Using Q Methodology to Facilitate Relational Connectedness within the CURA

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1. INTRODUCTION

Community and university members from around the world recognize the importance of collaborating to systematically examine complex issues affecting the well-being of individuals and communities. To attend to issues of mutual concern, configured through a research alliance, the negotiation and sustainment of an authentic partnership is critical. While simultaneously addressing research objectives, alliance members engage in multiple relational processes to support their partnership. Such processes include, but are not limited to, establishing connections, negotiating parameters, sustaining meaningful involvement, engendering trust, mobilizing expertise and resources, and building capacity (Abdulrahim, Shareef, Alameddine, Afifi, and Hammad, 2010; Baiardi, Bruch, and Lapides, 2010; Janzen, Ochocka, Jacobson, Maiter, Simich, Westhues, and Fleras 2010; Mayo, Tsey, and Empowerment Research Team, 2009; McWilliam, Desai, and Greig 1997; Trotman, Reid, and Vianna, 2001). The uniqueness of each partnership is not only shaped by its research agenda, but also its internal dynamics situated within a specific geographical, social, economic and political context. Thereby, no singular approach can be prescribed to initiate, develop, maintain, and bring closure to community university partnerships. At best, the literature highlights the central need to anticipate and address relational components of partnering in an effort to support the research enterprise. The intentional orchestration of multiple interactional strategies within a community university partnership supports productivity, knowledge creation, dissemination, and perhaps most importantly, the meaningfulness of involvement (Brodskey 2001, p.334).

2. BACKGROUND

The development of community-university partnerships, as a forum for participatory action research, has received increasing prominence in the social, physical and health sciences to address complex human problems (Craps, Dewulf, Mancero, Santos, and Bouwen, 2004; Therrien, 2008; Williams, Labonte, Randall, and Muhajarine, 2005). Formal alliances between community and academia groups emerged partially in response to the shortcoming of conventional methods of inquiry, which have often failed to involve key stakeholders and generate actionable knowledge relative to a shared social agenda (Abelson et.al. 2004; D’Alonzo, 2010; Israel, Schulz, Parker, and Becker 1998; Therrien, 2008). The coming together of community and academic citizens in a formalized research alliance has the potential to mobilize the breadth of existing resources to support inquiry enriched by diverse expertise. Community university partners formally engaged in mutual inquiry, share responsibility for the outcomes of the partnership through active collaboration and the sharing of intellectual and material resources (Ansarei, Phillips, and Hammick, 2001; Baiardi et al. 2010). Collective ownership for the process and outcomes of a shared research initiative has the potential to generate meaningful knowledge to positively guide community change in response to complex issues (Chataway 1997; Craps et al. 2004). Daley and colleagues (2010) described their mindful efforts to craft an egalitarian community-university research partner-

1The authors acknowledge the openness of community members and academics who participated in the Q activity as a support in the development of their relational connectedness. Laura Killam contributed to statistical data analysis using PQ program.
ship, characterized by shared power and decision-making throughout all aspects of the research process. They found that eradicating the asymmetrical relationship between and among partners was conducive to generating knowledge and commitment to action for mutual benefit to all partners and the community at large.

Within the literature are illustrations of the time, effort and processes undertaken by some authors in the construction of their unique community university partnerships. Hillier and Koppisch's (2005), for example, described the successes and challenges involved in the development of an alliance between housing activists and university researchers to address housing for the poorest of Philadelphians. The partnership was initiated when the groups convened relative to a common purpose. Working together, however, revealed ideological and power differentials that unaddressed, could threaten the success of the partnership. For example, divisiveness arose relative to understanding of research roles and responsibilities, styles of work efficiency, means and frequency of communication, meeting structure and frequency, and dissemination tactics. These authors suggest that anticipation and successful resolution of such issues has the potential to mediate divisiveness and facilitate sustainability within complex alliances. Inherent in the tenure of a community university research partnership is the necessity for all members to constantly balance personal needs and agendas with that of the larger alliance to mediate divisiveness (Chataway 1997). Other authors have echoed the salience of attending to the relational aspects of a research enterprise not only for its sustainability, but also to actualize its purpose (Hillier and Koppisch 2005; Mayo et al. 2009; McWilliam et al. 1997; Naylor, Wharf-Higgins, Blair, Green, and O'Connor 2002; Trotman et al. 2001; Williams et al. 2005).

