's Behavioral Research Ethics Committee.

Results

Quantitative Results

Mean and standard deviations of the importance ratings from the Community-Based Participatory Research Rating Scale for both academic and community partners are presented for level of community involvement, relational factors, community access issues, mobilizing partnerships, education, training and informational support, methodological processes, and fostering collaboration (see Table 2). The following results describe the mean responses for the importance ratings.

Table 2. Mean (*SD*) Ratings of Importance From the Community-Based Participatory Rating Scale by Category for Academic and Community Partners

	Academics (*n* = 10)	Community (*n* = 9)
Level of community involvement in:		
Defining the research objectives	8.3 (2.0)	8.3 (1.8)
Developing the research proposal	7.0 (2.9)	7.3 (1.4)
Budget discussions	7.4 (2.7)	6.0 (2.2)
Data collection	8.0 (3.3)	7.4 (2.2)
Data analysis	5.8 (3.3)	6.0 (2.2)
Interpretation of data	9.0 (1.7)	9.1 (.92)
Dissemination	9.6 (.69)	9.6 (1.0)
Relational		
Sense of trust	9.7 (.67)	9.1 (1.1)
Mutual respect	9.7 (.48)	9.1 (1.2)
Commitment to power sharing	9.0 (1.4)	8.1 (2.9)
Shared commitment	9.6 (.69)	8.8 (1.3)
Access		
Remuneration for participation	8.1 (2.6)*	5.2 (3.4)*
Reimbursement for travel/parking	8.0 (2.2)*	5.0 (3.0)*
Flexible timelines	8.7 (1.4)	7.6 (1.8)
Flexible meeting places	7.6 (2.2)	5.6 (2.3)
Technical access	5.9 (3.2)	7.1 (2.3)
Mobilizing		
Discussion about resources	7.7 (2.6)	8.0 (1.7)
Clear roles	8.4 (1.7)	7.7 (1.0)
Ground rules	8.0 (2.0)	7.7 (1.9)
Having a common definition	8.3 (1.6)	9.0 (.81)
Having a strategic plan	7.3 (2.1)	8.0 (2.2)
Education, training, and information		
Educational materials	6.7 (3.1)	6.6 (2.4)
Training opportunities	5.8 (4.2)	6.7 (2.2)
Clear communication	9.4 (.84)	9.0 (1.4)
Continuous information sharing	8.5 (1.9)	8.0 (1.9)
Methods of conducting CBPR		
Having regular meetings	9.0 (1.4)	9.0 (.92)
The use of consensus building strategies	7.4 (1.9)	8.5 (1.3)
The use of conflict resolution strategies	6.5 (3.0)	8.3 (1.3)
Regular assessments of the partnership	8.3 (2.1)	7.7 (1.9)
Fostering collaboration		
Shared decision making	8.3 (2.0)	8.4 (1.2)
Shared goals	8.5 (1.5)	8.5 (1.2)
Public acknowledgment of community participation	9.3 (1.4)**	6.2 (2.3)**
Common values	8.6 (.96)	7.5 (1.5)

Note: Scale is from 1 (*not at all important*) to 10 (*extremely important*) endpoints. CBPR = community-based participatory research.
p < .05. **p* < .01.

Level of community involvement. This category asked how important is it to have community members involved in defining the objectives of the study, developing the proposal, budget discussions, data collection, data analyses, interpretation of the data, and information dissemination. Both community members (C) and academics (A) reported that it was very important for community members to be involved in the interpretation of the data (A = 8.9, C = 9.1) and dissemination of the research results (A = 9.6, C = 9.6). The lowest importance scores reported by both groups were for community members' involvement in data analyses (A = 5.8, C = 6.0). However, when qualitative analyses were being conducted, having the community researchers' perspective was considered very important by both groups. Community members reported a lower importance rating for being involved in budget discussions (6.0) than academics did (7.4).

Relational factors. Relational factors include trust, mutual respect for the knowledge and skills of each partner, a clear acknowledgment that no one person has superior or privileged status over others, and a shared commitment between partners. Overall, relational factors had the highest mean scores compared to all other categories for both academic and community researchers, with all scores in the top quartile. Trust and mutual respect were identified as extremely important by both community (9.1) and academic researchers (9.7). Valuing and explicitly acknowledging the experiential knowledge and skills of the community partner by the academic partner has been cited by many (e.g., Shonkoff, 2000; Stokols, 2006) as essential for facilitating CBPR. This mutual recognition is seen as a key aspect of "power sharing" among the partners. The higher mean importance score reported by the academic partners (9.0) compared to the community partner (8.1) for power sharing is the one discrepancy in this section.

