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CAUGHT IN THE WEB: PILOTING A METHODOLOGY TO ASSESS COMMUNITY CAPACITY IN A RURAL HEART HEALTH PROJECT

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Abstract: As health promotion practitioners, we have been encouraged to implement strategies that embrace a community-building approach for strengthening community health. In this article, we present our experience in piloting a methodology to assess the extent to which community capacity was built in a rural heart health project. We defined community capacity as the degree to which a community (and its agency partners) can develop, implement, and sustain actions for strengthening community health. An assessment protocol that included a series of guiding questions and a ranking procedure to assess seven domains of community capacity was designed for focus group application. Following from this, community capacity webs, which visually depict the extent of capacity built through the heart project, were produced for each community. The methodology requires further refinement; however, through this process we were able to further our understanding of the effectiveness of this project in building community capacity.

Résumé: En tant que praticiens de promotion de santé, on nous a encouragés à mettre en oeuvre des stratégies incluant une approche à la mise en valeur du potentiel de la collectivité pour renforcer la santé de la communauté. Dans cet article, nous présentons notre expérience de piloter une méthodologie pour évaluer le degré de développement communautaire dans un projet rural de santé cardiaque. Nous avons défini la mise en valeur du potentiel de la communauté comme le degré auquel une communauté (et ses organismes partenaires) peut développer, mettre en oeuvre, et soutenir des actions pour renforcer la santé de la communauté. Un protocole d'évaluation qui a inclu une série de questions de direction et un procédé de rang pour évaluer sept domaines de la capacité de la communauté a été conçu et

appliqué dans un groupe d'entretien en profondeur. Ensuite, des schémas de mise en valeur du potentiel de la communauté qui représentent visuellement l'ampleur du développement suite au projet cardiaque ont été produits pour chaque communauté. La méthodologie doit s'améliorer; cependant, ce processus nous a permis d'étendre notre compréhension de l'efficacité du projet de mise en valeur du potentiel de la communauté.

Evidence from the literature (Fawcett et al., 1995; Freudenberg et al., 1995; Labonte, 1992, 1993a, 1993b; Lomas, 1997; Robertson & Minkler, 1994) and from our own experience suggests that an approach to health promotion programming that builds on existing community strengths and resources and embraces local experience and knowledge for planning, implementation, and evaluation is most effective in achieving positive health outcomes. Many authors advocate such a capacity-building approach, however, it has yet to be fully developed or made operational for planning and evaluation purposes (Goodman et al., 1998; Jackson et al., 1997). If understanding how a community works together for the improvement of health is to advance, increased efforts are needed to develop assessment methods and tools specific to this purpose (Baker & Teaser-Polk, 1998). We have attempted to meet this challenge with research centred on piloting a methodology to assess the extent to which community capacity was built in a heart health project.

HEART OF THE LAND, AN ALBERTA HEART HEALTH PROJECT

Heart of the Land was a four-year (1993–1997) community-based project that targeted rural adults in the David Thompson Health Region (DTHR) of central Alberta, Canada. This project was one of 36 research demonstration sites of the Canadian Heart Health Initiative (Health and Welfare Canada, 1992) and one of four in the Alberta Heart Health Project (AHHP). Two community clusters, each with a population of approximately 1,500 adults, had staggered dates of entry into the project. Six communities within these clusters were invited to participate because of the increased incidence of cardiovascular disease risk in Alberta rural communities (Joffres, Titanich, & Hessel, 1993) and their known desire to enhance personal and community health.

The main goals of the AHHP were: (a) to foster the improvement of heart health by improving knowledge and awareness of heart disease risk factors and by improving heart health lifestyle skills and behaviours; (b) to entrench heart health in the public agenda by

building structures, systems, and linkages to sustain heart health; and (c) to improve social and physical environments in support of heart health through increasing capacity, resources, research, and expertise for heart health, including an increased focus on developing policies with a heart health focus (Alberta Health, 1998).

