

“Right people, right place, right time”

**Exploring the creation of synergy within the EnRiCH-Québec City
partnership**

By

ELIZABETH GAGNON

A thesis submitted to the Telfer School of Management in conformity with the
requirements for the degree of

Master of Science in Health Systems

UNIVERSITY OF OTTAWA

© Elizabeth Gagnon, Ottawa, Canada, 2014

SUPERVISORY COMMITTEE

Dr. Tracey O'Sullivan, Interdisciplinary School of Health Sciences, University of Ottawa

Dr. Daniel E. Lane, Telfer School of Management, University of Ottawa

ABSTRACT

Many public health and social issues faced by society today are multifaceted and require joint and collaborative efforts through health promotion partnerships. Community-based participatory research (CBPR) is one strategy that consists of engaging community stakeholders from various sectors to pool their expertise and resources in addressing health and social issues holistically. The literature indicates that the effectiveness of partnerships, such as those established within CBPR initiatives, is influenced by collaborative mechanisms that promote the creation of synergy among partners. There is, however, a lack of knowledge with regards to synergy and its key determinants in the context of health promotion partnerships. This qualitative thesis study is conducted as part of The EnRiCH Project, a CBPR initiative conducted in four communities across Canada, which aims at enhancing resilience and preparedness for disasters among high-risk populations. It explores the creation of synergy through the study of dynamics of collaboration shaping the EnRiCH-Québec City partnership and influencing its ability to leverage community resources for emergency preparedness. Emergent themes highlight that optimal collaboration in the EnRiCH-Québec City partnership is about having the “right people, in the right place, at the right time”. These findings provide evidence to inform community stakeholders, researchers and decision-makers on the dynamics of synergy creation and its implications for partnership growth and effectiveness.

TABLE OF CONTENTS

SUPERVISORY COMMITTEE	ii
ABSTRACT	iii
LIST OF TABLES	vi
LIST OF FIGURES	vi
ACKNOWLEDGEMENTS	vii
CHAPTER 1: INTRODUCTION	1
1.1 Background	1
1.2 Research questions and objectives	4
1.3 Thesis overview	5
CHAPTER 2: LITERATURE REVIEW	6
2.1 The health asset approach	6
2.1.1 The theory of salutogenesis	8
2.2 Partnership dynamics	9
2.2.1 Synergy	10
2.2.2 Partnership stages of development	12
2.2.3 Community context	16
2.2.4 Leadership	16
2.2.5 Administration and management	17
2.2.6 Structure	17
2.2.7 Processes	18
2.3 The EnRiCH Project	19
2.3.1 The EnRiCH Project Summary	19
2.4 Preliminary conceptual model	21
2.5 Summary	23
CHAPTER 3: METHODOLOGY	24
3.1 Research design	24
3.2 The EnRiCH Project methodological framework	25
3.2.1 The EnRiCH-Québec City partnership	25

3.2.2 The EnRiCH Community Intervention Protocol in Québec City	27
3.2.3 Data collection of The EnRiCH Community Intervention	31
3.3 Data sources	33
3.4 Study sample	34
3.6 Data analysis and writing	37
3.7 Validity	38
CHAPTER 4: RESULTS	39
4.1 Emergent themes	39
4.1.1 Facilitators to collaboration	39
4.1.2 Barriers to collaboration	52
4.2 Emergent model	56
CHAPTER 5: DISCUSSION	61
5.1 Discussion of results	62
5.2.1 Synergy and partnership development	62
5.2.2 Involvement of the community sector	64
5.2.3 Community readiness	65
5.2.4 The catalytic role of a community outsider	66
CHAPTER 6: CONCLUSION	68
6.1 Contribution to knowledge	68
6.2 Implications for practice	69
6.3 Limitations of the study	70
6.4 Future research	72
6.5 Research questions and objectives revisited	73
BIBLIOGRAPHY	75
Appendix A: Consent form	81
Appendix B: The EnRiCH Interview Guide	84
Appendix C: The EnRiCH Follow-Up Session Protocol	88

