

Lessons Learned through the Creative and Iterative Process of Community-Based Participatory Research

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Abstract: *The purpose of this article is to examine lessons learned through the process of a community-based participatory research (CBPR) project that attempted to implement an innovative approach to community research in partnership with a clinical outcomes research project. Principal investigators were convinced that collaboration would be workable and mutually beneficial. When they reached the point where they were entering the community to begin their work, however, investigators came to realize the full implications of the divergence of their respective research principles and methods. Approaches that benefited both teams initially brought them to see that neither project would be able to achieve its individual research goals if the two teams continued to operate in tandem. The design that brought these teams together ultimately proved unworkable. The reflective and iterative process of CBPR empowered investigators to recognize and learn from both their success and failures and thus gain better control over their respective projects.*

Keywords: *Participatory action, community-based participatory research, interdisciplinary teams, rural research*

Citation

Powers, J., Cumbie, S. A., & Weinert, C. (2006). Lessons learned through the creative and iterative process of community-based participatory research. *International Journal of Qualitative Methods*, 5(2), Article 4. Retrieved [Month, day, year] from http://www.ualberta.ca/~iiqm/backissues/5_2/pdf/powers.pdf

Authors' note

Funding acknowledgement: UW Northern Rockies Regional NIH/INBRE (2P20RR016474-04).

A growing awareness of the need to understand the impact of community dynamics and sociocultural factors on health has led to an increased demand for truly collaborative research that addresses locally identified issues and engages community members in the development of health interventions (Minkler & Wallerstein, 2003). Funding to support collaborative and community-based research has also increased dramatically over the past 5 years. These changes have fostered the significant growth of orientations to inquiry that stress community partnership, action for social change, and reductions in health inequities as integral parts of the research enterprise. Research teams that attempt to establish programs of community-based participatory research (CBPR) can employ innovative approaches to funding their projects, building interdisciplinary teams, and managing resources. Some of these innovations will advance the methods of CBPR, however, others might be problematic to sustaining the integrity of the approach. The purpose of this article is to examine lessons learned through the initial developmental process of a community-based participatory research (CBPR) project that attempted to implement an innovative approach to community research in partnership with a clinical outcomes research project placed in the same rural community.

PROJECT BACKGROUND

The two projects discussed here comprise one thematic research area, "Clinical Outcomes in Rural Populations," of a National Institutes of Health (NIH) IDeA Networks for Biomedical Excellence (INBRE) grant awarded to the University of Wyoming (UW) College of Health Sciences in July 2004. INBRE grants are awarded contingent on the successful completion of an NIH Biomedical Research Infrastructure Network (BRIN) grant and are intended to fund the continuation of the research infrastructure-building efforts the BRIN initiated. The CBPR project was, by definition, committed to the principles of community-determined priorities for assessment, action, and evaluation; the clinical outcomes project planned to conduct community-based tests of a researcher-defined activity intervention. Thus, two studies with widely divergent approaches to community-based research became identified as and were funded as a collaborative effort.

At the outset of the initiative, the two principal investigators were convinced that their projected collaboration would be both workable and mutually beneficial. Johnson, Wistow, Schultz, and Hardy (2003) have referred to this quality, which is essential to good collaboration, as "collective efficacy," or the

belief that a combined effort is necessary to attain a shared goal and that all parties involved are capable of and willing to do their share of the work (p. 70). The two projects and project budgets were structured with this conviction in mind, and, when funded, the investigators proceeded to build a combined project team and to develop a collaborative plan based on CBPR principles to approach community partners.

During the first half-year of the project, an infrastructure and team-building period, the collaborative approach served the team well. In particular, the comparatively slow pace of CBPR, grounded as it is in the iterative processes of analysis and revision, allowed for learning and for essential project redefinition in a way that is not often possible, or desirable, in more linear approaches to research. Both projects were strengthened through this ongoing dialogue, analysis, and iterative change. However, the insights the process provided into the potential applicability of CBPR principles to both community-based and clinical outcomes research eventually led the project investigators to question the reasonableness of continuing to pair the two projects. In the end, the same CBPR approach that benefited both teams initially brought them to see that neither project would be able to achieve its individual research goals if the two teams continued to operate in tandem.