Access issues. This category includes remuneration for participation, flexible timelines and meeting places, reimbursement for expenses such as parking and travel, and access to technical assistance. Overall, the academics rated the importance of access factors in the top quartile (with the exception of access to technical assistance), whereas the community members generally rated these factors in the third quartile, with at least a 1-point difference between the community and academic responses on five of the six items. The categories related to money (reimbursement and remuneration) showed statistically significant differences between community and academic members in relation to importance, using Mann-Whitney U tests. Specifically, community members ($n = 9$) rated remuneration (Mann-Whitney $U = 17.5$, $p < .05$, two-tailed) and reimbursement (Mann-Whitney $U = 13.0$, $p < .05$, two-tailed) as significantly less important than the academics ($n = 10$).

Mobilizing partnerships. Mobilizing questions asked both academic and community partners to rate the importance of the following factors: identification and discussion about available resources, having clearly identified roles and responsibilities, establishing ground rules for collaboration, having a common definition of the research objectives or problem, and developing a strategic plan of collaborative action. Community partners rated all mobilizing factors in the top quartile of importance, with having a common definition of the research problem as extremely important (9.0). Academics reported lower ratings for discussion about resources (7.0) and having a strategic plan (7.3).

Education, training, and information-sharing support. Education and training of community partners for CBPR fell into the third quartile range of importance for both community and academic researchers (range = 5.8-6.7). The exception to this finding was two projects whose purpose involved training community members in a new assessment method. Having clear communication received extremely high importance ratings by both groups (A = 9.4; C = 9.0). Continuous information sharing was rated in the top quartile range of importance for both groups, although slightly higher for academics (8.5) compared to community partners (8.0). The general consensus was that information sharing should be considered and moderated according to the needs of the partners, and the amount and method of information sharing should be discussed.

Methods of conducting CBPR. Methodological process factors include the importance of regular meetings, the use of consensus- and conflict-building strategies, and regular assessment of partner satisfaction. Regular meetings were valued as very important by both academic (9.0) and community researchers (9.0), providing a "deadline" to complete tasks, and an opportunity to keep connected and to facilitate communication and momentum. The importance of consensus and conflict resolution strategies was rated higher by the community members (top quartile) than by the academics (third quartile). Having regular assessments of partner satisfaction was rated in the top quartile for both academics (8.3) and community partners (7.7).

Fostering collaboration. Fostering collaboration includes the following factors: shared decision making, shared goals, public acknowledgment of the community members' involvement, and common values. Shared decision making and goals were rated as very important for both groups (range = 8.3-8.5). A significant difference between community and academic researchers was found for public acknowledgment of the community partners' involvement, Mann-Whitney $U = 6.5$, $p < .01$ (A = 9.4, C = 6.2). Academics felt that public acknowledgment provided support for the study within the communities, legitimacy, and ecological validity within the university. Community members were concerned only when their organization's name was incorrectly advertised or when incorrect information was published on the website. Sharing common values during the research project was of more importance to the academics (8.6) than the community partners (7.5).

Qualitative Results

Although the rating scale data provided a useful framework for understanding the major factors associated with CBPR, the qualitative data provided a greater depth of understanding of the nuances and complexity associated with each participants' individual context. The open-ended questions gave participants the opportunity to discuss: benefits, facilitators, barriers, the value of a partnership agreement, and recommendations.

Benefits. Participants were asked to identify the potential benefit to collaboration from a personal perspective and for their study. Seven of the 10 academic partners identified the relationships that resulted from the collaboration as an important personal benefit, closely followed by a sense of increased knowledge ($n = 5$) and enhanced networking opportunities ($n = 3$). Reported benefits to the study were that the collaboration added an essential perspective ($n = 7$), provided a vehicle for information dissemination ($n = 6$), ensured relevancy ($n = 4$), provided credibility within communities ($n = 2$), and provided opportunities for students ($n = 2$). As one academic noted, "collaboration keeps us grounded in reality and attached to practice."

The greatest personal benefits to collaboration identified by community partners were increased knowledge ($n = 6$) and networking ($n = 2$). Most of the benefits identified by the community members were associated with their organization, such as an increased profile for the community organization, the provision of greater resources to the public, and greater credibility to obtain further funding.