Currie, King, Rosenbaum, Law, Kerto, and Specht (2005) developed a comprehensive impact model that focuses on the function of community university research partnership. Primarily, this is an outcome model, which does not allow for formative evaluation of the partnership during the early stages. To this end, these authors emphasize the importance of facilitator's ability to enable and support others by encouraging engagement, understanding, and engendering shared control for instigating changes. The model does identify the importance of developing and sustaining rapport and cooperative relationships over time. Although the model does not provide guidance on how to structure and operate within the partnership, select elements can, however, be used to understand partner activities from a systems perspective. More specifically, partners are constantly interacting with the broader context of which they must be aware.

King and associates (2010) examined five community-university research partnerships and described their common feature. These included: defining characteristics such as priorities and scope; ways of operating such as type and frequency of communications; outputs such as information; accessibility of generated information; and short- and long-term impacts such as uptake of knowledge to address real-world issues through personal, community and organizational development. They found that partnerships most committed to affecting community change demonstrated efficacious internal and external interactions. Those alliances most focused on traditional research productivity, however, did not demonstrate the same attentiveness to relational connectedness as a defining feature of their partnership. These authors identified the need to reveal the salient features of a given community university research alliance.

3. Q Methodology

3.1 Historical Application: Supporting a Research Mandate

In the mid-1930s, William Stephenson, a physicist and psychologist, proposed Q Methodology as an alternative form of factor analysis that allowed for correlations between persons instead of test scores (Stephenson 1935, 1936). This revolutionary development was aimed at operationalizing subjectivity (Brown 1993; Stephenson 1935). Stephenson proposed, "all subjectivity is transformable to operant factor structure, affording a new approach to knowledge, particularly to that deriving from everyday experience" (Stephenson 1980, p. 882). His early methodological claims generated much debate and controversy in academic communities. Since the 1970s, however, Q Methodology has gained wide international recognition. In 2008, Stephen Brown, a professor of political science and prolific writer regarding Q Methodology, provided a comprehensive bibliography of publications addressing the underpinnings and application of Q Methodology for knowledge generation. This bibliography demonstrates the use of Q Methodology in the research of the multiple phenomenon of relevance to many disciplines. Q Methodology has gained wide popularity as a mixed method approach that enables individuals to express their attitudes, opinions, perspectives and preferences relative to a topic of inquiry, not preconceived by, but made understandable to the researcher (Brown 1996; Dziopa and Ahern 2011; Watts and Stenner 2005). Further, Watts, and Stenner (2005) noted the value of Q Methodology in the exploration of highly complex and socially contested concepts and subject matters from the point of view of the group... it can show us the particular combinations or configurations of themes which are preferred by the participant group [p. 70].
There is a plethora of peer-reviewed literature as well as an electronic site that provides guidance to researchers regarding the application of Q Methodology as a research method. A description of the intricacies of its use as a research method is beyond the scope of this chapter. Not as common are reports presenting non-research applications of Q Methodology (Pruslow and Owl 2012). The subsequent section of this chapter details a novel application of Q methodology to enable engagement between members of a CURA.

3.2 Novel Application: Supporting Relational Connectedness

In part, the effectiveness of a community university partnership evolves through dynamic collaborations among members committed to a shared focus (Montoya and Kent 2011). Q Methodology can be applied within a partnership to promote equity and active engagement between members. Convening members are invited to formulate and communicate their unique perspectives regarding an everyday topic of interest to the entire partnership. Woods (2011) identified that within any group, there is variation in member’s individual subjectivity regarding the phenomenon of interest. This variation, however, is not infinite. The finite number of “patterns” in ways of perceiving the world (Woods 2011, p. 323) within the partnership can be revealed through Q Methodology. Q Methodology, as a planned activity, is therefore effectual in promoting engagement. This occurs through the identification of common and contrasting viewpoints held by individual members in order to capture the shared subjectivities unique to the community-university partnership.