One portion of the INBRE grant funds six individual research projects intended to build research capability among junior faculty in Health Sciences. To qualify for funding, the potential project investigators were required to hold the rank of assistant professor; devote a minimum of 50% work-effort to research; and prepare a project budget that does not exceed \$150,000 per year. In addition, each investigator must be linked with a senior research mentor who would commit to a work-effort of at least 10%, and up to 20% of his or her time, this time to be supported through the INBRE Administrative infrastructure. Interdisciplinary and collaborative proposals were encouraged and considered a strength in the funding determination.

The overall goals of the BRIN/INBRE effort at UW have been and are to increase the capacity of biomedical researchers at the university to compete successfully for NIH funding, to bring more graduate and undergraduate students into the research efforts at UW and its partner institutions, and to encourage students to pursue health research careers. These goals, which are more or less standard for schools receiving INBRE funds, take on a unique complexion in Wyoming, where the university is the only baccalaureate postsecondary degree-granting institution in a frontier state of 97,818 square miles, inhabited by a population of only 494,423 people (U.S. Census of Population and

Housing, 2000). UW's partner institutions in the INBRE are four of the state's seven community colleges, which are distributed regionally across the landscape, separated, for the most part, by vast unpopulated spaces and frequently impassable roads. These physical challenges to collaboration, added to the even greater challenge of establishing fruitful research relationships with community college faculty, whose primary responsibility is teaching, and their freshman and sophomore students, therefore, give research infrastructure-building a different meaning here from the one it typically has elsewhere.

The "Clinical Outcomes in Rural Populations" portion of the UW INBRE was designed to respond to some of these contextual factors. Its two research projects were the only INBRE-supported faculty inquiries that moved the research enterprise out of the laboratory and into the community. As community-based efforts, they were destined to play a more significant community outreach role in the grant as a whole than its other faculty projects, a role whose potential impact reaches beyond the meaning of the data they would collect. That is, in addition to conducting their two projects, these INBRE research teams would actually be in the community for a 5-year period, building a community-centered research-and-action infrastructure intended not just for these specific projects but also for future health and health promotion inquiries. This larger mission of the two "Clinical Outcomes in Rural Populations" projects tied them back into the infrastructure-building and community/community-college partnership goals of the INBRE grant in a way that the other, more traditional faculty research projects were not. They also had the potential of developing an effective mechanism for both studying and ameliorating some of the health disparities of the state's largely underserved rural population and thus helping move the university forward in its mission to serve the state.

The two projects that were combined as the Clinical Research arm of the INBRE were originally titled "Building Clinical Research Infrastructures for Community-Focused Health Research" (Project 5) and "Community-Focused Health and Bio-Physical Research" (Project 6). The first, Project 5, is a community-based participatory research (CBPR) initiative aimed at bringing UW researchers, community college faculty and students, and members of local communities together to identify community health priorities, develop a collaborative infrastructure to determine and implement appropriate solutions, and evaluate those solutions as a prelude to future action. The principal investigator of this project has an academic background in nursing. The Project 5 research team includes co-investigators from Social Work and Kinesiology and

Health, which are also divisions of the College of Health Sciences, and research associates from the Center for Rural Health and Research Education. The principal investigator's earlier CPBR work with individuals living with severe and persistent mental illness (Cumbie & Quick, 2005) laid the groundwork for Project 5 and also reflects her tendency as a researcher toward a multidisciplinary approach to project design and implementation.

The second project, Project 6, is an intervention study assessing the efficacy of positive lifestyle behavior changes in preventing cardiovascular disease, type 2 diabetes, and obesity in children and adolescents. The principal investigator is an applied physiologist and a member of the UW Division of Kinesiology and Health. Although his past work focused primarily on applied clinical research, recent statistics documenting the alarming rise of obesity and chronic illnesses among young people have made him increasingly interested in the translation of basic scientific knowledge into effective community interventions. The location of Project 6 in the community context and its linkage with Project 5's CBPR approach to community health issues and priorities reflect a move toward exploring how such a translation might be effected.