Facilitators. When asked to identify the facilitators to collaboration, relational issues were predominantly mentioned. Having a positive relationship with their partner was mentioned by six of the academics and four of the community partners. One academic reported, "Basically the willingness of our partner, their attitude, their responsiveness, and them

being so positive all the way along, working around barriers and just trying to make a go of it. They've been great." A community member summed up why they had such a positive relationship with their researcher, "I would have to say what worked most is the flexibility, the openness of our researcher, her willingness to just put her cards on the table and say this is what I know and I know nothing about that and then hand the cards to me and say you take it from here, because I don't know. She was so open to say what she didn't know and to give me the responsibility to step in when it was my turn."

Similarly, personal relationships that existed or were developed with their research partner was mentioned by five academics and five community members and typically identified trust and respect as key features. For example, a community member emphasized the importance of trust in their relationship, "there's the trust, you know the person, you know their history, and you know they're not going to go down the garden path—that any time you put into it will be well worth it. You know, you want to do this work; you know it's going to be successful. You know you're working with people who are committed and knowledgeable." The other reported facilitators were nicely summed up by an academic researcher: "Facilitators included CHILD learning forums, personal contacts and networks and the personalities and professionalism of our team. Have to say right up front that we are all equals—this needs to be articulated. Community members provide a quality to the knowledge and richness to our discussions."

Barriers. By far the most often reported barrier to collaboration within their research studies was the lack of time (A = 8, C = 8). As most community members indicated, because of their priority to service provision, the research was often done off the side of their desks, "well I mean, common to everyone, time. I don't have the time to commit to the degree that I would like to and I don't have people that I can delegate these responsibilities to." The following quote from an academic partner typifies many academic perspectives on why CBPR takes more time, "The success is in establishing a relationship, which requires time. Respecting the way in which they're prepared to be involved in the collaboration means a spectrum of things and needs to be respected."

Availability issues were also identified as barriers, including having researchers and community members not physically located together, the lack of availability because of busy schedules, difficulty in organizing meeting times, career interruptions, 2 to 3 hours' traveling to attend meetings, and long distances between partners. To address these problems, most of the research meetings were conducted in the community, often at the community partners' organization.

Systemic issues were also identified as barriers, especially the discontinuation or restriction of funding to community organizations by the government, resulting in concern for their survival, reduced staff, and even less time to devote

to research (C = 3). Financial issues served as barriers to collaboration in other areas as well. In the original design and budget of the consortium, funds were allocated to serve as "release time" for both academic and community partners. For the academics, these funds were used to hire substitute instructors who would carry part of the normal academic teaching load (usually one course). The same amount of money was allocated to each participating community agency to free up a certain amount of time of the community partner. In most cases however, the stipends for the community agency was not sufficient for providing release time or hiring another practitioner to replace them (*n* = 7).

Some of the arrangements intended to facilitate collaboration across the consortium, such as CHILD learning forums (CLFs), where all participants convened to present findings and discuss similarities across studies, in fact presented challenges. The most frequently reported challenge regarding the consortium was the focus on identifying similarities across very different studies. As one academic noted, "In the big picture, when I think back to the first couple of forums, it was a challenge to take people with such different backgrounds and discover that we're not all talking the same language. So we had to work on bridging those areas." Although the CLFs were considered extremely useful by both academic and community members in the long run, it did take time for individuals to feel comfortable and understand the language, concepts, and similarities across studies.

Partnership agreement. Eight of the 10 academic researchers and all 9 of the community researchers reported that it would have been helpful to develop a more detailed partnership agreement or a memorandum of understanding at the beginning of the research process, with the proviso that it not be "set in stone." Benefits suggested for such an agreement included the opportunity to prospectively discuss roles and responsibilities, the goals and objectives of the study, communication strategies, decision-making strategies, modes for information dissemination, budgets, and timelines.

Most telling about the value of CBPR was whether participants would participate in future CBPR studies. All 10 academic partners indicated "yes" (if they weren't planning to retire, *n* = 2). Eight of the nine community partners also indicated that they would consider involvement in another CBPR study. The remaining community partner would become involved in the future if it was more participatory in nature.

