

Community-Based Participatory Action Research

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“**T**here must exist a paradigm, a practical model for social change that includes an understanding of ways to transform consciousness that are linked to efforts to transform structures” (bell hooks, 1995, p. 193). The transformative role of knowledge production in structural change, summarized in the preceding quote, highlights ways broadening understanding of the circumstances of one’s oppression can kindle transformations on the individual and group levels, and how these transformations of consciousness regarding one’s circumstances can drive structural change. This type of change is of central concern in participatory research, a research perspective that has social action and structural change as its ultimate goals.

From its earliest roots, community psychology has enjoyed a rich history of participatory, collaborative research efforts. This history predates the advent of the term *community-based participatory research* (CBPR), as advanced by public health, a term that has also been variously described as collaborative research, participatory research, social action research, community-engaged research, and participatory action research (PAR). A defining feature of CBPR involves engagement of the people who are the community of concern as co-researchers in the research process. This act of engagement involves a sharing of power, a democratization of the research process, and an action component. Typically, adherents are engaged in social change, program development, and policy change efforts. Understood as a perspective rather than as a research method, participatory research has taken on multilayered and different meanings and forms, ranging from community members acting as consultants to academic researchers working at the direction of community members on research questions defined by the community.

There are two primary terms used for participatory research. One is community-based CBPR, and the other is PAR. One definition of CBPR involves the equitable involvement of community members, organizational representatives, and researchers in the entire research process, identifies the community as a unit of identity, builds on strengths and resources within the community, promotes co-learning and capacity building among everyone involved, and achieves a balance of research and action (Israel et al., 2008). CBPR links science with social activism, is based in action research, and sees community members as active, decision-making participants (Wallerstein & Duran, 2008). Definitions of PAR focus on concerns with community empowerment (Zimmerman, 1995) and a commitment to democratic social change, a participatory worldview, and practical solutions to pressing needs of communities (Brydon-Miller, Greenwood, & Maguire, 2003). Thus, CBPR and PAR are similar in approach and seek to achieve similar ends, which is why we combine them in our title through the term *community-based participatory action research* (CBPAR).

This chapter provides an introduction to mixed methods participatory research. Mixed methods refer to research that integrates rigorous quantitative and qualitative research to draw on the strengths of each (Creswell & Plano Clark, 2011). To set the stage, we provide a brief history of participatory research, tracing its historical evolution and theoretical roots to define its essential characteristics. These roots include community empowerment, ecology, social justice, feminism, and critical theory. With this in place, we next provide two case studies that used mixed methods to advance a participatory research agenda. We conclude using Arnstein’s (1969) framework as a guide to consider

some current controversies in the application of participatory principles and their interface with mixed methods research.

INTRODUCTION TO COMMUNITY-BASED PARTICIPATORY ACTION RESEARCH

In most areas of human research, the person who is the subject of research never participates. Why should subjects participate? If a researcher is interested in studying memory functioning, conceivably one could argue that memory is the subject, and its evaluation becomes decontextualized from the experience of the person under study. Is this best scientific practice for research that involves communities of people? Is this viewpoint even relevant to research in the community? Moreover, how might such a viewpoint, applied to communities of historically and currently oppressed groups, perpetuate inequity, discrimination, and other forms of structural violence? Is there another way?

Participatory research, also referred to as collaborative inquiry, is a paradigm-shifting approach to research. It involves varying degrees of participation of the researched as coresearchers. The approach involves studying *with*, rather than *about*. For many of its adherents, it is also a moral perspective, an ethical stance bringing social justice considerations into research practice (Shore, 2008). Pursuit of social justice objectives has led participatory researchers to often creatively bridge quantitative-qualitative ideological divisions, using both quantitative and qualitative methods as research tools. In doing this, participatory approaches adopt a methodological pluralism, driven by pragmatism to advance both coresearcher involvement common and structural and policy change.

Communities are collectives. They are people who know each other, love each other, take care of each other, and communicate with each other. When a researcher shows up, communities take notice. They talk about and evaluate the researcher and decide if they want to participate. They ask how they and their community might benefit from such participation. Communities are active agents. What is needed is a science and perspective that acknowledges these realities. Moreover, in research with oppressed communities, there is an added imperative for approaches that include a social action element whose end goal is structural change.