The first three years of the DTHR project are best characterized as following a traditional community-based programming approach to heart health. Inherent in this approach is the concept that community members are mobilized and motivated to act as change agents to address problems and achieve health outcomes defined by health professionals (Labonte, 1993a, 1993b). In the heart project, staff elicited the support of community members and groups to mobilize the maximum number of people to reduce risk behaviours and to improve lifestyles for heart health. Strategies based on the experiences of other community-based heart projects were implemented (Carleton et al., 1995; Fortmann et al., 1995; Luepker et al., 1994; Shea & Basch, 1990). Staff established partnerships with several community organizations and agencies in the targeted communities to support educational and promotional activities such as individual risk assessment, community health education, media communication, support groups, and healthy public policy development.

Lessons learned throughout the project coupled with evidence from the literature (Ebrahim & Davey Smith, 1997; Egolf, Lasker, Wolf, & Potvin, 1992) led us to an understanding that the focus on changing individual heart health behaviours — the original perspective of the project — was not conducive to community ownership and sustainability of heart health. Thus, in the fourth year, staff added a community capacity-building approach to continued education and promotion strategies. The most significant change was the introduction of community facilitator(s) to replace the project coordinator role. This new role of the health professional focused on the facilitation of a developmental process within the communities to engage community members in actions they deemed to be important to support and sustain heart health, as opposed to the coordination of predetermined heart health activities. Guiding principles for this process were developed by the facilitators and included (a) development of positive relationships with community members, (b) respect for the uniqueness of each community, (c) recognition of empowerment and participation of the community, (d) building of a shared vision for heart health, and (e) the need for ongoing critical reflection (Baugh Littlejohns, Smith, & Thompson, 1999).

METHODOLOGY

Within the context of our research we defined community capacity as the degree to which a community (and its agency partners) can develop, implement, and sustain actions for strengthening community health. In our case, agency refers to staff working with the heart project in the health region. We designed a process to assess the extent of community capacity built and to further understand how each of the targeted communities and the agency worked together to realize changes for sustainable heart health. Prior to establishing the evaluation protocol, we identified characteristics that make a community effective in taking action. Following from this, a list of elements was refined to seven community capacity domains: vision, experience of community, resources, knowledge and skill, participation, leadership, and critical learning (Baugh Littlejohns, Smith, & Thompson, 1999). These domains are defined in the results section of this article.

We chose a focus group methodology for data collection as we wanted to engage community members and project staff in an interactive and iterative process to capture the broad community effects of the heart project (Baker & Teaser-Polk, 1998; Eng & Parker, 1994; Goeppinger & Baglioni, 1985; Hawe, 1994). Four focus groups (two in each community cluster) were held with participants from the various sectors that partnered with the heart project, including agricultural societies, women's institutes, family and community support service agencies, and seniors' groups. Health professionals and individual project participants were also invited. Each focus group was comprised of six to ten people, which allowed us to comfortably dialogue with members. Eight agency staff — including public health nurses, community facilitators, and a nutritionist — participated in a separate focus group to determine the extent to which they perceived the heart project built community capacity. A facilitator was engaged to conduct the focus groups and a recorder documented the proceedings. All focus groups were audiotaped.

In each focus group the facilitator shared the definition of community capacity and presented the seven domains. A series of questions for each domain were developed to guide the dialogue among focus-group members. These questions were intended to frame the discussion and prompt participants to describe how capacity was built in each domain through the heart project. For example, the following questions (drawn from different domains) were asked: (a)

Was a common vision created for heart health? (b) How did the project fit into the community way of life? (c) How did the project built on existing community resources? (d) Why did people participate in heart activities? and (e) How was leadership for heart health developed in the community? This data was used to identify salient themes for each capacity domain, both individually and collectively, for all communities.

Through a consensus-building process (whereby focus group members reached a collective agreement even though individual opinions differed), members then ranked the extent to which they believed that capacity was built in each domain. They were asked to provide examples from the heart project that explained the rank given. A Likert scale of 0 to 5 was used: a rank of 0 indicated that "no capacity had been built," 3 denoted that capacity was built "to a moderate extent," and 5 meant that capacity "had been built to a great extent."

To visually depict the rankings for each capacity domain we designed an octogram. For practical purposes and further clarification we separated the domain of participation into two components — participation in community-based heart activities and participation in decision making. Thus, seven capacity domains gave rise to an eight-sided figure. A pentagram used by Bjaras, Haglund, and Rifkin (1991) to measure five elements of community participation inspired this octogram. With this tool, we were able to create a "community capacity web" for each focus group. By connecting the numbers assigned to each domain, a web was drawn depicting the sphere or area of community capacity perceived to have been built. This process allowed us to see the differences between focus groups in the extent to which community capacity was considered to be built.