Power differentials within a partnership can exist based on or evolve from diverse perspectives and competing agendas held by its membership. This disparity may threaten connections within a partnership by marginalizing some members and blurring expectations (Baiaardi et al. 2010; Montoya and Kent 2011). Those partnerships most likely to be sustained over time function in an open milieu, and build upon mutually beneficial goals to decrease power differentials. Q Methodology allows academic partner to fulfill their obligation to seek not only mainstream, but also marginalized viewpoints (De Graaf and Van Exel 2008). Q Methodology is therefore conducive to minimizing power imbalances, which may silence marginalized voices. This occurs through its inclusive nature, inviting diverse member expertise, preferences, and perceptions (Stephenson 1953). Each member has an equitable voice in contributing to the grouped and prioritized perspectives that constitute collective subjectivity, which may guide progression within the CURA project.

Q Methodology is a flexible and time efficient approach that can be used to make meaning of individual experiences (Brown 1993; Woolley, Hyman, and Graunke 2004). Although it has been established as a rigorous research methodology, it is congruent with the principles of inclusivity and diversity, critical to the development of effective alliances. In concrete terms, Q Methodology requires nothing more from participants than the communication of their point of view. Responses are prompted by participants’ consideration of their opinions, views, and thoughts on a topic, and are therefore meaningful because they are saying something about their personal experiences. Group discussions associated with the Q Methodology preserves the participant’s frame of reference. Such discussion are typically populated by participant remarks as, “It seems to me...” Or “In my opinion...” (McKeown and Thomas 1988, p. 12). Q Methodology offers an approach to engage participants in a non-threatening manner through invitation, to express their impressions about the world, about them that can be quite unique relative to other participants and apart from the researcher (McKeown and Thomas 1988). Q discussion allows individuals to determine their fit within the group. The more specific discussion allows partners to determine how their expressed viewpoints most align or do not align with the multiple perspectives generated by the partnership as a whole. Examination of the paper-based Q documents informed by the Q discussion allows for formal identification of convergent and divergent subjectivities expressed as viewpoints among participants that indicate mutual priorities for inquiry.

Over a decade ago, Denner, Cooper, Lopez, and Dunbar (1999) recognized the importance of investing time and effort into the development of a strong university partnership with non-academic organizations to bridge the gap between research, practice and policy for youth. As a result, they generated eleven guidelines to assist others in the development of comparable alliances. The early phases of partnership development require open communication to connect with others, share ideas and knowledge, listen for commonalities, question for clarity, respect diversity, learn about self and others, and negotiate priorities. The structured application of Q Methodology allows for the relational processes described by Denner et al. (1999) to be intentionally enacted by creating a forum for connecting, sharing, listening, questioning, respecting, learning and negotiating. Through Q Methodology, individual members, including the researchers are actively invited to share their personal impressions regarding the topic of interest. As impressions are expressed, patterns of viewpoints within the group are not only revealed but welcome and regarded. This allows members to come to know each other within the context of a burgeoning partnership. Successful application of Q Methodology allows each member “to represent his or her vantage point for purposes of holding it constant for inspection and comparison” (Brown 1998, Para 26).
3.3 Application: Supporting Relational Connectedness in a CURA

The relational connectedness between community and academic members within the CURA project, presented in Chapter One, was considered essential relative to addressing the complex intersection of poverty, homelessness and migration. To support relational connectedness, at the project’s first annual conference, one activity undertaken by the membership was participation in a planned activity based on Q Methodology. This conference, hosted by a northern community, was attended by 36 CURA members from at least nine of the 11 communities. The activity led by one of the CURA academic members, unfolded through the following five stages: representing expressed subjectivity; refining the phenomenon of interest; inviting individual perspectives; connecting for understanding; and interpreting grouped perspectives.

