FEATURE ARTICLE

Community-based participatory research with traditional and indigenous communities of the Americas: Historical context and future directions

by
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Community-based participatory research (CBPR) is an investigative orientation that is gaining prominence in the fields of population and public health and among underserved community groups, such as traditional and indigenous peoples of the Americas. In this model, research questions are approached in a collaborative fashion with the community. The community of interest, not individual participants, is the research unit. Trained community members participate in the research process in an equitable fashion as full collaborators, not just as 'research participants'. Academic and other scientists, on the other hand, are not just 'objective investigators' but also active learners in this process. Cultural information gleaned from the community is used to inform the research process. Thus, another characteristic of CBPR is that it is iterative. In the dissemination of the findings, an educational component is designed and implemented to serve the needs of the community. This article is a practical, not exhaustive, review of the historical context of CBPR, with a focus on the applications of this problem-solving orientation with traditional/indigenous peoples of the Americas. Research stages are outlined, and discussed are potential pitfalls to avoid and methods for collaborative problem-solving. Future directions for the use of CBPR among communities are promising. Indigenous and traditional populations throughout the Americas (rural, reserve, remote, and urban) continue to seek ways to express their cultural sovereignty, while partnering with institutions to solve community

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problems through science and education. As well, CBPR is receiving increased support in academic institutions as a viable research orientation for academicians, and through funding agencies that recognize the merit of its strengths.

Introduction

Community-based participatory research (CBPR) in population and public health studies is a collaborative approach to research whereby academicians, organizations, and community members are equitable partners throughout all phases of the research process (Israel, Schulz, Parker, & Becker, 1998). The goal of CBPR is to improve the lives of the people in the community studied, through research and education. In this research model, community members and researchers work side by side to define the research question, design and implement the research methodology, interpret, and disseminate the findings (Israel, Eng, Schulz, & Parker, 2005; Macaulay, Commanda, Freeman et al., 1999). It is an orientation to research, rather than a methodology, and it is one that is emerging as a preferred research process used by and with indigenous communities in the Americas (Burhansstipanov, Christopher, & Schumacher, 2005). Indigenous people are wary of "helicopter research" in which academics literally or figuratively fly into their communities, administer surveys, and leave-never to be heard from again by the community. Meanwhile—as conditions improve for the academician via career advancement—notably absent are improvements within the indigenous community studied by reductionist methodologies. The CBPR approach to research has a rich history that stems from social science and adult education, and it has evolved through time and use with indigenous/traditional communities in Latin America and Anglo-America (Canada & USA).

Herein, CBPR will be described from its incipience in social science and adult education, referenced to its application with indigenous and traditional populations in the Americas, and developed in the context of emergent issues of its use today. Guidelines for the application of CBPR by and with traditional/indigenous peoples will be provided for the purpose of serving as a useful guide for both communities and academic researchers. Future directions for the use of CBPR will also be illuminated. While the geo-political region of the American continent will be emphasized in the literature review, the research orientation has been used world-wide.

Historical Contexts in the Americas

Community-based participatory research originates from the melding of action research and participatory research; two research approaches that have their roots in the fields of social science and popular education (Khanlou & Peter, 2005). Action research is referred to as the Northern Tradition, and it can be traced to Kurt Lewin, a German social psychologist who had contended in the 1940s that a new type of research for social transformation was needed. He and his successors

rejected the positivist belief of science, and brought practitioners and community members together as co-partners in research. Participatory research, referred to as the Southern Tradition, can be traced to works in Latin America, Asia, and Africa to transform society through experiential knowledge. The participatory action research tradition stems from the application of liberation pedagogy within the context of adult education in Latin America in the 1960s as a specific platform from which to 'conscientisize' social transformation among oppressed social groups such as indigenous people, traditional communities, and women.