RESULTS

The numerical rankings assigned to the capacity domains for all five focus groups are found in Table 1.

The rankings for each domain have been compiled according to community and agency focus groups. This table is a useful way to organize the data to illustrate variations in the rankings of the capacity domains. For example, the range for critical learning is great (0.5 to 4.0), while the range for resources is narrow (4.0 to 4.5). To comprehend the differences underlying these rankings, it is critical to

analyze the qualitative data. This analysis helped us clarify why focus group members believed that the domains were well-built or not. It showed how people could use similar perceptions to give vastly different rankings, and how vastly different perceptions could be used to justify an identical ranking.

These focus group rankings were used to create the community capacity webs. The webs of two communities and the agency are shown in Figure 1.

From the community capacity webs, it is clear which capacities were perceived by participants to be well-built and which were not. For instance, the web for Community B reveals that focus group members in that community believed the domains of resources, knowledge and skill, leadership, experience of community, and critical learning were built to a greater extent than the domains of vision, participation in activities, and decision making. The web for Community C indicates that the domains of resources, knowledge and skill, and participation in activities were acknowledged as well-built, while vision, leadership, participation in decision making, experience of community, and critical learning were seen to be not as well-built. Findings from the agency focus group indicated that resources, knowledge and skill, and experience of community were perceived to have been built to a greater extent than vision, participation (in activities and decision making), leadership, and critical learning.

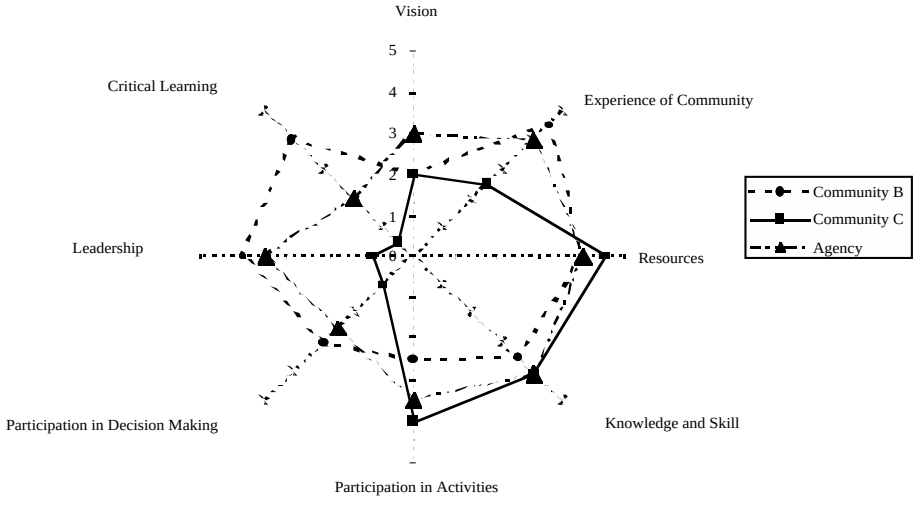
Table 1
Ranking of Community Capacity Domains by Focus Groups

Focus Group	Vision	Experience of Community	Resources	Knowledge and Skill	Participation in Activities	Participation in Decision Making	Leadership	Critical Learning
Community A	4.0	4.0	4.5	5.0	3.5	3.0	1.5	3.5
Community B	2.0	4.5	4.0	3.5	2.5	3.0	4.0	4.0
Community C	2.0	2.5	4.5	4.0	4.0	1.0	1.0	0.5
Community D	3.5	4.0	4.0	4.5	3.5	2.0	4.0	1.0
Agency	3.0	4.0	4.0	4.0	3.5	2.5	3.5	2.0

While these octograms gave us an immediate portrayal of the extent of community capacity built, we had to analyze the descriptive data to determine what these rankings meant. For example, we wanted to know why one focus group (Community D) gave the domain of leadership a rank of 4, and another (Community C) gave it a rank of 1 (see Figure 1). Analysis of the recorded data revealed differences in perceptions held by focus group members and helped us to understand their differing viewpoints.