LIST OF TABLES

Table 1: Overview of The EnRiCH Community Intervention Protocol in Québec City .	30
Table 2: Data collection timeline of The EnRiCH Community Intervention in Québec City.....	32
Table 3: Participant tracking sheet of the study sample.....	35
Table 4: Participant Demographics.....	36

LIST OF FIGURES

Figure 1: A preliminary model mapping dynamics of collaboration in health promotion partnerships	p.22
Figure 2: Model of dynamics of collaboration influencing synergy creation in the EnRiCH-Québec City partnership	p.60

ACKNOWLEDGEMENTS

First, I would like to thank my supervisors Dr. Tracey O’Sullivan and Dr. Daniel Lane for their continued mentorship and the trust they have placed in my research capabilities throughout the last two years. This journey has been enriching both academically and personally, and I thank you for contributing to this learning opportunity!

I am extremely grateful to have been involved in The EnRiCH Project and I wish to express my sincere appreciation to the Québec City participants who generously shared with me their experiences in working collaboratively to enhance resilience and emergency preparedness among high-risk populations. Merci pour tout et bonne continuation dans vos futurs projets de collaboration!

Thank you also to Nat Leduc for his technical assistance with designing the conceptual model that emerged from the analysis work of this thesis.

I acknowledge the financial support from Telfer School of Management (Excellence Award), the Ontario Government (Ontario Graduate Scholarship) and the Canadian Center for Security Science (CSS) who has funded The EnRiCH Project.

À mes parents, mon frère et mes grands-parents, merci pour votre présence, votre amour et votre soutien tout au long de mon parcours scolaire!

CHAPTER 1: INTRODUCTION

1.1 Background

The Alberta floods, Lac-Mégantic train derailment/explosions, and Typhoon Haiyan are all recent striking examples that have brought attention to the need for comprehensive emergency preparedness initiatives to enhance resilience and capacity for health among individuals and communities. The disruptive character of disasters has shown the potential of these events to reveal and widen health disparities in populations by creating a substantial gap in the ability of people to respond effectively to, and recover from adversity. Emergency preparedness requires upstream efforts to strengthen and promote adaptive capacities of individuals and communities, particularly those living with functional limitations that may increase their risk of experiencing negative impacts during disasters.

Community-based participatory research (CBPR) is a partnership approach to research that seeks to address complex health and social issues, and improve community health (Schulz, Israel & Lantz, 2003; Israel, Schulz, Parker & Becker, 1998, 2001). This approach involves engaging a wide variety of stakeholders, such as community members, organizational representatives and researchers, who contribute their diverse expertise to better understand and take action on health and social concerns (Schulz et al., 2003; Israel et al., 2001, 1998; Sandoval et al., 2012). In line with this, the Federal Emergency Management Agency (FEMA) of the United States Department of Homeland Security proposes a Whole Community approach to emergency management that recognizes and promotes the need to engage collectively to meet the challenges posed by disasters (FEMA, 2012). The Whole Community approach reinforces the idea that emergency management does not fall solely within the remit of national governments, but is the shared responsibility of all levels of governments, non-governmental organizations, the private sector industry, individuals, families and communities (FEMA, 2012).

The key value underpinning a partnership approach is to work together to accomplish collective goals more effectively than any single individual, organization or sector can achieve alone (Lasker, Weiss & Miller, 2001; Weiss, Anderson & Lasker, 2002; Jones & Barry, 2011a, b). This principle refers to the concept of synergy and provides an important indication of effective collaborative functioning within CBPR or Whole Community approach interventions (Weiss et al., 2002; Jones & Barry, 2011a, b; Corwin, Corbin & Mittelmark, 2012). Collaboration is a multifaceted concept and various terms are used to describe this concept, including partnership, coalition, alliance, network and teamwork (Kickbush & Quick, 1998; Corwin, Corbin & Mittelmark, 2012). Wood and Gray (1991) see collaboration as occurring “when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms and structures, to act or decide on issues related to that domain” (p.146). Core components of successful collaboration include trust, interdependence, problem solving and shared decision-making (Canadian Interprofessional Health Collaborative, 2010; Corwin, Corbin & Mittelmark, 2012). While collaboration has been identified as a useful approach for addressing complex societal health issues, very few studies have examined the process through which collaborative functioning leads to synergy, or fails to do so (Jones & Barry, 2011a, b; Weiss et al., 2002). Therefore, the term collaboration as used in this study centers on the concept of synergy and its key determinants.