Recommendations. Participants were asked to provide recommendations for facilitating CBPR research within their studies, within their organizations, and for consortiums (see Table 3). The recommendations by community partners specific to their research studies focused on communication, shared decision making, education, and modes of dissemination. Academic researchers' recommendations for studies also focused on communication and dissemination activities. Specifically, providing opportunities

Table 3. Recommendations for Facilitating CBPR: Within Studies, Across a Consortium and Within Institutions

	Community researchers	Academic researchers
Within studies		
Communication	Ensuring clear communication and expectations Ensuring cultural and language sensitivity training Providing opportunities for more and regular dialogue	Providing opportunities for more and regular dialogue Benefits to research are made more explicit Research involvement becomes a part of the community agency's mandate
Shared decision making	More opportunities for community involvement in decision making	
Education	In-service educational opportunities made available for community partners to better understand research	
Dissemination	Providing information to the community agency board of directors and providing opportunities for community members to participate in all public presentations	Showcasing the study in the community organization's annual report
	Community service agency	University
Within their organization		
Better understanding of CBPR/time support	Dedicated time made available for conducting CBPR	Institutional understanding that CBPR requires more time Understanding CBPR—a broader definition of research Acknowledging collaborative teams in research ethics/funding
Resource support	In-service training opportunities at the community agency be provided in the areas of research and collaborative practices Cultural sensitivity training within organizations be provided Information be made available to the community organization and board of directors Opportunities provided within the organization for education and mentoring related to the study	In-kind resource support
Across a consortium		
Research plan	A focused overall research plan	A focused overall research plan; use of a partnership agreement or memorandum of understanding
Education/learning	Education and sensitization of consortium members to cultural and ethnic issues Relationship-building seminars or events at the beginning of the process Learning support for community partners	The provision of learning support for community members Awareness and minimization of power differentials
Time strategies	Time provided at CLFs for individual team meetings	Strategies developed for community partners to participate in spite of time constraints The opportunity for all members to share different skills Meetings dedicated for community partners
Funding strategies	Recognition of community agencies in funding applications	Better organization for funding distribution
Access support		Spaces for community partners to lead dialogue
Dissemination	An Internet site devoted solely to the consortium, which is updated regularly, has links to the community agencies, and describes their involvement The development of brochures about the consortium and research study, dedicated to families and community service agencies	

(continued)

Table 3. (continued)

	Community researchers	Academic researchers
Acknowledgment	An official thank-you letter sent to the board of the community agency for providing personnel involvement	
Partnership assessments	Annual updates to a memorandum of understanding for collaboration	

Note: CBPR = community-based participatory research; CLF = CHILD (*Consortium for Health, Intervention, Learning and Development*) learning forum.

for more and regular dialogue and showcasing the study in the community organization's annual report. As well, academic partners recommended that benefits to research be made more explicit and that research involvement become a part of the agency's mandate. Within organizations, both groups recommended support for conducting CBPR—be it more time, recognition for professional requirements (academics), and resource support such as training and information (community researchers). Recommendations for consortiums for both groups included a memorandum of agreement or a focused research plan and increased time, learning, and funding support. Academics also suggested spaces for community partners to lead dialogue, and community researchers recommended that consortiums address issues associated with information dissemination, acknowledgment, and partnership assessments.

Discussion

This evaluation supports the premise that context plays a role in CBPR between academic and community-based service professionals. The nine different community service providers all saw the importance of participating in research to provide further insight and evidence-based practice; however, their first priority was service provision. This was evident in their desire to participate in data interpretation and information dissemination, suggesting an interest in being advisors or consultants as opposed to a more active participatory role. The one study that was initiated by the community did assume a more active role in research decision making. This focus on clients also explains the identification of time as a major barrier, the interest in clear but strategic communication and the lack of interest in personal acknowledgment of their participation (however, proper acknowledgment of their agency was considered important). As well, the interest in having a partnership agreement, clearly defined roles and responsibilities, shared decision-making strategies, and an understanding of how to respond to conflict also reflects their focus, time constraints, and their participation in a research process that was not completely familiar to most. A similar focus was reported by King, Currie, Smith, Servais, and McDougall (2008) in their "clinician-researcher skills development model." Although the community service providers were not able to be involved in all aspects of the

research project because of their clinical load, they and their academic partners felt that their contribution was important and valuable. These data suggest that the definition of CBPR be broadened to include participation in the research process at whatever level is feasible to the participants instead of the blanket statement that community members must be involved in all aspects of the study.

Overall, the academic researchers understood the community partners' realities and the "requirements of CBPR." Study meetings were often held in the community, often at their agencies. The high ratings from the academics on the need for power sharing, acknowledgment of community members' participation, and reimbursements for travel and parking are other examples. The effort to reimburse for release time for community members and provide training opportunities was also commendable albeit largely unsuccessful, in large part because of the realities of finding part-time replacements and university bureaucracy impediments. The focus of the academics on university requirements such as publications, presentations, and grant application requirements did at times create conflict in the eyes of some community members. The request that community members be consulted about and asked to participate in public presentations related to their study is an example. These types of cultural factors have been described by Stokols (2006) and Shonkoff (2000).