Here, we present the definition for and the key question asked in ranking each domain in piloting this methodology. Then rankings for the capacity domains, along with selected examples given to substantiate each, are described for community and agency focus groups. To facilitate ease of presentation, we have collapsed the rankings for each domain into three categories, with a ranking of 0–2.0 considered low (capacity was built to a limited extent), 2.1–3.9 being moderate (capacity was built to a moderate extent), and 4.0–5.0 deemed to be high (capacity was built to a great extent).

Figure 1
Community Capacity Webs of Communities B, C, and Agency



Vision

We defined vision as an agreed preferred future that reflects shared goals for a healthy community. It becomes a pathway to the future and a key reference point for planning health strategies. Communities with capacity find strength to act together when they have a shared and compelling picture of a healthier community. The question posed to focus group members was "To what extent was a clear vision created for heart health in the community?"

Focus groups in Communities B and C articulated that no community visioning process for heart health had been facilitated during the project and so ranked vision low. One participant commented, "I don't think we knew what we were going towards, so it was hard to pinpoint what we really needed." The focus group in Community D gave vision a moderate ranking. Participants acknowledged there was a goal of making community members more aware of heart health through the project, particularly with risk screening. Participants felt "this vision was clear for people involved with the project, but fell short for the community." Agency focus-group members ranked vision as moderate; they never actively engaged the targeted communities in an exercise to identify a shared and compelling picture of heart health. However, they felt that communities generally accepted that increased heart health knowledge and behaviour change for individuals constituted the vision.

Focus group members in Community A did not mention a visioning process for heart health; nonetheless, they ranked this domain high. This was based on the fact that they understood they were part of a research project. They felt the community would benefit as a result of this participation. Focus group members suggested that learning about heart health through risk-screening assessment constituted the primary and clear focus of their involvement.

Experience of Community

We defined this as a sense of belonging to, and a shared strong history in, the community. It denotes one's sense of community that is supported by traditions, celebrations, ceremonies, and rituals. These are the ways community members come together to recognize and renew their relationships with one another. We asked the following question for ranking: "To what extent did the heart project fit into the community way of life?"

The focus group in Community C ranked the fit of the project into the community way of life as moderate. Participants thought the project was well integrated into selected community-based activities (e.g., development of a community cookbook and seniors dinners), though they felt young adults were not reached.

Focus groups in Communities A, B, D, and the agency gave the domain of experience of community a high rank. Examples cited were (a) the influence of the project in the initiation of activities like daily walking groups and line dancing at senior group meetings, (b) the integration of project volunteer recognition into community-sponsored events, and (c) the inclusion of heart health information in social activities such as picnics, community dinners, and parade floats. One community focus group member commented that "Any time there is a function, everybody is talking about what is heart healthy." Agency focus-group members stated that they had made a point of getting to know the communities well and facilitated the incorporation of heart health into community-based functions.

Resources

We defined resources as time, money, leadership, volunteers, information, and facilities within the community and the ability to access them outside the community. For ranking purposes we asked, "To what extent did the heart project build on known resources within the community?"

All community focus groups and the agency ranked the extent to which the project built on known community resources as high. Numerous examples were offered to support the high rankings. Community focus-group members perceived that local resources were well acknowledged and utilized in heart health including (a) the number of volunteers, (b) the provision of local facilities, such as schools and community halls, and (c) the donated space in community newsletters. Collaboration with community groups was believed to be effectively fostered as reflected in this comment: "The involvement of local groups, businesses, and government agencies in this project was outstanding. There was strength in partnerships."

Many points were raised by community focus group participants to express their satisfaction with resource sharing between the project and the community. One member responded, "We need to work together for health — we have so few health resources of any kind,

that we have to go outside the community." This domain seemed to be readily understood by focus-group members, with concrete examples shared to support the positive collaboration perceived by all targeted communities and staff in maximizing available community resources.

Knowledge and Skill

We defined knowledge and skill as the attributes, skills, and experiences of community members. The ability of the community to utilize these in effective ways is critical. Community members must develop, enhance, promote, and strengthen skills to take action on health. The question we focused on for ranking was, "To what extent was existing knowledge and skill in the community built upon by the heart project?"

Focus group members in Community B ranked this domain as moderate, because members felt that "if more people had participated in the project, the spread of knowledge and skill would have been greater." They also suggested that local physicians, whose knowledge and skills are well respected, could have been more involved to add credibility to the project.