The Brazilian educator Paulo Freire proposed that conscientization—as a central objective of cultural transformative action—involves learning to perceive social, political, and economic contradictions, that is to say, developing a critical awareness, such that individuals in the community can take action against oppression (Freire, 1970). He was a critic of the authoritarian paradigm of teaching, in which the student was the depository of knowledge and the teacher the depositor. He also was a critic of positivism, in which Western-oriented researchers study an objective world separate from the inter-subjective meanings understood by the participants in their world. He instead believed that research of people must include both the people and their perceptions. As such, the teacher is a student and the student is a teacher, and similarly, the researcher is a subject and the subject is a researcher.

In this Freireian context, the agenda of education and research occurs in a 'culture circle' that is community-based, linked to the needs of the communities, and is more flexible than authoritarian Western paradigms. In Latin America, the spread and use of participatory research with indigenous/traditional communities occurred within the social movement contexts in the 1960s and 1970s. Paulo Friere's original proposal for alternative approaches to research was termed 'thematic research' (Freire, 1970) and the Colombian sociologist Orlando Fals Borda evolved a 'participatory action research' that was influenced by Freire and European antecessors such as Kurt Lewin, Frederick Engels, Karl Marx, and Anthony Gramsci (Fals-Borda, 1987). Orlando Fals-Borda, however, was wise to point out that the roots to participatory research can also be found long before in the applicative combination of theory and practice as evidenced in the individual and collective lives of those from indigenous societies that constructed large civilizations (Vio Grossi, Gianotten, & de Wit, 1981).

Participatory action research is a phrase that emerged independently within both the Northern and Southern traditions and is characterized by research, educational work, and social action. Fals-Borda, for example, coined the specific phrase 'participatory action research' upon interaction with the Latin American network of 'participatory researchers' to include these three characteristics. Budd Hall, from Toronto, Canada, produced a seminal issue of *Convergence* on the topic of participatory research. Upon the timely formation of an inter-continental network of participatory researchers, the 'Southern Tradition' was brought into Canada.

He and his colleagues offered a seven-point definition of participatory research at their first meeting (Hall, 1981; Hall & Kidd, 1978):

1. Participatory research involves a whole range of powerless groups of people-exploited, poor, oppressed, and marginalized.
2. It involves the full and active participation of the community in the research process.
3. The subject of the research originates in the community itself and the problem is defined, analyzed and solved by the community.
4. The ultimate goal is the radical transformation of social reality and the improvement of the people's lives. The beneficiaries of the research are the community members.
5. The process of participatory research can create a greater awareness in the people of their own resources and mobilize them for self-reliant development.
6. It is a more scientific method of research in that the participation of the community facilitates a more accurate and authentic analysis of social reality.
7. The researcher is a committed participant and learner in the research process.

In the U.S.A., Peter Park from the University of Massachusetts became one of the first academics to become engaged in the dialogue and uses of participatory action research in social movement contexts, and co-authored a book on the topic with an emphasis on Anglo-America (Park, Brydon-Miller, Hall, & Jackson, 1993). However, in the opinion of some Latin American thinkers, the practice of participatory research in Anglo-America remains somewhat reductionist and lacks the richness in dimension of its application such as it exists in Latin America (Picon, 1991)-although that is changing.

Participatory Research Today

There are many terms variously used to refer to participatory action-like research today, including, but not limited to: community-participatory, community-based, participatory, collaborative, cooperative. In general, the action science traditions (Northern) that stemmed from the Lewinian model can be thought to be on one end of the continuum, and the participatory research and participatory action research traditions (Southern) that stem largely from the Freireian model can be thought to be on the other end of a continuum. Cooperative and mutual inquiry methods would occupy a position somewhere between the two ends. While many academicians contend that there are important ideological differences among these terms, for the purposes of this review let us focus rather on their underlying common theme of inclusion of the participants as full collaborators throughout the research process.