A quarter century before bell hooks envisioned an idea of transformative change, Arnstein (1969) wrote about citizen power as a model for achieving these types of change. Arnstein described ways “[the] ‘nobodies’ in several arenas are trying to become ‘somebodies’ with enough power to make the target institutions responsive to their views, aspirations, and needs” (p. 217). Participatory, for Arnstein, meant making a difference; this required both being heard *and* precipitating action coming out of being heard. Token membership on a decision-making board is not the same as citizen participation, which she viewed as the power to make institutions responsive. Out of this conviction, she developed a ladder of citizenship participation as a framework to assist understanding of the variety of approaches to participatory research.

This ladder of citizen participation comprises eight levels of participation, moving from non-participation to degrees of tokenism to degrees of citizen power. The bottom two rungs are (1) manipulation and (2) therapy. These describe levels contrived to substitute for genuine participation that enable entrenched interests to maintain power. An example of manipulation would be a citizen advisory board with no real decision-making input. Therapy includes the ways that grassroots citizens groups sometimes are enlisted as vehicles to change participants. Illustratively, an early childhood program developed to serve an immigrant group might instead function to assimilate the group’s values and attitudes to those of the mainstream dominant group through parenting classes largely based on dominant culture parenting practices. (3) Informing and (4) consultation describe a form of tokenism where participants may be heard but lack power to ensure that their views are heeded, while (5) placation allows participants to advise but not to decide. Degrees of citizen power include (6) partnership, characterized by negotiation and trade-offs; (7) delegated power, where citizens enjoy a majority of decision-making seats; and (8) citizen control, or full managerial power at its highest point. Arnstein examined primarily urban renewal and antipoverty programs. However, she also saw how citizen power could be applied to other institutional structures, and her model has influenced policymakers more broadly, especially in health care (Tritter & McCallum, 2006). In the conclusion of this chapter, we will return to Arnstein’s model as a means of evaluating

and critiquing implementations of participatory research, the relative merits of qualitative and quantitative methods in participatory work, and efforts that blend the two methods.

BACKGROUND OF PARTICIPATORY RESEARCH

Although participatory approaches have existed for well over a century (Hall, 2005), current manifestations can be traced to the 1960s, most notably in work from Latin America, including Fals Borda's work with peasant movements (Fals Borda, 2001) and Freire's reframing of adult education as democratic empowerment (Freire, 1970). Research from Europe, Asia, and Africa aimed at helping the marginalized in society (Hall, 2005) contributed as well. Some of this movement developed out of literacy work (Kemmis & McTaggart, 2005), as well as youth participation and the rise of activist scholarship in the academy (Fine & Torre, 2005). Participatory research became an international method (Kapoor & Jordan, 2009) involving work with marginalized peoples, with active community participation on research questions coming from the community and a goal of transforming social reality (Hall, 2005).

Similar notions emerged historically from a number of sources in the United States, including early settlement and land ownership, the property rights movement, and, later, a reframing of environmental issues (Dukes, Firehock, & Birkoff, 2011). Traditions such as Kurt Lewin's (1970) action research also focused on social change; central to this approach was a view of research as intervention and a community perspective.

WHAT IS PARTICIPATORY RESEARCH?

When a researcher meets a community, a relationship is formed (Kral, 2014). Relationships are at the core of community research. Communities often look for reciprocity in their relationships with researchers; participatory research emphasizes reciprocity in a respect for local knowledge, belief in democratic principles, and commitment to social justice that leads to positive change. Like jazz, participatory research is a collaborative process whereby everyone respects each other's contributions, is willing to innovate and explore, and views every contribution as essential (Brydon-Miller,

Kral, Maguire, Noffke, & Sabhlok, 2011). The participatory perspective draws from work in feminist theory and social reconstruction (Mies, 1996); multicultural theory (Sue, 1999); critical theory (Kagan, Burton, Duckett, & Lawthom, 2011); critical race theory (Brydon-Miller, 2004); social theory emphasizing agency, subjectivity, and power (Ortner, 2006); and indigenous/decolonization perspectives (Smith, 2012).

Community members have typically been the objects of research that generates representational knowledge, with the research problems studied being ones identified by individuals from outside of the community. In participatory approaches, community members transform representational knowledge into relational and reflective knowledge through the establishment of a democratic dialogue with the researcher (Gustavsen, Hanson, & Qvale, 2008). Community members shape and construct the research questions, methods, interpretations, and conclusions. The process imbues knowledge generated through the research with the meaning of participants to build *conscientization* (Freire, 1970), wherein knowledge becomes emancipatory (Fals Borda, 2001), generated through a process that empowers communities to solve concrete problems (Brydon-Miller et al., 2011). Rather than being a specific research methodology, participatory research is an attitude, a perspective, and a philosophy of practice (Kidd & Kral, 2005).