Focus groups in Communities A, C, D, and the agency ranked this domain high. Focus-group members felt that new knowledge gained through the project strengthened the existing knowledge base of groups and professionals supporting health in the community. They perceived that training local health professionals in blood pressure monitoring, tobacco reduction support, and recipe modification for heart health would sustain knowledge development in their communities. They expressed the view that the understanding of their own communities was utilized in the coordination of risk assessment, workshops, and newspaper articles.

Some focus-group participants observed that the project primarily focused on building new knowledge for individuals to make personal behaviour changes, rather than fostering change at the community level. Comments such as "individuals now know more" and "we came into this with the thought of our own health rather than the health of the community" support this idea. Project staff affirmed that the greatest percentage of activities was directed toward the promotion of knowledge and skills for individuals.

Participation

We defined participation as the right and responsibility of community members to get involved in local decision making. This means there needs to be a fair distribution of power that seeks inclusiveness of all members of the community. Participation also included the notion of the presence of many associations and groups in a community, and the subsequent involvement in voluntary organizations, mutual support groups, and social movements are evident. For practical reasons we divided the domain of community participation into two parts for discussion. The first part was participation in activities, where we asked this question for ranking: "To what extent did community members participate in community-based heart activities?" The second part was participation in decision making, and the question asked for ranking was, "To what extent was the community involved in decision making about heart health activities?"

Members of focus groups in Community A, B, D, and the agency ranked participation in activities as moderate; they noted the lack of involvement of younger adults and suggested that participation was selective and repetitive, with the same people attending multiple events. Another perception offered by a community focus-group member was that "Those who were already healthy and informed were the primary attendees of events." Members in the focus group in Community A indicated they participated because "It was a research project and we do not often get this opportunity." Focus-group members here also explained that for the first two years of the project they thought people participated because they were interested, and events were stimulating; however, they believed participation waned in the last two years because people had nothing more to learn personally. This was a comment shared by some of the local citizenry.

In Community C, focus-group members believed that participation in heart health activities was comparable to that of other community-based events, which they said is extensive, and accordingly ranked this domain high.

All focus groups (community and agency) indicated there was good representation in this project of community-based organizations, for example agricultural societies, family and community support service agencies, seniors groups, and firefighters. Project staff created many linkages with these groups in the provision of heart health education and risk screening.

With respect to participation in decision making, focus-group members in Communities C and D ranked it low. They felt that the decision making for the project was in the hands of project staff, not the community. One focus-group participant indicated, "As far as our decision making in the project — decisions were already made by staff," and another stated, "We received a lot of direction from project staff."

Communities A and B ranked this domain as moderate. They believed that the community and project did share in some decision making, particularly in the last year of the project. Focus-group participants in Community B compared themselves to children who were now mature and were given more responsibility in the last year. Even though they indicated decision making was conjoint in the final year, they explained, "In decision making only a few were instrumental, because there was a very small group of community people involved."

Participants of the agency focus group also ranked this domain as moderate. They agreed that few opportunities were implemented to increase community participation in decision making. Staff offered, "We didn't involve the community directly in all decisions affecting the project. This was not a community development project … we were trying to mobilize people." One staff member suggested that "We created opportunities for discussion and we listened, but the overall balance of power rested with the project."

Leadership

We defined leadership as something that is dynamic and responsive, which is demonstrated through individuals and groups who recognize that all community members need to be heard and who acknowledge community and individual achievements. The development and recruitment of new community leaders is valued. Leaders facilitate networks of people to maximize community resources. Focus-group members were asked to rank this question: "To what extent did the heart project build on existing leadership in the community?"

Focus groups in Communities A and C ranked this domain low. Focus-group participants believed that the leadership came from the project and not from within the community. Focus-group members in Community C were quite comfortable with a low ranking, as they

thought leadership should come from project staff with the knowledge and time to lead. Focus-group participants, themselves, did not want the responsibility of community leadership for heart health, and suggested that people would be more interested in participating if activities were organized by health professionals, rather than local community members. When asked who the heart health leaders in the community were, members of Community A named the Agricultural Society and Women's Institute, indicating the presence of community leadership. Neither Community A nor C focus groups perceived that new leaders came forward in the community through the heart project.