In an important review of the topic, Israel et al. (1998) defines community-based research as a collaborative approach to research that equitably involves community members, organizational representatives, and researchers in all aspects of the research process. Four important themes are addressed by CBPR: (1) participation of the community as co-researchers and the role of researcher as co-learner; (2) creation of knowledge; (3) community transformation (praxis); and (4) reflexivity upon power dynamics in the relationship (Wallerstein, Duran, Minkler, & Foley, 2005). Thus, CBPR has elements of both the co-participation of researcher with community members in knowledge creation from the Northern traditions, along with the emancipatory features of social movements from the Southern traditions.

The use of CBPR with communities throughout the world has met with many trials and tribulations, as well as successes. In an attempt to address some of these findings in a way that is mindful of the intended reading audience (traditional/indigenous people and scientists who use CBPR), selected references will be provided as an illustrative framework for the discussion of the strengths, limitations, and future directions for the use of CBPR with these communities.

CBPR with Traditional and Indigenous Communities

CBPR is an important research orientation to utilize in partnership with traditional and indigenous American communities in part due to the differing ethno-histories of the dominant culture at large and a specific community of interest. These differing societies, past and present, which converge on the same soil, held and continue to hold differing perspectives on identity, sovereignty, relationships, disease etiologies, and world views in general. A lack of awareness and sensitivity on the part of Western-trained scientist toward indigenous American cultures creates an ethnocentric perspective on science (Davis & Reid, 1999) that does not consider that there may not be a single reality (its own), but rather, a shared one. Thus, the deconstruction of the positivist perspective allows for the expanded notion that there can be more than one cultural reality and that the Western-trained researcher can also be a student of the culture it wishes to 'study', as well that the 'subject' can be a researcher. Working towards an understanding of each others' culture, the indigenous person learns the processes involved in scientific research, and conversely, the scientist learns the pertinent cultural nuances of the indigenous community as they relate to the topic of study. In this way, the research becomes more objective, not less so, as commonly perceived among scientists. Additionally, the results have cultural relevance to both the indigenous and scientific communities. To gather information on a native community that failed to consider the indigenous perspective in the formulation of the research question, subsequent study design, data analysis, and interpretation would result in an incomplete picture of the topic of interest and would limit its generalizability to the very community it purports to represent-due to an outsider's ethnocentric bias. Research interventions

that are designed for indigenous community transformation should have at their core indigenous beliefs and values (Park, Brydon-Miller, Hall, & Jackson, 1993).

Cartoon Translation: "From now on in all of our negotiations Dona Coatlique, goddess of the earth, who defends our rights and natural resources, will represent us."

While the orientation of CBPR can be applied to many research methodologies and fields of inquiry, there is increased interest today in the use of CBPR among indigenous peoples in environment & health research (Jacklin & Kinoshameg, 2008; Minkler & Wallerstein, 2003; Noe, Manson, Croy et al., 2007). Indigenous communities historically have had few economic and social resources to address health risk exposures, resulting in a disproportionate burden of morbidity and mortality for many chronic diseases and environmental exposures. Investigative and informed address of health status disparities among minority groups continues to be a real challenge to communities, health care systems, academic institutions, and governments. There is an emerging trend in the fields of population and public health to create knowledge about community risk factors as health determinants. Social and environmental conditions contribute to health status, and this becomes evident when reflecting upon the health status gaps among people of differing socioeconomic levels, races/ethnicities, and genders. Health disparity researchers are embracing the use of the investigative orientation called CBPR, and specifically as a preferred approach with indigenous peoples (Burhansstipanov, Christopher, & Schumacher, 2005). Partnerships between health services, academic institutions, and community-based organizations allow for greater involvement by the community throughout the research process.