Although the two clinical outcomes projects grew initially out of the individual research interests and expertise of their principal investigators, the idea of combining them in a joint community-based initiative arose early in the grant development process for both theoretical and practical reasons. First of all, unlike the other INBRE thematic projects, which involve basic laboratory research, these two address community health issues with complex social, cultural, and behavioral dimensions. Moreover, they both developed as community-based efforts in direct response to the INBRE objective to build a multidisciplinary biomedical research infrastructure at UW and its partner institutions. The clinical outcomes investigators eventually phrased their relationship to this INBRE objective as follows: "The long-range objective of the project is to establish and maintain long-term campus-community partnerships to advance interdisciplinary research related to rural community health that will contribute to the quality of life among the citizens of Wyoming" (Cumbie & Smith, 2004, p. 126).

This understanding of the mission of each community-based project in relation to the larger goals of the grant mandated that both would be conducted in one or more of the four communities where the partner community colleges are located and chosen with an eye to both the communities' rurality and their manifestation of the health disparities most relevant to the expertise and interests of the two investigators. After the initial

assessment of possible sites for the projects, Riverton and Sheridan emerged as the most appropriate communities. Riverton and Sheridan are medium-sized cities by Wyoming standards (10,000 and 16,800 people, respectively). Besides being home to two of the state's seven community colleges, they serve as focal points for health promotion and health care provision for their surrounding areas. Once these two communities had been identified as the most appropriate sites for both projects, it also became a practical matter to consider a collaborative effort, as two campus-community infrastructure-building efforts in the same small communities and colleges might cause confusion and frustration, which would undermine both.

Furthermore, as the idea of a combined "clinical outcomes" project began to emerge, another practical consideration became clear. The two communities that the principal investigators had tentatively chosen are 240 and 350 miles from the main university campus. The large amount of travel that would be required to conduct community-based research at those distances and the rising cost of such travel made it economically attractive to consider sharing resources, as each project was limited to a budget of \$150,000 per year of the grant period.

Thus, for the above theoretical and practical reasons, Projects 5 and 6 were incorporated into the INBRE proposal as the thematic area "Clinical Outcomes in Rural Populations." Once the grant was funded, the two projects would be known as WyoHealth CORPs (Clinical Outcomes in Rural Populations). The projects shared a grounding in CBPR principles, and their budgets reflected shared resources, staff, and travel expenses. They also shared a senior research mentor, Clarann Weinert, director of the Center for Research on Chronic Conditions in Rural Dwellers at Montana State University.

INFRASTRUCTURE AND COALITION BUILDING

The WyoHealth CORPS project set out its first year with a clear commitment to becoming the "WyoHealth Corps team." Although only one of the principal investigators had previous experience with community-based research, both were enthusiastic about the innovativeness of their initiative and committed to the idea of working together to make a difference in the two communities they had targeted. They had structured their projects with the belief that the two could be integrated and connected, despite their different approaches, and that doing so would benefit both studies.

Year 1 of the 5-year project had been designed as a period to establish team infrastructure and initiate community coalition building, in preparation for the beginning of community assessment in Year 2. Given the organizational nature of their early efforts, it was not difficult for the combined project to speak with one voice, and the process that had been established worked well for them.

Establishing an integrated team of investigators and co-investigators prepared to work both independently and together in the targeted communities was a first concern. The original team members began by setting up a series of regular meetings where they could share their previous experiences and relevant expertise. At the same time, they began to define and select appropriate support personnel and to shape a unified vision of what they would accomplish in Year 2. They also began to discuss the necessary design of the system by which they would manage the multiple types of data the project would generate: for example, demographic information; contact information; and survey, interview, and focus group data sets. Finally, they determined and acquired the various kinds of electronic and office equipment the investigators and the project staff would need to schedule, undertake, and process the results of the community action and evaluation. Putting this complex team infrastructure in place was a primary goal during Year 1, and, like the CBPR approach on which it was built, it was often more recursive than linear. For example, clarifying project goals might lead to a redefinition of staffing or equipment needs, or individual research priorities might lead to a rethinking of project structure.