Agency focus-group members ranked leadership as moderate; they, too, felt leadership rested with the project. Agency focus-group participants suggested that communities had been loyal to the program coordinator during the first three years of the heart project, and constantly checked with her for direction rather than relying on their own leadership. One staff member commented, "The project did not build a good foundation in terms of recognizing existing community leadership and building it to sustain activities." Another staff member suggested that "We were good at facilitating task leadership, but we did not develop leadership in community planning."

Focus-group participants in Communities B and D ranked leadership high. This rank was supported in that these two focus groups felt the community provided leadership and that the project would not have accomplished its goals without it. Particularly in the last year of the project, they felt leadership was increasingly shared with agency staff as affirmed by the following quote: "This year we took more responsibility for it [the project] … we felt a little overwhelmed at first." They did qualify that this leadership was limited to the Family and Community Support Service agency in their communities. Participants in Community D also felt they had gained the confidence to advocate for change within their community to support heart health — "We now have the backbone to say 'no smoking' at community suppers."

Critical Learning

We defined critical learning as a process to reflect on what is happening in a project or community in order to enhance the community's ability to analyze and understand its circumstances. Lessons from the past are valued in order for successes to be repeated and

failures avoided. Effective community learning is participatory and builds confidence in the learner. To rank critical learning, we asked, "To what extent did you feel there were opportunities to talk about how well the project was going in the community?"

Focus-group members in Communities C and D ranked this domain low. To explain this ranking, members revealed that they had seen few opportunities to critically assess how the project was going in the community. One participant stated, "As for community round-table discussions, we really did not do very much." Reasons cited were that the agency did not facilitate critical learning and the community thought it did not have the knowledge or resources to complete such a task. Members in Community D indicated their Family and Community Support Service agency was periodically involved in critical assessment of the heart project. Focus-group participants acknowledged they briefly discussed the effects of the project and expressed, "what we did learn we are carrying out at home." This comment suggests that the learning from the heart project was more individual than collective.

The agency focus group also ranked this domain low, based on the fact that staff had implemented few processes to address critical learning. One meeting was held with stakeholders after the first year to reflect and plan for the next year. For the staff group, there were ample opportunities to critically reflect on the progress of the project, but there were few occasions designated for shared reflection with the communities.

The focus group in Community A ranked critical reflection as moderate. Members indicated they had discussed individual health changes as a result of the project and had participated in the provincial evaluation. Focus-group members in Community B ranked this domain high. Even though members commented that few people participated in the annual evaluation of the heart project, they felt there were many informal opportunities to discuss the project in the community. They pointed out that they participated to a much greater extent in reflecting on community-based heart activities and lessons learned in the fourth year. Because of their heightened involvement in critical learning in the final year, they ranked this domain high. One focus-group member commented, "We took away the good ideas to apply to future activities."

DISCUSSION

Through piloting this methodology to assess the extent to which community capacity was built in a rural heart project, we observed both strengths and limitations. We want to discuss four key points regarding these parameters. These are (1) the focus group methodology, (2) the community capacity domains, (3) the practice setting, and (4) the validity or soundness of our research.

Focus-Group Methodology

This methodology provided a framework for focused dialogue about the heart project and its effect on the capacity domains. The environment was relaxed, friendly, and open since focus-group members knew us through their participation in the project. We developed a set of guiding questions specific to the heart project and the targeted communities; however, these questions can be tailored to any health-promotion initiative and community. The difficulty we experienced was that participants wanted at first to answer the questions with their personal experiences rather than with what they felt happened at the community level. Thus, we had to guide discussion to capture the changes at the broad community level.

We anticipate that this process could be used in a variety of settings with different community groups to assess either capacity that is built as a result of a health-promotion initiative or capacity that is currently present in a community. We caution not to confuse these purposes by mixing questions about "what now exists" in the community with questions on "what was built." The questions we asked prompted telling discussion on how the heart project built capacity in each capacity domain, and clear evidence was presented in distinguishing the role of the community and agency in building capacity.