Participatory research focuses on multiple ways of knowing based on relationships of reciprocal responsibility, collaborative decision making, and the sharing of power. The perspective rests on a covenantal ethics, "an ethical stance enacted through relationship and commitment to working for the good of others" (Brydon-Miller, 2008, p. 244). CBPAR has improved programs through improved efficiency, sustainability, and equitable service delivery (Wallerstein & Duran, 2010) and has often resulted in positive research outcomes (Jason, Keys, Suarez-Balcazar, Taylor, & Davis, 2004).

The approach is well suited to a community-based research focus on what Tolan, Chertok, Keys, and Jason (1990, p. 4) called "ill-structured" problems that are defined in local terms, with solutions dependent on particular elements of the local context. A participatory action perspective is increasingly being used in such research (Jason et al., 2004) and is a common global theme

(Reich, Riemer, Prilleltensky, & Montero, 2007). Although participatory research is common in community psychology, other disciplines also use it to focus on health disparities and social justice, including public health (Cargo & Mercer, 2008; Wallerstein & Duran, 2010), social work (Baffour, 2011), nursing (Savage et al., 2006), and medicine (O'Toole, Aaron, Chin, Horowitz, & Tyson, 2003).

Community participation in research can mean different things. Some may say that consent is participation; however, we view participation instead as deep collaboration. This means a more meaningful partnering with a community agency, organization, or group. No studies have yet explored how various types and levels of partnership may be differentially beneficial (Jason et al., 2004). Within partnership, given the needs of the partnership, the research question, the strengths and challenges in the context and setting, and the problem at hand, participation can take on many forms, and partnership can take place at different times and at different levels.

MIXED METHODS AND PARTICIPATORY RESEARCH AS PARADIGM SHIFTS

As sociologists began identifying social factors in mental health in the late 19th century, they developed the methods of the social survey, which reached ascendancy between 1940 and 1960, and with it quantitative methods for the analysis of survey data in the social sciences, including psychology. Beginning in the 1970s, a paradigm war erupted in the social sciences between adherents to quantitative versus qualitative methodological approaches. The civil rights and feminist movements of this period had formed what Staller, Block, and Horner (2008) called a methodological revolution in which the role, responsibility, and authority of the researcher were questioned. These paradigm wars included a “politics of evidence” (Denzin & Giardina, 2008, p. 9), where qualitative researchers railed against the preferred methods of experimental design, psychometric theory, and biomedical models of research. The goal of adherents of qualitative, interpretive research was not to create a mirror of nature, or even constructs by which to describe it, but instead to provide an understanding of social reality created by human actors in context (Yanow, 2006).

Accompanying the paradigm conflict was a diffusion of methodological approaches aligned with the qualitative movement (Alastalo, 2008), including critical and indigenous methodologies (Denzin, Lincoln, & Smith, 2008; Kovach, 2009). We are currently in a period of emergent methods, wherein the traditional research process has been challenged and disrupted (Hesse-Biber & Leavy, 2008). This diffusion in methodology has now come full circle and includes the integration of quantitative and qualitative methods, or mixed methods.

Mixed methods research combines what Shweder (1996) described as *quanta*, data that are consistent, replicable, comparable, able to be counted, and generalized, with *qualia*, where the objects of inquiry are subjectivity, meaning making, signification, and local discourse. It involves pragmatism in problem solving, with an emphasis on practical consequences and research questions over methods, through a blend of deductive and inductive reasoning (Hanson, Creswell, Plano Clark, Petska, & Creswell, 2005). Greene (2007, p. 199) described mixed methods as crossing “borders and boundaries once fenced and defended,” which “invites diverse ways of thinking to dialogue one with the other.” Mixed methods research is a conversation, a mixing of mental models involving multiple philosophies, values, theories, methods, and analyses. This pluralism in methodologies can be understood as a dialectical stance bridging postpositivist, postmodernist, and social constructivist worldviews, as well as pragmatic and transformative perspectives. Mixed methods can provide a “more comprehensive understanding . . . [and] highly informative, exhaustive, balanced and useful research results” (Krivokapic-Skoko & O’Neill, 2010, p. 279). Through mixed methods, the concept of triangulation across multiple methods, as introduced to psychology by Campbell and Fiske (1959), moves a step further, encouraging researchers to adopt a more critical view toward their data and to extract their interpretations from multiple sources and methods, seeing this as a form of convergent validity (Fielding & Fielding, 2008). Like participatory research itself, mixed methods research involves a shift in, and perhaps an inversion of, paradigms (Park, 1992).