Community involvement is a cornerstone of project success, which may be otherwise met with skepticism, low participation, and/or high attrition if conducted in a Western-dominant paradigm. Indigenous and traditional peoples of the Americas are by no means a homogenous group (Pidgeon & Hardy Cox, 2002); however attention to the particular characteristics of the group (e.g., urban, rural, reserve, remote) and inclusion of representative community members on advisory boards will facilitate the community's control of project progress and impact. Attention to cultural details-such as gender relations, inter-tribal relations, and age relations are critically important and should be addressed. These factors, if not considered, can delay the agreement between the researcher and community on the research focus and impede project implementation through cultural inappropriateness. A unifying characteristic across most traditional and indigenous cultures of the Americas is the high value placed upon relationships. This strongly suggests that the development of the relationship of the community with the work of the community (i.e., the research project) is integral to success of the research. CBPR has the capacity to develop this relationship throughout the research stages.

Research Stages: Preparatory Partnering

The functional unit of CBPR is the relationship between the community of interest and the work of the community. This relationship must interface with the outside institution; thus, attention will need to be paid to the careful development of this partnership. Note that the partnership can originate from either side. In common practice, the researcher from academia persuades the community of the worth of a partnership (and from that point involves the community in a participatory fashion); alternatively, communities may recognize a need for research in their community and invite academics to become involved. The latter is an emergent scenario, as indigenous/traditional communities become familiar with this research orientation, are curious to pursue knowledge for the benefit of the community, and to address the community's needs through research (Scott & Receveur, 1995).

The partnership between the community and the academy should be nurtured through attention to networking, cooperation, collaboration, and partnership (Amuwo & Jenkins, 2001). These stages do not necessarily occur in a linear fashion or in a neat timeline that coincides precisely with the phases of research. Thus, they should be attended to throughout the research process to assure that the functional unit of the CBPR project remains tenable. There are many stories of indigenous peoples becoming distrustful of scientists (Jacklin & Kinoshameg, 2008) due to lack of mindfulness of these four areas that comprise a true partnering relationship (Burhansstipanov, Christopher, & Schumacher, 2005). Indigenous communities today, however, largely support CBPR endeavors within their communities in partnership with outside institutions (Noe, Manson, Croy et al., 2007) who work equitably (e.g., decision-making shared among the partners),

honestly, cooperatively, respectfully (e.g., confidentially, as appropriate), communicatively (Burhansstipanov, Christopher, & Schumacher, 2005), reciprocally (Pidgeon & Hardy Cox, 2002), and patiently (e.g., willingness to work on "Indian time") with them. One of the emerging trends in the address of equitable relations between the indigenous community and the academic institution involves the budget allocation between the CBPR partners. The provision of equitable salaries to indigenous partners and project staff is a key way to facilitate a true partnership and to increase the level of respect on both sides (Burhansstipanov, Christopher, & Schumacher, 2005). Trained community partners, whether paid or not, should be involved in data collection, management, analysis, and interpretation (Cashman, Adeky, Allen et al., 2008). Involvement by community members in the dissemination of the findings is another important area; successful inclusive authorship on manuscripts has occurred (Christopher, Watts, McCormick, & Young, 2008), and is expected to become the norm.

Research Stages: Participatory Appraisal and Design Development

The objective nature of science has inevitably led to some concern regarding the ability of CBPR to sustain the scrutiny of the scientific community and emerge 'rigorous'. However, the realization that inherent assumptions of science-as inherently unbiased and objective in its focus, process, and outcome-is questionable at best, has thus led to acceptance of the application of CBPR to scientific inquiries within communities. Research that incorporates the knowledge and the experience of the people (Scott & Receveur, 1995) should improve generalizability of the findings to the community. This is relevant in translation research, which endeavors to bring the results of the research back into the community for positive change. There can be frustration on the part of the indigenous communities who may observe that standard approaches to research rarely lead to interventions and policies that directly benefit the community-the gap between measuring differences and making differences (Katz, 2004). Thus, there is growing acceptance of the methodological rigor, broader understanding of the concept of scientific 'objectivity', and appreciation for the 'added value' of the CBPR model by all stakeholders including the communities themselves, academia, and funding foundations/agencies. Despite these advances, institutions adapt to accommodate the CBPR orientation and timeline at a lethargic pace relative to the promise of the model.