We recognize that the descriptive and explanatory qualitative data was of greatest importance to our research; however, the ranking exercise added merit to the process. Our experience paralleled that of Bopp (1994) who stated that "the value of the ranking exercise [was] not so much in the actual numbers assigned … Rather, the process of insiders and outside helpers being forced to agree on numerical values that ranked the various degrees and subtle dimensions of development partnerships proved to be revealing. The consensus-building process, particularly when differences of perspec-

tives arose, served to heighten everyone's awareness" (p. 39). After the ranking procedure, we were able to create community capacity webs, which gave focus-group members a sense of closure to the discussion and allowed us to show the communities how much capacity was caught in their web.

Community Capacity Domains

We found that focus group participants easily understood our definitions of the seven community capacity domains in the context of the heart project. We propose the seven domains presented here as noteworthy (though not exhaustive) as an initial reference point to structure an assessment of community capacity. The exact meaning of each domain, however, is likely to vary from community to community based on the unique experiences and circumstances of each. In retrospect, we should have involved community members in the identification, definition, and values associated with the domains of community capacity to ensure that these were most meaningful.

Practice Setting

This methodology is ideally based on the values and assumptions inherent in community-based action research. Stringer (1996) indicates that such research would involve extensive community participation in deciding (a) how, when, and where to assess its capacities in a systematic way, (b) how to interpret the findings, (c) what additional learning needs or changes are indicated by the findings, and particularly (d) how to best take action in response to research findings. We did not incorporate these principles from the inception of the heart project; thus, we have not piloted the process under ideal conditions.

In the future, we will subscribe to the "Ten Commandments" of community-based research proclaimed by Brown (1997). In particular, we will define and design the research framework in consultation with the community; we will analyze the community data with community input; we will involve the community in the compilation of the research findings; and we will include community members to assist with the research.

Validity

We suggest that validity as it is commonly understood in positivist research may not be a fully appropriate criterion by which to judge this type of qualitative or interpretivist research. We concur with Lincoln and Guba (1985), Creswell (1998), Mays and Pope (1996), and Lin (1998) that alternate constructs are more fitting for assessing the soundness of this type of research. Lincoln and Guba (1985) propose four such constructs — credibility, transferability (or generalizability), dependability, and confirmability.

Credibility is established through a comprehensive and accurate description process (this is commonly referred to as "thick description"). We provided an in-depth characterization of our data results in an attempt to clarify their meaning and facilitate understanding.

Transferability or *generalizability* is the application of one set of learning to another context. We believe that this methodology has application to other settings (e.g., communities, organizations) where one wants to ascertain the presence of or the extent to which capacity is built. Triangulation of data from different sources is another strategy used to strengthen the generalizability of qualitative research findings. We could have asked the same questions in the community and with the agency about community capacity using other methods (e.g., stakeholder interview, citizen survey) to corroborate our focus-group data.

Dependability accounts for changing conditions in the phenomenon chosen for study, as well as for changes in the design created by an increasingly refined understanding of the setting. We did not design this research to replicate the same results among communities; it was intended to refine our understanding of and insight into how the heart project built capacity in each community. We believe the tool is dependable in that it concentrates on the intricacies and complexities for each community in the same way, rather than standardizing scores for comparison.

Confirmability relates to whether the data help confirm general findings and lead to implications. Since there were recurrent themes in our data analysis, we feel this corroborates a degree of relevancy for the domains in assessing the extent to which community capacity was built.

CONCLUSION

We have presented our research methodology and findings here in a spirit of learning. We recognize that further study is needed from a theoretical base to establish credibility and to refine the process. We believe that these tools should have several practical applications in health promotion for (a) preparing funding proposals for projects where the identification of a community's ability to take action is requested, (b) determining a community's assets and challenges to plan and implement strategies as desired; and (c) evaluating the extent to which strategies are building community capacity.

We also believe that a capacity-building approach produces more effective and sustainable community action in health promotion. Therefore, we suggest that capacity could be used as a proxy measure for evaluation purposes in determining the health of a community (Smith, Baugh Littlejohns, & Thompson, in press). The methodology described here with its unique focus on the relationship of the community and agency allows us to see how the community capacity web is spun in developing, implementing, and sustaining action for community health.

NOTE

1 The members of the Alberta Heart Health Team are Dr. Ruth Collins-Nakai, Dr. Ronald J. Dyck, Dr. Rudy Dressendorfer, W. Keith McLaughlin, and Dr. Don Schopflocher.

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