Creswell, Klassen, Plano Clark, and Smith (2011) summarized definitions, methods, and strengths of qualitative and quantitative research

and of the major approaches to combining the two. Qualitative approaches include ethnography, case studies, life history interviews, and structured interviewing. Quantitative research is deductive, tests theories or hypotheses, and studies the relationship among variables or gathers descriptive knowledge. Measurement leads to numeric data, to statistical analysis to establish causality, and generalization to populations or group comparison. Quantitative approaches include randomized controlled trials, time-series and other quasi-experimental designs, observational studies, case-control studies, and descriptive surveys. Mixed methods research combines an intentional collection of both quantitative and qualitative data with an intentional integration of the data. This integration seeks to minimize the weaknesses and maximize the strengths of each approach.

Creswell and Plano Clark (2011) identified three general mixed methods approaches involving merging, connecting, and embedding data. Merging data is achieved by reporting results together. Examples include reporting quantitative statistical results with qualitative quotes or themes that support or refute the quantitative results, or transforming qualitative to quantitative data (such as by reporting counts of occurrence of qualitative codes). Connecting data involves analysis of one data set (for example, a quantitative survey) to inform a subsequent project (an in-depth qualitative interview study). Embedding data occurs when data collection of secondary importance is implanted within a primary research design, as in the case of a qualitative descriptive study that elucidates the subjective experience of treatment among the participants within a randomized controlled trial. The case studies that follow provide examples of connecting and embedding data, respectively.

CASE STUDIES

People Awakening Project

Alcohol research with Alaska Native communities has had a history of conflict, resulting in community suspicion of research (Manson, 1989). At the same time, there is a critical need for research to guide alcohol abuse prevention and treatment with Alaska Native people. The People Awakening research group of grassroots members of the Alaska Native sobriety movement and university researchers addressed this need together (see Mohatt,

Hazel, et al., 2004, for greater detail). The group of community members who formed the research coordinating council for the project began its work by choosing a methodology that honored the oral traditions of Alaska Native cultures through the use of life history interviews. It then redefined the research question itself from alcoholism to sobriety. Interview protocols were developed collaboratively, emphasizing protocols that facilitated shaping the study methodology toward the empowerment of participants. The research coordinating council members were trained in the coding process, discussed data interpretation, and coded and interpreted a sample of the life histories in order to provide an audit of the university researcher's data coding efforts from the perspective of local cultural understandings. The work identified protective factors, capturing hidden and unheard narratives of Alaska Native strength and resilience (Mohatt, Rasmus, et al., 2004).

These qualitative findings were connected to culturally adapted existing instruments and developed into new, culturally grounded ways of measuring these salient factors in quantitative work with a Yup'ik (an Alaska Native Indigenous population) coresearcher group who assisted in the direction of this instrument development. The qualitative findings culminated in a culturally grounded heuristic model of protection to guide intervention (Allen et al., 2006). The qualitative findings were connected to the quantitative survey methods, where they guided development and testing of a protective factors measure through contributions to item content and construct composition. Through seminar training meetings and commentary at team meetings, the Yup'k coresearchers, who did not initially possess specialist measurement training, provided key input into the design, implementation, and interpretation of the findings.

This and similarly developed measures were tested as part of a complex model of protection made possible only through the detailed, rich qualitative data and the heuristic model developed out of the Phase 1 life history research (Allen et al., 2014). The results of Phase 2 suggested important alterations to the original heuristic model, displaying how mixed methods research draws on complementary strengths in methods. One finding refined the team's understanding of the role of family characteristics as moderating peer influences on alcohol beliefs. Another contribution was structural

equation modeling's ability to assign relative weights to different protective factors within the model, suggesting particularly important areas for intervention. A culturally patterned finding with implications for prevention emerged in young people's preference for problem solving using communal mastery over self-mastery strategies. Although this preference was anticipated through the qualitative findings, the extent of that preference that these communal strategies to achieve mastery would draw on family relationships over adolescent peer friendships was not predicted.

In the quantitative interplay with qualitative data, methods limitations also emerged. Foremost was what was lost in the transition from a heuristic model based on rich, narrative data embedded in deep cultural structures to a model based on self-report quantitative data. Each level of the original heuristic model included nuanced description that was reduced in the measurement instruments to only a few salient factors. Clearly, the creation of brief measures developmentally appropriate for youth as young as age 12 required simplification. However, there were also issues related to the nomothetic method. For example, although the existence of a safe place growing up was reported to be of critical importance by a small high-risk group of qualitative research participants, it was not an issue for the larger overall group, and, in the aggregated data, safe places did not exhibit a significant relationship to outcomes.