The Enhancing Resilience and Capacity for Health (EnRiCH) is a research initiative by the Resilience and High-Risk Populations (RHRP) Research Lab located in the Interdisciplinary School of Health Sciences, Faculty of Health Sciences, at the University of Ottawa (RHRP Research Lab, 2013a). It was launched as a community-based participatory research project in January 2010 through a partnership comprised of 13 governmental, non-governmental and academic partners. Over the course of the project, the partnership expanded to include partners in the target communities of Truro, Nova Scotia; Québec City, Québec; Gatineau, Québec; The Region of Waterloo, Ontario; and Calgary, Alberta; as well as across Canada and internationally (O’Sullivan, Corneil, Kuziemy, Lemyre & McCrann, 2013a). Funded by the Canadian Center for Security Sciences (CSS), the first objective of the EnRiCH initiative was to conduct a community-

based participatory intervention in each of the target community to develop new knowledge about how to enhance resilience and preparedness for disasters among high-risk populations (O’Sullivan et al., 2013a). In The EnRiCH Project, high-risk populations refer to people with functional limitations that could be at greater risk of experiencing the negative impacts of disasters.

The EnRiCH-Québec City partnership grew out of The EnRiCH Project community-based intervention that took place in the target community of Québec City between March 2011 and March 2013. The intervention consisted of conducting an asset/need assessment and a collaborative mapping activity to determine strengths, weaknesses, opportunities, and threats (SWOT) to community resilience during disasters, and build awareness about the assets specific to the Québec City community that can contribute to adaptive response in such events (O’Sullivan, Kuziemy, Toal-Sullivan & Corneil, 2012; O’Sullivan et al., 2013). The EnRiCH-Québec City partnership is multi-sectored and includes partners from government (provincial, regional, municipal), community, and university. More specifically, the partnership engages professionals and volunteers from the emergency management sector, health and social services organizations, emergency service organizations, community-based agencies which offer direct care for people living with functional limitations (O’Sullivan et al., 2013).

This qualitative thesis study explores the creation of synergy through an examination of the dynamics of collaboration that have shaped the Québec City partnership throughout The EnRiCH Project community-based participatory intervention. An asset approach is applied to place greater emphasis on aspects of collaboration that enabled the Québec City community group to organize and strengthen their resources to build capability for enhancing emergency preparedness among high-risk populations. The research reported in this document therefore addresses some of the processes of collaboration that are considered to have influenced the success of the EnRiCH-Québec City partnership.

1.2 Research questions and objectives

The overarching purpose of this study is to explore the creation of synergy through the study of dynamics of collaboration within the EnRiCH-Québec City partnership, a community group working towards enhancing resilience and emergency preparedness among high-risk populations.

Specific research questions are as follows:

1. What are the key aspects of synergistic collaboration in partnerships?

Objective: Provide a description of the functional components supporting synergistic collaboration in health-promoting partnerships.

2. How did the Québec City community partners perceive their collaborative experience?

Objective: Use semi-structured interviews and focus group discussions to provide a description of the participants' experiences in collaborating within a multi-sectoral partnership.

3. What is synergy in the EnRiCH-Québec City partnership and how can it help us describe key dynamics of collaboration influencing the activation of assets for emergency preparedness among high-risk populations?

Objective: Provide an inductive analysis and conceptual model of the dynamics of collaboration influencing the creation of synergy within the EnRiCH-Québec City partnership.