3.3.1 Stage I: Representing Expressed Subjectivity—Concourse

Based on a review of the documented dialogue that occurred between community members and academics during the first year of the CURA project, a set of preliminary statements about poverty, homelessness and migration was created. The core question that guided the creation of statements was “What did CURA members identify as pressing health, social, political, and economic issues facing persons living in northern and rural communities?” As a result, 157 naturalistically-derived statements, referred to as the concourse, represented the partnership’s communicated subjectivity (Ernst 2011). By extracting the members’ expressed concerns, views and opinions, the attribution of statement meaning was increased (McKeown and Thomas 1988). Of the listed statements, no attempt was made to alter expressed views, prioritize statements, or judge their merit. The concourse simply represented as many topical viewpoints as possible.

3.3.2 Stage II: Refining the Phenomenon of Interest—Q set

The objective of this stage was to organize and present a parsimonious rendering of the concourse (Stephenson 1993). To achieve this goal, a subgroup of community and academic members combined statements that expressed similar ideas, removed duplicated statements and if necessary, edited statements for clarity. Their efforts generated a condensed set of 36 statements, known as the Q set. A cohort of the project’s CURA Advisory Committee was then asked to review these statements to ensure descriptive accuracy. On the basis of their feedback, four statements were collapsed into other statements by clarifying wording. In the end, the final Q set of 32 statements offered a ‘broad representation’ of expressed issues (Watts and Stenner 2005). Each statement was randomly assigned a number from 1 to 32. Then, each statement was printed on a separate two-by-two inch card with its assigned number identified on the back of the card.

3.3.3 Stage III: Inviting Individual Perspectives—Q sort

In order to facilitate CURA members’ expression of their subjective perceptions about the priorities for poverty, homelessness and migration in their community, at the project’s first annual conference, they were invited to participate in the ranking of the Q set, known as Q sorting. Each attendee was provided with a package that contained a pencil, a written instruction and information sheet, the 32 statement cards, and a blank Q template. The Q template (Figure 2.1), contained 32 two-by-two inch spaces arranged as an inverted pyramid with two endpoints labelled as Strongly Disagree (-4) on the left and Strongly Agree (+4) on the right.

Following an introduction to the activity by the lead academic, attendees were guided through the Q sorting process. This began with reading the prompt “What are the priorities in your community?” Guided by this prompt, members were then asked to read and initially sort each of the 32 statement cards into one of three piles: Disagree, Neutral, and Agree (Watts and Stenner 2005). Next, they were asked to select a statement from the Agree pile that they considered to be the highest priority in their community. This statement card was placed in the far right column on the Template. Attendees were then directed to undertake the same process for items in their Disagree pile. This back and forth process of sorting cards from attendees’ Disagree and Agree piles, finalizing with sorting the cards in the Neutral pile. This alternating process enabled the attendees to make choices about priorities, reconsider their prioritization of the statement cards, and make changes as they processed through the activity (McKeown and Thomas 1988; Watts and Stenner 2005). Once all the cards were placed on the Q template, the attendees were asked to review their rankings one last time, to ensure that their views were accurately represented (Shine Bourne 2009). Confident in their rankings, attendees were asked to record the number on the back of each statement card into the corresponding box on the Q template. Participation in this stage of the Q activity allowed attendees to become aware of their ‘internal frame of reference’, formulate their unique subjectivity relative to poverty, housing and migration, and communicate their perspectives in writing. This stage was completed in a timely manner of less than 30 minutes.
3.3.4 Stage IV: Connecting for Early Understanding—Q Discussion