Researcher experience with community cultural norms regarding direct questions about trauma provides an even more far-reaching case example in comparative strengths and weaknesses of method (Gonzalez & Trickett, 2014). Trauma exposure, protection from trauma, and response to traumatization emerged as important elements in the original qualitative heuristic model (Allen et al., 2006). However, discussion of trauma during the life history interviews occurred at the disclosure, discretion, and choice of the individual. Interviewers did not ask direct questions about trauma. Instead, interviewers asked about important transformative events, both positive and negative, and followed up with careful yet respectful inquiry if trauma experience was revealed. In developing measurement strategies for the protective factors study, many community members were not comfortable with researchers asking youth direct questions of the type found in trauma self-report

measures. Within the Yup'ik cultural context, given the respect afforded to individual autonomy, direct questions of this type by their very nature can be intrusive and culturally inappropriate. Therefore, in the quantitative work it was not possible to explore this component of the model. In summary, connecting qualitative to quantitative methods led to increased specificity and generalizability but at a cost in nuance, description of individual- and community-level differences, and appreciation of the deeper structure of several cultural elements.

Developing Communities Project of Greater Roseland

A research collaboration between the University of Illinois at Chicago and the Developing Communities Project of Greater Roseland (DCP), a local church-related community organization, provides an embedded mixed methods case study. A key component of this participatory intervention was leadership development of community members who were delivering substance abuse education and prevention programming in their community. A primary aim was to identify issues, processes, and motivating influences behind the emergence of community leaders that the intervention drew upon and to present the findings in a way that would be of maximum usefulness to the community organization. Semistructured interviews with the community leaders explored leadership influences around four topics: (a) social support for the community leader, (b) skills learned and skills to be learned in future training, (c) communications with other community organizations, and (d) personal visions of the community leaders.

The process of qualitative data collection, coding, and interpretation for 77 interviews is presented in Tandon, Azelton, Kelly, and Strickland (1998). Through the process of its analysis, the research team concluded that the 56 codes generated could be grouped into five dimensions describing social processes of community leadership: (a) reasons for community involvement and activities, (b) the organization's impact on the leaders, (c) factors promoting continued and active involvement, (d) religious influences affecting leaders' commitment, and (e) personal visions. Community dissemination of the results used a graphic representation of five trees; each tree represented one of these five dimensions, with the codes organized according to each dimension as a

branch of one of the trees. In providing individual feedback to participants, the codes that emerged in each individual interview were plotted on each participant's own five trees of leadership so that the citizen leader could examine his or her profile and even compare it with group data.

The executive director of DCP was interested in whether the community leaders in their program formed subgroups based on their motivations to take on the leadership responsibilities the DCP depended upon. The executive director believed that better understanding of the types of motivations could guide recruitment and improve leader training. Henry, Dymnicki, Mohatt, Allen, and Kelly (2015) described and then explored the utility of three different cluster analysis approaches in assisting with the identification of these subgroups.

The interpretation of the meaning of the different clusters of leadership subgroups and their implications for recruitment and retention was facilitated through the active involvement of the coresearcher group. The coresearcher team identified the leaders comprising the first cluster as being motivated by the desire to create community change, those in the second cluster by the prospect of gaining personal knowledge and exchanging information with others, and those in the third cluster by an agenda for systemic community change via economic development. The DCP organization and its board felt that the cluster analysis provided helpful information to guide enhancement of the organization's recruiting and training activities.

Embedded approaches involve more transformation of data from one approach into another than is the case in merging or connecting data approaches. In the DCP study, the quantitative findings were secondary and were used as a tool yielding new interpretative information from the qualitative data that were primary in importance for analytic yield. These clustering methods can guide qualitative analysis using complex coding systems and can support more systematic exploration of the meaning of relational configurations of code structures. This can provide qualitative researchers with new tools to explore their data beyond individual code types in isolation. However, embedded mixed methods can be used effectively only by researchers with grounding in theory and context, and through rich immersion in narrative data made possible through qualitative work combined with coresearcher involvement and collaboration. Such

mixed methods approaches move the field closer to the concept of triangulation as convergent findings from multiple methods envisioned by Jick (1979).