An equally important concern during this first year was to initiate the community college and community agency contacts that would help the team build the community-based coalition at the heart of the CBPR effort. The project investigators were able to make excellent contacts with the community college presidents and the respective UW outreach coordinators at fall meetings for both groups scheduled on the UW campus. The outreach coordinators were enthusiastic about the project and, as community residents who worked for UW on their local campuses, became essential to the entry of the project into the communities. In fact, when the research team later determined it would approach the Riverton community and campus first, it relied on the help of the local outreach coordinator to provide the names and contact information for the diverse group of health professionals who attended the team's first informational presentations in that community.

RETHINKING THE PROJECT STRUCTURE

The developmental process worked well for the combined projects until about midway through the first year of the grant, when the team began the detailed planning for its venture into the first of the target communities. At that point, team members began to discuss in increasing detail how they would introduce the two projects as a single community-based effort. Having by this time become better acquainted with the community-determined definition of CBPR research priorities, the principal investigator of Project 6 raised the crucial question of how the CBPR team would deal with the fact that his project had a research agenda that was already defined. Although this issue would eventually lead to a rethinking of the entire project structure, it did not do so at the time, mainly because team members had become strongly committed to the idea of the combined project as a team effort but probably also because they were feeling the pressure to initiate the move into the community and make their first contacts. Instead, the team took a route that, in retrospect, seems problematic, both in terms of CBPR principles and in terms of its likelihood of success. They decided to present the entire project and CBPR research principles in general terms and not to mention at the initial meetings that one project's focus was already defined.

In spite of this decision, the first team visit to Riverton went well because of the work of the outreach coordinator at the community college, the large group of interested and committed health professionals in the area, and the enthusiasm of the project team for the project. Team members presented an overview of the combined project and the CBPR approach, first, to an intercommunity coalition of health agencies and, second, to an even broader group of health professionals from the area, who had received invitations to an informational reception based on the list of contacts the outreach coordinator had provided. Those attending the meetings appeared interested in what the project might do for and with their communities, but most also indicated on the information sheets they were asked to complete that they were not entirely clear what the project involved and needed more information before they could decide whether or how to participate in it. More important, perhaps, the members of the teams of the two original projects had the opportunity to see how the decision about the project differences played out in public and begin to consider whether that solution would be workable for the future.

The 6 to 8 weeks following the team's initial visit to Riverton and before its second visit were a period of sometimes stressful but ultimately creative rethinking

of the project structure, much of which occurred within the two projects and outside of full team meetings. In essence, without verbalizing their growing awareness of the problems inherent in the divergent underlying perspectives of the two projects, the two principal investigators increasingly found themselves struggling to make their time lines for the upcoming year work together. At the same time, other members of the multidisciplinary research team, who were not as immersed in the details of the projects as the principal investigators, began to step back and reflect on what had occurred and what now needed to occur. It was becoming clear to both project teams that what each project required to move forward individually in the second year differed substantially and in ways that made it impossible for them to operate in tandem. Project 5 was at the beginning of a year-long period of community assessment and coalition building, prior to determining community priorities for action; Project 6 was ready to begin an equally long period of data collection that would measure outcomes over time. What had originally appeared to be an innovative partnership to share resources and intellectual capital between two community-based research projects no longer seemed workable when the two were poised to enter the community and begin their work.