Ethical Concerns and the Research Process

To begin, ethical approval to conduct research must be secured by an institutional review board (IRB) prior to the collection of data on the part of the researcher. The general ethics guidelines for scientific research acceptable by international associations require that an ethical research project proposes to (Khanlou &

Peter, 2005): obtain formal consent for fair human subject selection and participation; provide a mechanism for the understanding of the exposure to risks and benefits that a subject can expect during the study; describe how the research will increase knowledge or improve the well-being of the community; describe the validity of the scientific project, ensure that the proposal describe the institution's responsibility throughout to prevent harm to the participant; and ensure that the research proposal will undergo independent review for ethical and scientific merit. The informed consent process is apparently sensible, well-intentioned, and well-established in its use by the dominant scientific community. However, imagine paper and pen wielding scientists approaching a community of people who through the course of 'post-contact history' have been subjected to similar paper and pen fanfares associated with treaties, lost land, relocations, reserves, boarding schools, foster homes, loss of language and culture, litigation, and sovereignty, etc. Suspicion of the research culture by traditional and indigenous peoples (Jacklin & Kinoshameg, 2008; Pidgeon & Hardy Cox, 2002) and suspicion of indigenous culture by dominant culture members thus requires a reciprocal process of education. The partnership between the community and researchers needs to be well-established before consent forms and pens are pulled out for participant signatures-especially among indigenous Americans. There are some strategies to facilitate the IRB approval process, as discussed by Kelly (2005).

Any CBPR researcher who intends to work with indigenous communities should become familiar not only with standard codes of ethics, but also with those by various institutions generated through their experiences of working with communities (Scott & Receveur, 2005). Indigenous organizations may also have IRBs, and there is increased attention to a community-centered approach in IRBs because there are differences in the ethics of research that is participant-centered versus that which is community-centered. Harms and benefits occur not only to individual participants but can occur to entire communities (Macaulay, Delormier, McComber et al., 1998), particularly tribal ones (Quigley, 2006). Although this is self-evident from the indigenous perspective, it does take some intentional reflection to incorporate the community as an entity in ethical codes from the Western perspective.

There is a model research code developed by the American Indian Law Center (1999) that can be adapted and implemented by any tribe for a research partnership (Fisher & Thomas, 2003); a tribe can also develop its own code of ethics (Beauvais, 1999; Macaulay, Commanda, Freeman et al., 1999). The tribal research code can be used in conjunction with, or instead of, a tribal IRB. The codes of ethics can be used with the research evaluation instruments, to ensure that the community is a true co-partner in knowledge generation through research. The advantage of such a written agreement as the tribal code of ethics is that, in addition to attending to the standards of recognized codes of ethics in research, the concerns and suggestions of the community will have been incorporated into the written agreement (Scott & Receveur, 1995).

Increasingly, ethics guideline resources are available for community and academic partners to address the ethical standards for research with communities. In the United States, several handbooks currently serve as a means of an overview on the topic (Israel, Eng, Schulz, & Parker, 2005; Trimble & Fisher, 2005). In Canada, the three major funding research agencies have a document designed to cover the ethical conduct of all types of research involving humans, including a chapter on Aboriginal peoples (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and the Social Sciences and Humanities Research Council of Canada, 2010). The World Health Organization, in close collaboration with the Centre for Indigenous Peoples' Nutrition and Environment in Quebec, Canada, has drafted a document entitled: *Indigenous Peoples & Participatory Health Research* (WHO, 2006). This document contains annexes devoted to research ethics procedures and guidelines that were drawn from international experiences of collaboration between indigenous peoples and academic institutions world-wide.

The International Society of Ethnobiology (2006) has written a Code of Ethics and is developing a toolkit for investigators designed to implement traditional rights regarding indigenous resources and knowledge in research, while facilitating compliance with established international and national laws (ISE, 2006). These various documents highlight the importance of community engagement and provide guidance on how to build reciprocal relationships with traditional/indigenous communities, from the stages of conception and design of projects, to the analysis and dissemination of results. Several of the documents are designed to assist scientists and their institutions in promotion of competent research that incorporates indigenous perspectives at the interface of biomedical research and traditional knowledge (Martin-Hill & Soucy, 2005).