CONCLUSION

Arnstein's (1969) citizen participation framework provides a useful tool for describing the implementation of participatory research and the contribution of mixed methods. Clearly, some projects foster citizen power, while others, although described as CBPAR, may represent tokenism or even nonparticipation. The framework allows us to think about what is participation and to what extent a CBPAR project embodies it. An important element of the qualitative component in mixed methods may be the avenues by which it makes research approachable and relevant to the coresearcher team and community, creating portals for introducing local meaning and direction, while including elements of precision and generalizability associated with quantitative work persuasive to the policymakers whom a community hopes to influence. The utility of mixed methods in participatory research thus involves the ways in which it moves the project up the ladder of participation.

This issue is discussed by Trickett (2011), who described the worldview of participatory research as involving the community as the unit of solution and practice, community involvement in decision making, social change as goal, a constructivist approach, and sustainability as a concern. Trickett noted that elements of the participatory research perspective can be selectively bracketed and invoked to accomplish aims that are not collaboratively defined. For example, a research team may use participatory elements in implementing a randomized controlled trial of an adapted intervention. Yet it may be the case there was limited community input and choice in selection of which intervention to adapt, and deeper still, the general approach to the solution of the social problem, and even the selection of the research problem itself as an area of community concern. In such cases, local knowledge is relegated to carrying out science as conceived within a framework devised by experts from outside the community, and without empowerment and community capacity development as explicit goals. Mixed methods research provides one additional portal for critical insertion of the local knowledge, concerns, frameworks, and

aims that distinguish CBPAR as a worldview, as opposed to a set of instrumental strategies in the service of implementation of an outside research agenda.

In summary, mixed methods research's utility in participatory research can be judged by the degree to which it maximizes engagement, voice, and influence in facilitating structural change. Qualitative research elucidates local meaning, understandings, and a narrative defined by participants. Quantitative research can be influential in the process of structural change. Judged by the criteria of influence, mixed methods is a valuable way of facilitating higher levels of citizen participation in research.

REFERENCES

- Alastalo, M. (2008). The history of social research methods. In P. Alasuutari, L. Bickman, & J. Brannen (Eds.), *The Sage handbook of social research methods* (pp. 26–41). Thousand Oaks, CA: Sage.
- Allen, J., Mohatt, G. V., Hazel, K., Rasmus, M., Thomas, L., Lindley, S., & People Awakening Team. (2006). The tools to understand: Community as co-researcher on culture specific protective factors for Alaska Natives. *Journal of Prevention and Intervention in the Community*, 32, 41–59.
- Allen, J., Mohatt, G. V., Fok, C. C. T., Henry, D., Burkett, R., & People Awakening Team. (2014). A protective factors model for alcohol abuse and suicide prevention among Alaska Native youth. *American Journal of Community Psychology*, 54, 125–139.
- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35, 216–224.
- Baffour, T. D. (2011). Addressing health and social disparities through community-based participatory research in rural communities: Challenges and opportunities for social work. *Contemporary Rural Social Work*, 3, 4–16.
- bell hooks. (1995). *Killing rage: Ending racism*. New York, NY: Henry Holt.
- Brydon-Miller, M. (2004). The terrifying truth: Interrogating systems of power and privilege and choosing to act. In M. Brydon-Miller, P. Maguire, & A. McIntyre (Eds.), *Traveling companions: Feminism, teaching, and action research* (pp. 3–19). Westport, CT: Praeger.
- Brydon-Miller, M. (2008). Covenantal ethics and action research: Exploring a common foundation for social research. In D. Mertens & P. Ginsberg (Eds.), *Handbook of social research ethics* (pp. 243–258). Newbury Park, CA: Sage.
- Brydon-Miller, M., Greenwood, D., & Maguire, P. (2003). Why action research? *Action Research*, 1, 9–28.
- Brydon-Miller, M., Kral, M. J., Maguire, P., Noffke, S., & Sabhlok, A. (2011). Jazz and the Banyan tree: Roots and riffs on participatory action research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (4th ed., pp. 387–400). Thousand Oaks, CA: Sage.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56, 81–105.
- Cargo, M., & Mercer, S. L. (2008). The values and challenges of participatory research: Strengthening its practice. *Annual Review of Public Health*, 29, 325–350.
- Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2011). *Best practices for mixed methods research in the health sciences*. Bethesda, MD: National Institutes of Health.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.
- Denzin, N. K., & Giardina, M. D. (2008). The elephant in the living room, or advancing the conversation about the politics of evidence. In N. K. Denzin & M. D. Giardina (Eds.), *Qualitative inquiry and the politics of evidence* (pp. 9–51). Walnut Creek, CA: Left Coast Press.
- Denzin, N. K., Lincoln, Y. S., & Smith, L. T. (2008). *Handbook of critical and indigenous methodologies*. Los Angeles, CA: Sage.
- Dukes, E. F., Firelock, K. E., & Birkoff, J. E. (Eds.). (2011). *Community-based collaboration: Bridging socio-ecological research and practice*. Charlottesville: University of Virginia Press.
- Fals Borda, O. (2001). Participatory (action) research in social theory: Origins and challenges. In P. Reason & H. Bradbury (Eds.), *Handbook of action research* (pp. 27–37). London, England: Sage.
- Fielding, J., & Fielding, N. (2008). Synergy and synthesis: Integrating qualitative and quantitative data. In P. Alasuutari, L. Bickman, & J. Brannen (Eds.), *The Sage handbook of social research methods* (pp. 555–571). Thousand Oaks, CA: Sage.
- Fine, M., & Torre, M. (2005). Resisting and researching: Youth participatory action research. In S. Ginwright, J. Cammarota, & P. Noguera (Eds.), *Social justice, youth, and their communities* (pp. 269–285). New York, NY: Routledge.
- Freire, P. (1970). *Pedagogy of the oppressed*. New York, NY: Seabury.
- Greene, J. C. (2007). *Mixed methods in social inquiry*. San Francisco, CA: Wiley.
- Gonzalez, J., & Trickett, E. J. (2014). Collaborative measurement development as a tool in CBPR: Measurement development and adaptation within