The objective of this stage, which immediately followed the completion of Q sorts, was to promote open dialogue about the presence of and rationale for existent perspectives (Gallagher and Porock 2010). To create an egalitarian milieu conducive to open dialogue, the lead academic prefaced the Q discussion with an acknowledgement that within any group, variability in individual perspectives was not only expected but welcomed. Participation by all was invited to foster member inclusivity and promote a more comprehensive understanding of priorities within the partnership. What followed was an initial discussion among attendees concerning their rankings of individual statement cards. By recording the discussion on a large easel, the CURA project academic was able to present a preliminary picture of the diverse priorities within the group for all to see. This conceptualization stimulated richer discussion revealing the attendees’ beliefs, values and meanings of poverty, homelessness and migration. This vibrant connectedness fostered understanding through expression of shared subjectivities. At the conclusion of the activity, attendees were invited to submit their anonymized Q templates to the lead academic so that the priorities within the partnership could be further examined.

3.3.5 Stage V: Interpreting Grouped Viewpoints—Q Analysis

This stage was undertaken by the academic subsequent to the project’s first annual conference. The 26 Q templates received were subjected to Q analysis using PQ Method 2.11 (Schmolck, 2002). The intent of this stage was to locate factors that represented the shared viewpoint of a subgroup of the whole, or, in Q terminology, a category of operant subjectivity (Brown 1993). Factor analysis revealed three cohorts of individuals within the partnership, each of which held a discrete viewpoint regarding the priorities necessary to address poverty, homelessness and migration. The viewpoints were labelled as follows: Minimizing Migration, Building a Sustainable Community, and Providing Timely Health and Housing Resources.

The discrete viewpoint, Minimizing Migration, was comprised of similar rankings for 13 of the 32 Q set statements (Figure 2.2).

This viewpoint represented the need to secure a respectful and safe place for Aboriginal peoples to remain within their desired community. The priority need was to respond to emergency housing situations free of oppressive racism and guided by Aboriginal leadership. Four statements, related to strengthening access and resourcing of services, received a neutral ranking. Economic development and financial supplements were
ranked as of lesser importance than involvement of women in the structuring of services. Opportunities to participate in cultural practices and leave shelter services were also less threatening to out migration in comparison to inadequate crisis services. An exclusive focus on policies and programs to comprehensively address poverty was perceived as the least important priority in minimizing migration among the cohort of partnership members that shared this viewpoint.

The second viewpoint, *Building Sustainable Community*, focused on the importance of a community’s structure as opposed to an emphasis on service provision. It was comprised of 18 Q set statements (Figure 2.3).

The important structural elements of a building a sustainable community included Aboriginal leadership, access to health services, retention of families and education of service providers. Other features sustainability included the need for programs and policies to address poverty, transitional support for the most vulnerable, economic development and engagement in traditional practices. The two neutrally ranked statements within this viewpoint referred to the need for increased knowledge about the community’s status and social integration practices. The three statements of least importance represented the need to increase the efficiency of health and social services. Other statements ranked as least important included proximity to services, preservation of language, secure housing, and social justice.

The third viewpoint, labelled, *Providing Timely Health and Housing Resources*, was composed of 16 distinguishing Q set statements (Figure 2.4). The group who shared this viewpoint perceived early access to an increased range of transitional service options within a context of cultural safety as most important.

With a range of community supports, individuals would have the opportunity to exercise self-determination to address their immediate needs. The immediate needs extended beyond economic and housing security to include a broader emphasis on a network of resources to support overall wellness. The most highly ranked statements were early entry and exit from housing and health services. Members who held this viewpoint also perceived the importance of readily available assistance during crisis. The three neutral statements represented a proactive system level response to address racism, poverty, and economic development. Less negatively ranked statements involved long-term resource development within communities through housing supplements, progressive policy, education, and authentic leadership. Those statements which were considered to be the less urgent related to the financial upkeep of housing and participation in cultural practices.
### Figure 2.3
Discrete viewpoint—Building a sustainable community