1.3 Thesis overview

In the next chapter, a literature review is provided on the theoretical constructs pertaining to partnerships dynamics, including stages of development as well as key aspects of synergistic collaboration. This literature will be first contextualized by the health asset-based approach that sets out the framework to study successful partnership dynamics. Chapter 3 is a description of the methodological approach adopted to conduct this study and outline the measures taken to ensure validity of the data. Emergent themes of the EnRiCH-Québec City partnership case study are found in Chapter 4. Chapter 5 focuses on the discussion of the findings and presents a model to conceptualize synergy creation in the EnRiCH-Québec City partnership. Finally, Chapter 6 concludes the document and offers a critical reflection on the contributions of this research, the practical implications of the findings, limitations of the study, and potential for future research. The bibliography and appendices, which include The EnRiCH Project Consent Form, The EnRiCH Project Interview Guide, and The EnRiCH Follow-Up Session Protocol, can be found at the end of this document.

CHAPTER 2: LITERATURE REVIEW

The three main bodies of literature that inform this research are: (2.1) the health asset approach, which set the perspective for this study; (2.2) partnership dynamics; and (2.3) the documentation that emerged from The EnRiCH Project. The health asset approach focuses on resources for health and emphasizes factors that contribute to optimal system functioning. Thus, it provides a lens to examine the dynamics of collaboration that enabled the EnRiCH-Québec City partnership to organize and catalog community resources successfully in addressing the issue of emergency preparedness among high-risk populations. The second body of literature provides a synthesis of aspects of synergistic collaboration in health promotion partnerships. Throughout the review, links are drawn between these two bodies of literature to highlight how they mutually support each other. In section 2.3 a summary of The EnRiCH Project is presented to describe the intervention framework in which this thesis research takes place. Lastly, major findings from the literature review are summarized in section 2.4 to provide the basis of the analysis that follows.

2.1 The health asset approach

Over the last 30 years, the field of public health has undergone an important philosophical transformation (Eriksson & Lindström, 2008; Lindström & Eriksson, 2005, 2006). A progressive shift has taken place from one dominant and well-established pathogenic paradigm focused on the study of determinants of illness, to another less known and understood health asset approach oriented towards determinants of health (Eriksson & Lindström, 2008; Lindström & Eriksson, 2006; Morgan & Ziglio, 2007). This change of orientation has happened for particular reasons, including the growing and widespread need to fulfill our understanding of what creates health, in order to enhance our capacity to deal with today's most urgent and complex public health problems (Foot & Hopkins, 2010; Foot, 2012; McLean, 2011; Morgan & Ziglio, 2007).

Until now, the public health field has been mainly driven by the pathogenic or deficit-based paradigm (Foot & Hopkins, 2010; Lindström & Eriksson, 2006; McLean, 2011; Morgan & Ziglio, 2007). The adoption of this approach has brought a greater focus towards risk and vulnerability factors that may lead to undesirable health outcomes. Consequently, health related issues have largely been raised and answered in terms of weaknesses, rather than strength factors that buffer against adverse effects of illnesses or life events (Eriksson, 2007; Lindström & Eriksson, 2006; Morgan, Davies & Ziglio, 2010).

The health asset approach provides a framework to study health issues through a more positive set of optics (Foot & Hopkins, 2010; McLean, 2011; Morgan & Ziglio, 2007). With the recent development and acknowledgement of this approach, efforts are made to strike a better balance between the traditional deficit model of health and a strength-based model of health (Morgan & Ziglio, 2007). According to Morgan et al. (2010) health asset is defined as: “Any factor (or resource), which enhances the ability of individuals, groups, communities, populations, social systems and/or institutions to maintain and sustain health and well-being and to help reduce health inequalities” (p.5).

The health asset approach draws on a large number of already existent theories and concepts that place emphasis on resources, as opposed to risks and vulnerabilities, that contribute to optimal health outcomes (Ericksson, 2007; Morgan et al., 2010). The theories of resilience (Barnard, 1994), self-efficacy (Bandura, 1977), social capital (Putnam, 2000), and the ecological system model (Bronfenbrenner, 1979), all feed theoretically and empirically into the health asset approach, to enhance the recognition and credibility of this perspective (Morgan, 2012; Eriksson, 2007). The challenge now lies in linking and reconciling those convergent theories and concepts to develop a unified and systematic answer of what creates health and optimal functioning (Morgan & Ziglio, 2007; Morgan et al., 2010).