- the cultures of communities. *American Journal of Community Psychology*, 54, 112–124.
- Gustavsen, B., Hanson, A., & Qvale, T. U. (2008). Action research and the challenge of scope. In P. Reason & H. Bradbury (Eds.), *Handbook of action research* (2nd ed., pp. 63–76). Thousand Oaks, CA: Sage.
- Hall, B. L. (2005). In from the cold? Reflections on participatory research from 1970–2005. *Convergence*, 38, 5–24.
- Hanson, W. E., Creswell, J. W., Plano Clark, V. L., Petska, K. S., & Creswell, J. D. (2005). Mixed methods research designs in counseling psychology. *Journal of Counseling Psychology*, 52, 224–235.
- Hesse-Biber, S. N., & Leavy, P. (Eds.). (2008). *Handbook of emergent methods*. New York, NY: Guilford Press.
- Henry, D., Dymnicki, A. B., Mohatt, N. V., Allen, J., & Kelly, J. (2015). Clustering methods with qualitative data: A mixed methods approach for prevention research with small samples. *Prevention Science*. Epub ahead of print.
- Israel, B. A., Schulz, A. J., Parker, E. A., Becker, A. B., Allen, A. J., & Guzman, J. R. (2008). Critical issues in developing and following CBPR principles. In M. Minkler & N. Wallerstein (2008), *Community-based participatory research for health: From process to outcomes* (pp. 47–63). Hoboken, NJ: Wiley.
- Jason, L. A., Keys, C. B., Suarez-Balcazar, Y. E., Taylor, R. R., & Davis, M. I. (2004). *Participatory community research: Theories and methods in action*. Washington, DC: American Psychological Association.
- Jick, T. D. (1979). Mixing qualitative and quantitative methods: Triangulation in action. *Administrative Science Quarterly*, 24, 602–611.
- Kagan, C., Burton, M., Duckett, P., & Lawthom, R. (2011). *Critical community psychology*. Hoboken, NJ: Blackwell.
- Kapoor, D., & Jordan, S. (Eds.). (2009). *Education, participatory action research, and social change: International perspectives*. New York, NY: Palgrave Macmillan.
- Kemmis, S., & McTaggart, R. (2005). Participatory action research: Communicative action and the public sphere. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 559–603). Thousand Oaks, CA: Sage.
- Kidd, S. A., & Kral, M. J. (2005). Practicing participatory action research. *Journal of Counseling Psychology*, 52, 187–195.
- Kovach, M. (2009). *Indigenous methodologies: Characteristics, conversations, and contexts*. Toronto, ON: University of Toronto Press.
- Kral, M. J. (2014). The relational motif in participatory qualitative research. *Qualitative Inquiry*, 20, 144–150.
- Krivokapic-Skoko, B., & O'Neill, G. (2010). Doing mixed methods research. In J. Higgs, N. Cherry, R. Macklin, & R. Ajjawi (Eds.), *Researching practice: A discourse on qualitative methodologies* (pp. 279–288). Rotterdam, The Netherlands: Sense.
- Lewin, K. (1970). Action research and minority problems. *Journal of Social Issues*, 2, 34–46.
- Manson, S. M. (1989). Barrow alcohol study: Emphasis on its ethical and procedural aspects. *American Indian and Alaska Native Mental Health Research*, 2(3), 5–6.
- Mies, M. (1996). Liberating women, liberating knowledge: Reflections on two decades of feminist action research. *Atlantis*, 21(6), 10–24.
- Mohatt, G. V., Hazel, K. L., Allen, J., Stachelrodt, M., Hensel, C., & Fath, R. (2004). Unheard Alaska: Culturally anchored participatory action research on sobriety with Alaska Natives. *American Journal of Community Psychology*, 33, 263–273.
- Mohatt, G. V., Rasmus, S. M., Thomas, L., Allen, J., Hazel, K., & Hensel, C. (2004). Tied together like a woven hat: Protective pathways to Alaska Native sobriety. *Harm Reduction*, 1(10), 1–12.
- Ortner, S. B. (2006). *Anthropology and social theory: Culture, power, and the acting subject*. Durham, NC: Duke University Press.
- O'Toole, T. P., Aaron, K. F., Chin, M. H., Horowitz, C. & Tyson, F. (2003). Community-based participatory research: Opportunities, challenges, and the need for a common language. *Journal of General Internal Medicine*, 18, 592–594.
- Park, P. (1992). The discovery of participatory research as a new scientific paradigm: Personal and intellectual accounts. *American Sociologist*, 23, 29–42.
- Reich, S. M., Riemer, M., Prilleltensky, I., & Montero, M. (Eds.). (2007). *International community psychology: History and theories*. New York, NY: Springer.
- Savage, C. L., Xu, Y., Lee, R., Rose, B. L., Kappesser, M., & Anthony, J. S. (2006). A case study in the use of community-based participatory research in public health nursing. *Public Health Nursing*, 23, 472–478.
- Shore, N. (2008). Introduction to special issue: Advancing the ethics of community-based participatory research. *Journal of Empirical Research on Human Research Ethics*, 3, 1–4.
- Shweder, R. A. (1996). Quanta and qualia: What is the "object" of ethnographic method? In R. Jessor, A. Colby, & R. A. Shweder (Eds.), *Ethnography and human development: Context and meaning in social inquiry* (pp. 175–182). Chicago, IL: University of Chicago Press.
- Smith, L. T. (2012). *Decolonizing methodologies: Research and indigenous peoples* (2nd ed.). London, England: Zed.
- Staller, K. M., Block, E., & Horner, P. S. (2008). History of methods in social science research. In S. N. Hesse-Biber & P. Leavy (Eds.), *Handbook of emergent methods* (pp. 25–51). New York, NY: Guilford Press.