Finally, mindfulness of the timeline to properly develop a CBPR proposal cannot be over-emphasized. Due to the nature of the research, CBPR projects involving indigenous peoples should have an established partnership between the community and the academic institution prior to the submission of a grant proposal to a funder. The approval process of IRBs at the level of the indigenous group itself and academic or governmental institutions can take 12 months or longer (Burhansstipanov, Christopher, & Schumacher, 2005). Many grant proposals are often due within 90 days of the request for application (RFA) release. Thus, it is important to operate effectively to not miss the funding that presents within a narrow window of opportunity.

Research Stages: Participatory Implementation

Participatory implementation of research implies that the community is participating at multiple levels of the implementation of the research project. Herein has been discussed the centrality of community-level participation in the formulation of the research question and subsequent study design. How can community part-

ners directly be involved in research implementation? One important avenue is their employment at the level of project staff (Fisher & Thomas, 2003).

While scientists may initially be uncomfortable with this concept in general, its merits soon become apparent, especially in studies with oppressed peoples. Studies that require interviews from indigenous community members can provide an illustrative example (Christopher, Burhansstipanov, & Knows His Gun-McCormick, 2005). Culturally sensitive interview questions and manner of interviewing have the potential to improve data acquisition. The use of trained interviewers from the community and/or the use of an interview protocol designed in conjunction with the community can ameliorate cultural *faux pas* and provide mechanisms to allow community members to participate as project staff.

One way to solidify research skill development for project staff is to provide a training process that is culturally appropriate and accessible to individuals from a variety of educational backgrounds (Fisher & Thomas, 2003; Fong, Braun, & Tsark, 2003). Fisher & Ball (2003) explain how staff from the indigenous community was trained via a one-year undergraduate research methods course offered at the local university through the community education program. Community members earned credit hours for the completed course and were hired as research staff on the project. The data processing activities were handled by these community members, who had been trained through the course and then hired (Fisher & Thomas, 2003).

Research Stages: Action

While the stages of CBPR can be as linear as conventional research orientations, the implicit nature of CBPR as an iterative, cyclic process lends itself to a continued contribution to the research process. At all stages of research, information gained can be utilized to inform the research process. Thus, when we speak to the 'action' in participatory research, we touch, in part, its historical roots that are to be found in 'action research'. Within the specific context of participatory research, this refers to the recognition that knowledge lies within action. People in a community engage in their world and gain knowledge, which informs their subsequent engagement with the world, which in turn produces knowledge. Simply, the people who know best their environment and their relationships to it are those people themselves and not some 'objective' observer outside of that relational context. To omit the people's perspective from research is an omission of real-world phenomena (Schon, 1995). Thus, as the research is unfolding, insights gained which can benefit the research process, and/or the partnership, are incorporated into the research/partnership process as deemed appropriate. The production of knowledge from the CBPR process will be laden with the values of the community and reveal how the research findings can be incorporated into educational programs to address community needs (Boston, Jordan, MacNamara et al., 1997).

Research Stages: Participatory Monitoring and Evaluation

Monitoring and evaluation of the research should occur throughout all phases of the research process. These findings should be incorporated into subsequent phases of research. A set of 20 guiding principles has been developed by the work group on American Indian Research and Program Evaluation methodology that can be used for conducting and evaluating CBPR research with indigenous Americans (Caldwell, Davis, DuBois et al., 2005). Checklists can easily be used by the communities (Scott & Receveur, 1995) and the institutional partners to evaluate new research projects, the extent to which the community will be served by the research, and the extent of participation by the community in the research (Wallerstein, Duran, Minkler, & Foley, 2005). Research participants can also be involved in performing inquiry audits and in assessment of the relative utility and transformative aspects of the research as related to the community. The extent to which the research produced societal transformation is as important as the production of knowledge. This capacity for informing meaningful change within the society is a hallmark of the CBPR model-and the self-reflexive capacity of participatory research enables the means for its continued evaluation.