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Moderately Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Moderately Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<tbody>
<tr>
<td>-4</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Increased capacity within emergency shelters</td>
<td>Affordable housing</td>
<td>Supplements to reduce the cost of rent, heating or electricity</td>
<td>Integration of poor people</td>
<td>Economic development</td>
<td>Programs and policies that reflect different meanings of poverty</td>
<td>Access to a range of addiction services</td>
<td>Concrete strategies for Aboriginal peoples to take leadership positions</td>
<td>Incentives for retaining young families in the community</td>
</tr>
<tr>
<td>Access to mental health services</td>
<td>Access to translation services</td>
<td>Action strategies to address racism</td>
<td>Specific information about the community to complement decision making</td>
<td>Opportunities to participate in traditional practices and lifestyles</td>
<td>Incentives to leave shelter services</td>
<td>Incentives for retaining young families in the community</td>
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<td>Stable funding for social services</td>
<td>Health services that results in fewer moves and less travel</td>
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### Figure 2.4
Discrete viewpoint—Providing timely health and housing services

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Moderately Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Moderately Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
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<td>-4</td>
<td>-3</td>
<td>-2</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Affordable housing</td>
<td>Funding for renovating homes or rental housing</td>
<td>Increased training and resources for service providers</td>
<td>Progressive housing policies that suit local needs</td>
<td>Action strategies to address racism</td>
<td>Support services to help with ‘culture shock’ linked to migration</td>
<td>Incentives to leave shelter services</td>
<td>Having access to a range of housing options</td>
<td>Access to mental health services</td>
</tr>
<tr>
<td>Opportunities to participate in traditional practices and lifestyles</td>
<td>Work training available in the community</td>
<td>Concrete strategies for Aboriginal peoples to take leadership positions</td>
<td>Programs and policies that reflect different meanings of poverty</td>
<td>Increased capacity within emergency shelters</td>
<td></td>
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<tr>
<td>Supplements to reduce the cost of rent, heating or electricity</td>
<td>Economic development</td>
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3.3.6 Stage VI: Connecting for Further Action

The three discrete viewpoints were presented to CURA members at the project's second annual conference. Those members who were present concurred that their voices were captured in the shared viewpoints. In discussion, members identified that the meaningful incorporation of cultural values and First Nations' ways of knowing in service delivery was important, however, not an urgent need to be addressed by the current CURA project. Cultural safety in service delivery, a complex phenomenon, was described as best achieved through cooperative efforts over time. The members indicated that local education and environmental housing were of utmost urgency to build capacity and retain people where they want to reside. Overall, Q Methodology was successful in fortifying relational connectedness among CURA members. Such connectedness assisted in the identification of three diverse perspectives in a collaborative manner. In addition, it affirmed the shared commitment to build culturally informed knowledge in an effort to extend life beyond day-to-day survival.

In summary, the novel application of Q Methodology in the CURA project focused on poverty, homelessness, and migration had demonstrated efficacy in developing the relational connectedness necessary to strengthening the evolving partnership. In the midst of initial cultural and power differentials within the alliance, Q Methodology helped to structure open dialogue about priorities, allowing acknowledgment of both similar and contrasting viewpoints. The nature of completing the Q sort neutralizes power differentials in that each participant’s voice is afforded an equal opportunity for expression and inclusion. Each member in the partnership is able to self-determine the extent of their active participation in the Q activity. In this CURA project, active participation ranged from attending the forum, completing the Q-sort paper-based activity, vocalizing personally held viewpoints during post Q-discussions, commenting on the viewpoints of others, consenting to the inclusion of their viewpoint for Q analysis, and participating in follow-up discussion regarding priorities within the alliance. Regardless of the level of active involvement selected by the individuals, Q Methodology was noted to be partner centred, inviting, involving and aligning members to engender relational connectedness. This was particularly salient given the barriers to connectedness imposed by the geographical, social, economic and political parameters of the CURA partnership.

REFERENCES


McKeown, Bruce and Dan Thomas (1988), Q Methodology, Beverly Hills, Sage Publications