Even though contextual differences were identified between the academic and community partners, in large part because of their focus, organizational mandate, and particular expertise, there were some striking commonalities across both the quantitative and qualitative data. Both community and academic partners reported the following as very important for positive collaborations: trust and mutual respect; adequate time; shared commitment, decision making, and goals; a memorandum of understanding or partnership agreement; clear communication; involvement of community partners in the interpretation of the data and information dissemination; and regular meetings.

A comparison of these results to current models and frameworks for CBPR indicates both concordance and discordance—concordance in that these results were multidimensional, developmental, and interactive (Currie et al., 2005; Fawcett et al., 1994; Suarez-Balcazar, Harper, & Lewis, 2005). For example, time influenced feelings of trust and respect, which in turn

impacted on the degree and type of communication, the benefits associated with the collaboration and collaborative values such as a shared decision making. As well, key facilitators identified by both of our groups (respect, trust, shared commitment, shared decision making, shared goals, and clear communication) are evident in most of the models and frameworks reviewed. For example, trust and respect were identified by all of the models/frameworks reviewed as essential (Community-Campus Partnerships for Health, 2006; Kone et al., 2000; Pivik, 1997; Reed et al., 2000; Suarez-Balcazar et al., 2005; Thompson et al., 2003). Clear communication was also identified in five of the six models (Kone et al., 2000; Pivik, 1997; Reed et al., 2000; Suarez-Balcazar et al., 2005; Thompson et al., 2003). These results suggest that respect, trust, shared commitment, shared decision making, shared goals, and clear communication are vital to any type of community–university collaboration regardless of the context of the research or the individuals involved.

However, the unique recommendations identified by this study also suggest that attention must be paid to the purpose of the study, the groups involved, and context of the collaboration. As previously mentioned, collaborations focused on work with underserved populations require respect for the cultural setting and diversity (Kone et al., 2000; Norris et al., 2007; Suarez-Balcazar et al., 2005), attention to power sharing (Kone et al., 2000), and using local expertise and knowledge (Kone et al., 2000; Reed et al., 2000; Suarez-Balcazar et al., 2005; Thompson et al., 2003). As this study indicated, facilitators for collaborations between academics and community service agencies require not only the key factors indicated above but also consideration of their time constraints, their primary focus on serving clients, and organizational factors associated with the agency. Awareness of these considerations and discussions between partners about the "realities" they face (for both community and academic groups) should facilitate future community–university collaborations.

Limitations and Future Research

The major limitation for this evaluation was the format of the Community-Based Participatory Rating Scale. Having only end-points identified (not at all important to extremely important) made interpretation more difficult. It is recommended that future research use a 7-point Likert-type scale with labels. Future research should also endeavor to examine other contextual variables that might influence CBPR and were not systematically explored in this study but suggested in the qualitative interviews. Specifically, (a) personal characteristics of participants such as professional maturity or standing, leadership skills, and previous experience with CBPR; (b) dimensions of the community, including social, economic, environmental, cultural, and political backdrop; and (c) institutional supports or constraints such as professional, ethical, educational, and funding requirements. Finally,

future research should endeavor to include a larger sample size and ensure equal representation between academic and community partners.

Implications for Practitioners

Many of the key ingredients for successful collaborations in CBPR identified in this evaluation could be prospectively addressed through discussions at the initial stages of the partnership. A partnership agreement or memorandum of understanding provides a medium for these discussions and was recommended by most of the participants in this study. Along with providing a framework for community service providers, the value of a memorandum of understanding has been recommended for documenting roles and responsibilities in other CBPR contexts (Norris et al., 2007; Pivik, 2004a). Criteria that may be considered for developing an agreement were identified by Pivik (1997, 2004a) in *The Consumer-Researcher Collaborative Framework*, specifically that agreements include a description of methods that address full participation and accessibility; an identification of participants' strengths and constraints; clarity regarding participants' roles and responsibilities; decision-making and conflict resolution strategies; benefits to participation; educational, training, and informational support requirements; and budget considerations. Also recommended by this study is the need to periodically evaluate member satisfaction throughout the CBPR process. The Community-Based Participatory Rating Scale may also assist in these efforts or provide a starting point for discussion. Along with these potential tools for developing partnership agreements and assessing satisfaction, the academic and community researchers from these eight studies offer practical advice on key features that support collaboration and guidance for conducting CBPR with community service providers.

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