Although it took several weeks for the combined project teams to realize fully the implications of their essential differences, those differences had become clear well before the end of the first project year. Project 5 could not take a specific health priority and intervention into the community at the outset without undermining the CBPR methods at the heart of its approach; Project 6 had an already defined health priority and intervention that it was ready to test—it had neither the need nor the obligation to engage in the iterative discovery process of CBPR. The importance of acting on this realization became especially pressing for Project 6 when that team discovered, during the initial community contacts, that the tribal middle schools in two nearby reservation communities had just received money to implement an activity program like the one Project 6 had already developed. This serendipitous coincidence further reinforced the two project teams' growing understanding of the central differences in their individual requirements and approaches. It became clear to them that the successful completion of both projects required that they separate, at least on paper. Thus, the two projects produced decidedly divergent goals and time lines for Year 2.

Several other essentially fruitful changes occurred as a result of lessons learned during this early developmental period. Both teams agreed to narrow the scope of the project to a single community, Riverton and its

surrounding area, rather than to divide their initial efforts between that community and Sheridan. One reason for this decision was practical: The two investigators had hoped to make the amount of travel each project would require more affordable by combining trips into the communities. When it became clear that the differences in their projects made planning such a schedule infeasible, they were forced to limit their focus to accommodate the need to spread travel monies over their individual budgets. In doing so, however, they were also responding to other, more substantive realizations about the scope of the original project, realizations that emerged from their first community visit and were at least partially related to their relative inexperience in working with rural Wyoming communities. One of these involved the discovery of the amount of time and effort involved in planning, scheduling, and traveling to a community 5 hours away from their campus and remaining there a sufficient amount of time to accomplish their work. The other involved their coming to understand the size and diversity of the “community” with which they planned to work. It became apparent to them that if they spread their efforts over two widely separated communities, they would be unlikely to achieve their most significant goals, given the amount of researcher time and funding available. Thus, in limiting the focus of the projects, they hoped to increase the likelihood of having a substantial impact on a single community and community health.

Another important lesson led to each project’s decision to hire its own project manager. As a combined project team, the group had simply assumed that the skills the two projects would need from a project manager would be similar and complementary; therefore, they assumed a single person would best provide project coordination. In actuality, the same developmental process that gradually clarified the need for separate time lines also clarified the need for individual project managers. Project 5, heading into a year of community assessment and coalition building, needed a manager skilled at networking with community members, building travel and meeting schedules, searching and building health databases, effectively using various forms of

electronic communication, and managing vast amounts of qualitative data. Project 6, on the other hand, heading into a year of data collection, needed a project manager with the background and ability to explain the project intervention to prospective participants and to collect and manage the biophysical samples for the evaluation of its aerobic exercise intervention. Each project thus benefited by having the opportunity to choose a manager who provided the unique skills essential to that particular research approach.

DISCUSSION

The evolutionary process through which these two community-based research groups came together as a single team and later separated into individual community initiatives was driven principally by the essential differences between community-based participatory research and community-located clinical outcomes research, as reflected in Table 1.

It became clear to both project teams that these differences, which have been widely discussed in the literature for the past decade or more (Israel et al., 2003; Kelly, 2005), could not be ignored without serious detriment to the integrity of each individual project. In essence, a series of fundamental, paradigmatic contrasts in approach, which included each team’s relationship to the community, project objectives, ideal project time line, and target population, prevented a consolidation of team efforts.

The project investigators’ decision to produce separate time lines in Year 2 was driven as well by the realities of their position as junior faculty members facing tenure and promotion decisions in the near future. In a recent study, Kezar (2005) quoted a university provost’s assessment of one of the difficulties in implementing successful team approaches within academia: “the problem is that we keep trying to force collaborative innovations into a structure and culture that supports individual work” (p. 52). Kezar acknowledged that increased pressure for collaboration is being exerted from a wide range of sources such as federal and state agencies, disciplinary and professional societies,

<i>Project 5: Community-Based Participatory Research</i>	<i>Project 6: Community-Located Clinical Research</i>
Iterative process	Linear process
No initial agenda	Clear initial agenda
Community-determined intervention	Researcher-determined intervention
Evaluation of both process and outcomes	Evaluation of outcomes
Community involved in evaluating outcomes	Researcher analyzes outcomes

Table 1. Differences between community-based participatory research and community-located clinical outcomes research

and foundations but that faculty are not always in a position to take advantage of these opportunities. Although the potential rewards for the development of interdisciplinary and collaborative projects might increase faculty members' incentive to participate in them, the university, particularly in its promotion and tenure requirements, might value individual efforts over team endeavors. Accordingly, senior colleagues might advise junior faculty members to focus on developing a sustained program of individual research rather than exploring collaborative opportunities.