To address this need, Morgan et al. (2010) proposed an asset model for public health. The model provides guidance for researchers, practitioners and policy-makers to promote

healthy living in their respective practice. The proposed model consists of three key components to develop asset-oriented thinking and action: theory, application and evaluation. The theory that underlies the practical application and evaluation of the asset-based approach is the theory of *salutogenesis*, coined by the American Israeli sociologist Aaron Antonovsky (1979).

2.1.1 The theory of salutogenesis

The term *salutogenesis* derives from the Greek *salus* (=health) and *genesis* (=origin) (Antonovsky, 1996; Morgan et al., 2010). Accordingly, the term refers to “the origins of health”. The theory is defined through two main constructs: the Sense of Coherence (SOC) and the General Resistance Resources (GRRs).

SOC is an empowering attitude in life that enables individuals to identify and activate their GRRs to strive towards optimal health and well-being (Antonovsky, 1996; Eriksson & Lindström, 2006, 2008; Lindström & Eriksson, 2005, 2006). GRRs are resources that lie within individuals and their external environment, which are effectively used for this purpose. They can include knowledge, social support, genetics, positive thinking, and money (Eriksson & Lindström, 2006; Lindström & Eriksson, 2005, 2006). The stronger the SOC, the greater is the ability of the individual to mobilize its GRRs successfully. A strong sense of coherence comes with the perception that life events are comprehensible, manageable, and meaningful (Eriksson & Lindström, 2006, 2008; Lindström & Eriksson, 2005, 2006). Together, these three components provide the cognitive, instrumental and motivational prerequisites to empower individuals to move in the interest of their health (Eriksson, 2007).

SOC was originally treated as an individual trait and most of the literature on the topic maintains this traditional understanding of the concept (Graeser, 2011). However, Antonovsky also identified the opportunity to explore the collective meaning of the SOC through the phenomenon of family adaptation and health (Antonovsky & Sourani, 1988; Mosley-Hänninen, 2009). This research demonstrated that a strong SOC, shared by family members, was predictive of successful adaptation toward conflicts posed by

family stressors. This has allowed the concept to gain a new dimension as it was explored as a shared attribute and not solely as an individual characteristic. Consequently, it opened the possibility to assign a *salutogenic* character to systems (rather than only to individuals) by placing emphasis on the collective ability to activate GRRs to address health and social issues (Antonovsky & Sourani, 1988; Graeser, 2011; Mosley-Hänninen, 2009).

Community-based participatory research (CBPR) is one strategy to apply the health asset-approach and the theory of *salutogenesis* at a group-level (O’Sullivan et al., 2013). In fact, CBPR interventions are governed by the key principle that partnerships need to build on the individual and collective resources within the community to address the public health issue at stake (Israel, Eng, Schulz & Parker, 2005; Israel et al., 1998, 2001). The CBPR approach recognizes that each community partner has expertise to share, the value of which can be significantly amplified when joined and coordinated with other strengths through networks of relationships (Israel et al., 1998, 2001, 2005). Thus, within the scope of CBPR, the application of the health asset approach and theory of *salutogenesis* draws its significance from looking at how a partnership effectively identifies, mobilizes and activates its individual and collective assets (or GRRs) to promote optimal functioning and the achievement of community objectives.

2.2 Partnership dynamics

As mentioned above, the field of community-based participatory research (CBPR) offers a promising research area to apply the health asset approach to the study of partnership dynamics. The next section discusses the literature about partnership dynamics according to the following sequence: (2.2.1) Synergy; (2.2.2) Partnership stages of development; (2.2.3) Community context; (2.2.4) Leadership; (2.2.5) Administration and management; (2.2.6) Structure; and (2.2.7) Processes. The concept of synergy is first introduced as a means to set the focus on aspects of collaboration that enable partnerships to successfully combine and build on members’ resources in addressing the issue at stake.