- Sue, S. (1999). Science, ethnicity, and bias: Where have we gone wrong? *American Psychologist*, 54, 1070–1077.
- Tandon, S. D., Azelton, L. S., Kelly, J. G., & Strickland, D. (1998). Constructing a tree for community leaders: Contexts and processes in collaborative inquiry. *American Journal of Community Psychology*, 26, 669–696.
- Tolan, P., Chertok, F., Keys, C., & Jason, L. (1990). Conversing about theories, methods, and community research. In P. Tolan, C. Keys, F. Chertok, & L. Jason (Eds.), *Researching community psychology: Issues of theory and methods* (pp. 3–8). Washington, DC: American Psychological Association.
- Trickett, E. J. (2011). Community-based participatory research as worldview or instrumental strategy: Is it lost in translation(al) research? *American Journal of Public Health*, 101, 1353–1355.
- Tritter, J. Q., & McCallum, A. (2006). The snakes and ladders of user involvement: Moving beyond Arnstein. *Health Policy*, 76, 156–168.
- Wallerstein, N., & Duran, B. (2008). The theoretical, historical, and practice roots of CBPR. In M. Minkler & N. Wallerstein (Eds.), *Community-based participatory research for health: From process to outcomes* (pp. 25–46). Hoboken, NJ: Wiley.
- Wallerstein, N., & Duran, B. (2010). Community-based participatory research contributions to intervention research: The intersection of science and practice to improve health equity. *American Journal of Public Health*, 100, 40–46.
- Yanow, D. (2006). Neither rigorous nor objective? Interrogating criteria for knowledge claims in interpretive science. In D. Yanow & P. Schwartz-Shea (Eds.), *Interpretation and method: Empirical research methods and the interpretive turn* (pp. 67–88). Armonk, NY: M. E. Sharpe.
- Zimmerman, M. A. (1995). Psychological empowerment: Issues and illustrations. *American Journal of Community Psychology*, 23, 581–599.