Such was, in fact, the case with the two investigators who attempted to collaborate on the WyoHealth CORPs project. Although the Project 5 investigator was naturally involved in CBPR as part of her larger research program, the Project 6 investigator was clearly in a realm outside his established work. CBPR principles helped him move his research successfully into the community during the first, organizational year of the project, but the pace and structure of CBPR inquiry appeared to threaten his success in Year 2. Like many young clinical researchers, he came to realize he did not have the liberty to explore opportunities, however valuable, that arose through the collaborative process, and he properly heeded the advice of senior project advisors, who encouraged him to move quickly into intervention and evaluation.

Given the separation of the two projects after the first year of their funding, the collaborative, team-building process in which they engaged might seem to have ended in failure—and certainly the weeks between the first team visit to Riverton and the clear decision to separate were stressful ones for the two project investigators. Viewed from a different perspective, however, the collaboration at the outset of the project and the focus on CBPR principles helped both initiatives get off to a good start, even to the point of putting each individual project on a better footing in the community than they might have otherwise achieved as they move into Year 2. They, in fact, did benefit from many of the commonly cited advantages of interdisciplinary collaboration in project development, such as increased productivity, better quality, mutual and reciprocal professional development and mentorship, support and encouragement, and expanded accessibility to expertise and resources (Fox-Wasylyshyn, Oldfield, Muscedere, & El-Masri, 2005; McGuire, 1999). At the outset of Year 2, Project 5 has developed a promising initial network of committed community agency and community college participants, connected with each other and the research team by an electronic discussion list and beginning to share ideas as they are generated. This group has begun mapping community health risks and assets, with the help of community col-

lege and community volunteers, as the first part of the CBPR community assessment process. Project 6 has entered into partnership with two middle schools on the Wind River Reservation, where Riverton is also located, and will measure the outcomes of an aerobic exercise intervention on the risk factors for heart disease, type 2 diabetes, and obesity in reservation youth.

These kinds of promising community-based research contexts have been difficult for UW researchers to establish in a rural state where locals are not prone to see the university as coming to "help them." This skepticism is particularly strong on the state's only reservation, where the residents are accustomed to outsiders "studying" them and then taking the data away, without providing adequate (and frequently not any) feedback to the participants or the community. The CBPR process, with its emphasis on sharing among team and community members and on listening closely to community input, played a primary role in overcoming initial skepticism in the case of both projects. Both projects also benefited from the fact that the key community participants now involved with both projects were introduced to both investigators and projects through the combined project team's presentations at their first visit, even though those presentations did not detail the potential divergence of the two projects.

Even in separating the two projects at the end of Year 1, the CBPR principles in which team members had become immersed provided key guidance. Although the nature of the two projects dictated they develop different goals and time lines and cease operating in tandem, the principal investigators remained committed to working honestly within a community context. Rather than attempting to cover up the misperceptions they might have left at the initial meetings or ignore the vagueness of their goals as they had presented them, they tackled their shortcomings directly as they began to meet with individuals and community groups during their subsequent meetings. As an example of the effectiveness of this approach, the principal investigator of Project 5 met with a key participant who is a recognized community leader and city council representative. This councilmember had attended the first team meeting at the request of the mayor but did not leave any contact information for the team. When the researcher explained how and why the team was narrowing the focus of the project and separating the two initiatives, she more fully understood the intent of the project and expressed approval and support. She also confided that she had not left contact information initially because she could not understand the focus or purpose of the combined projects and had reported so to the mayor. The consistent effectiveness of this kind of direct approach to some rather substan-

tial changes in the WyoHealth CORPs project and project structure perhaps surprised team members at first, although it is directly in line with those CBPR principles that make honest, forthright dialogue with community members a cardinal point.