Partnership effectiveness can also be evaluated in a number of different approaches to assess and improve group process. Anonymous questionnaires can be provided at group meetings to review process dimensions such as communication and trust on both sides of the partnership (Wallerstein, Duran, Minkler, & Foley, 2005). Alternatively, open questions posed in writing can allow all partners an opportunity to produce reflective feedback on their experience of the meeting/process to date (Wallerstein, Duran, Minkler, & Foley, 2005). Community focus groups can thus provide feedback about the cultural acceptability and effectiveness of the process. Suggested changes should be implemented in a timely manner.

Research Stages: Education

Participatory research emerged from popular (common) movements and popular education in Latin America (Freire, 1970). Participatory approaches to research traditionally are comprised of the triad components of research, education, and action. The intent of participatory research at its roots and current application is to empower marginalized and oppressed peoples through a democratic process of creating knowledge. Thus, a fundamental part of this picture is education. Ideally, in a CBPR research model, the decision-making capabilities of the research team are shared equitably among the partners. Similarly, the education and empowerment capacities of the CBPR project can also be a shared endeavor by key members of the community involved in the research (Hall & Kidd, 1978), as well as by popular education specialists. While this is a theoretical ideal, there are many practical impediments that vary among communities (Albuquerque, Nascimento, Vieira et al., 2010). For example, 'key members' of the community involved in

the research/education may not accurately represent the views of the majority of community members.

A shortcoming today in Anglo-American application of CBPR is the paucity of trained popular education specialists involved directly with a CBPR projects. The result is a trend for the educational piece to be 'dropped' from the CBPR research agenda-or weakly present (Viswanathan, Ammerman, Eng et al., 2004). Western scientists often lack training in this regard, and funding timelines are not likely to be accommodating.

Well-intentioned academic researchers may be in a position to take the research findings and present them to the community with suggestions for community empowerment, but the distribution of power in this scenario is unbalanced. In this scenario, one must question whether the CBPR model is really intact, or whether the privileged are, once again, taking advantage of the oppressed to advance their own career and position of power through research of the oppressed community.

The relative absence of the 'educational' piece of CBPR, in the Anglo-American (Canada & U.S.A.) application of the Southern Tradition, is a topic that merits close attention. Scientists who may use CBPR are usually trained under the positivist scientific paradigm and often receive their funding under agencies that likely are not well-versed in CBPR (although this is changing). Anglo-America does not share the ripe history of popular movements, which fueled the emergence of participatory research and popular education in Latin America. Thus, while a fundamental understanding of CBPR includes its underlying mission to free oppressed groups through popular education, modern Anglo-American CBPR users may not give this aspect the attention that it deserves. To re-vitalize the emancipatory capacity of CBPR, it is suggested that Western-trained scientists receive training in popular education and that trained popular educators be recruited to participate in CBPR. The empowerment of the community should be carried out by informed community leaders who are also trained to do so.

A Call to Action Through Research and Education

In keeping with the Friereian traditions at the roots of community-based participatory research, the academician in this research model is also a student, learning from and with the community. This learning contributes knowledge and insight to the researcher, thus improving the research process and product. In turn, community partnership is a relationship beyond the traditional agenda of the academician, and creates the opportunity for translation of research findings into improved services, experience, and knowledge by and for the community itself. CBPR allows for the empowerment of oppressed peoples through the address of health and knowledge disparities using science and collaborative partnerships among communities of people and scientists. Participatory approaches to community-based research and intervention can be improved through: (1) training and production

of CBPR scientists; (2) accommodation of the publication and grant-writing timelines associated with CBPR; and (3) funding support for CBPR.

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