One additional benefit of the team's initial approach to the community might argue for coordination of efforts, especially initial efforts, in rural research, even when the projects involved are not linked. The first appearance of these two projects as a single initiative has had the effect of setting the community's mind at ease about the identity of the two investigators and the goals of their projects. Members of the community are apparently assured by the fact that investigators are aware of each other's projects, that they are working together in some general sense, that they are sharing information, and that they have a common interest in the health of the community. This assurance allows the two projects to conduct legitimate research individually within the same small community. They are thus able to present the community with a cooperative "face," maintain channels of communication with each other, and keep the community appropriately informed.

The pairing of the two projects initially under CBPR principles also proved fruitful in terms of the researcher development goals of the INBRE grant, in that it provided a cooperative learning opportunity for the two principal investigators. Fox-Wasylysyn et al. (2005) argued that one strength of the collaborative research environment is its ability to provide mentoring and self-development opportunities that are not "unidimensional" but, rather, "mutual and reciprocal" (p. 40). Such was clearly the case in during the initial year of the WyoHealth CORPs project. In introducing the Project 6 team to CBPR principles, the Project 5 investigator was encouraged to expand and develop the study structure and more fully explicate the CBPR research process in ways that benefited her study as well as his. The Project 6 investigator was able to learn community-entry techniques and ways of structuring cooperative endeavor that led him to a community-based research project that he might not have otherwise found and one ideally suited to the intervention he will test and to his goal of translating basic scientific knowledge into an effective community intervention.

CONCLUSIONS

The developmental year for the two community-based projects combined in the WyoHealth CORPs portion of the INBRE involved learning about project development and the various uses of collaboration, as much as

designing specific interventions. The principles of CBPR and the comparatively slower pace of this research approach, as compared to more traditional research endeavors, allowed for reflection and positive change. The participatory, iterative CBPR process encouraged these researchers to discuss, contemplate, backtrack as needed, and make appropriate changes to their projects to enhance the possibility of their mutual and individual success. It also led them to adapt an attitude of not posturing, minimizing, or running away from realities, whether their other conversants were team members or community members. In a traditional research world under traditional research funding and schedules, it is not always possible to see project structures and assumptions as mutable. The fact that these two projects began with the CBPR model, where almost nothing is written in stone, undoubtedly helped them to build together, unbuild together, and become the stronger for having done so.

Thus, although the innovative project design that led to the combined WyoHealth CORPs project proved unworkable when the team attempted to put it into action, the CBPR principles on which it was built enabled the two project teams to realize and accomplish the changes that were necessary to maintain the integrity of both projects. Moreover, the many important lessons they learned along the way enriched the research capabilities of both principal investigators. In this case, iterative change—an essential component of CBPR—sparked by reflection among team and community partners initiated a continual cycle of learning about the strengths and weaknesses of the initial project structure. It became an empowering process through which the investigators were able to recognize and learn from both their success and failures and thus gain better understanding and control over their respective projects.

Wallerstein and Duran (2003) cautioned researchers to remember that participation is a complex and iterative process, which can change, grow, or diminish, based on the research project. The issue, then, is how differences are negotiated so that the investigators' research perspectives sustain the integrity of the particular theoretical and research approach. Within this context, the experiences of the WyoHealth CORPs team suggest that both granting agencies and academics might look at the nature and advantages of interdisciplinary collaboration in too limited a context if they see its benefits as accruing only in situations where research partners are able to proceed as absolute equals through a long-term project. The Project 5 and 6 teams of the INBRE began with specific common interests and needs, and the benefits they received from their

collaborative effort were central to assuring each project's success as it moved forward. Just as the CBPR tenets that informed the early collaborative teamwork helped each project position itself successfully in the community that would be their common base, those same principles eventually led the individual project teams to recognize and effectively negotiate their need to separate, thereby assuring each project's integrity.

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