2.2.1 Synergy

The literature on partnership dynamics utilizes the term “synergy” to describe collaboration at its highest and full potential (Butterfoss & Kegler, 2009; Jones & Barry, 2011a, b; Lasker et al., 2001, 2003). According to Lasker et al. (2001), partnership synergy is “the true value of collaboration” (p.187) or the “unique advantage of collaboration” (p.183). Synergy is further defined as “breakthroughs in thinking and actions that are produced when a collaborative process successfully combines the complementary knowledge, skills, and resources of a group of participants” (Lasker & Weiss, 2003, p.121). The measure of synergy strives to capture the effect of pooling resources from diverse partners, based on the assumption that this effect is more powerful than what results from the addition of single and fragmented components of collaborative efforts (Bond & Keys, 1993; Jones & Barry, 2011b; Lasker et al., 2001; Lasker & Weiss, 2003).

The concept of synergy was developed in response to the lack of empirical evidence with regard to the mechanisms by which partnership functioning influences partnership effectiveness (Butterfoss & Kelger, 2009; Granner & Sharpe, 2004; Jones & Barry, 2011a, b; Lasker et al., 2001; Weiss et al., 2002). Across the existing literature, synergy is thus treated as a proxy measure for partnership effectiveness, as it provides a description of the pathway through which collaborative mechanisms can optimally support the achievement of community change outcomes (Cramm, Phaff & Neiboer, 2013; Lasker et al., 2001; Weiss et al., 2002). The literature on synergy in the context of health promotion partnerships remains an underdeveloped research area, and more research is needed to better conceptualize and measure this concept (Jones & Barry, 2011a, b; Lasker et al., 2001).

The conceptualization of synergy varies across national, organizational and personal cultures (Jones & Barry, 2011b), which explains the challenge of defining and measuring this construct across partnerships. To address this challenge, Jones & Barry (2011b) have conducted focus groups with 36 experienced health promotion partners across The Republic of Ireland to explore and describe the meaning of synergy in health promotion

partnerships. This approach generated a number of themes evoking synergy for partners, based on their lived experience and understanding of the concept. These themes subsequently led to the development of a five-point eight-item synergy measurement tool referred to the *Jones synergy scale* (Jones & Barry, 2011b).

In this scale, synergy is defined in terms of both the outcomes achieved by the partnership and the effectiveness of processes leading to these outcomes. This is consistent with previous studies that have considered partnership synergy as a product, capability, and experience (Bond & Keys, 1993; Jones & Barry, 2011a; Lasker et al., 2001; Weiss et al., 2002). The *Jones synergy scale* includes the following items to operationalize synergy in partnerships: (1) energy, (2) extra value, (3) problem solving, (4) positive experience, (5) outcomes, (6) all benefits, (7) complementary skills, and (8) work shared (Jones & Barry, 2011b).

Weiss et al.'s (2002) study also developed a scale to assess synergy in public and privately funded community partnerships. The scale builds on the work by Lasker et al. (2001) that suggests that partnership synergy is expressed through collaborative thinking and actions that have creative, comprehensive, practical and transformative properties. *Creativity* in partnerships refers to the collaborative process of generating new ideas that have meaning and value for the community at large (Gray, Mayan & Lo, 2009; Weiss et al., 2002). This process involves “breaking new ground, challenging accepted wisdom and discovering innovative solutions to problems” (Lasker et al., 2001, p.184). Through collaboration, partners exchange information to obtain a more accurate “reading” of the local context within which the issue is being discussed. As a result, collaboration is more *practically* oriented and allows the partnership to tailor actions to local needs and assets (Gray et al., 2009; Lasker et al., 2001; Weiss et al., 2002).

A *comprehensive* approach to collaboration is enhanced by the diversity of stakeholders involved in the partnership, as each brings a unique perspective to draw a more complete picture of the issue addressed. Having such a vision allows partners to expand the range of possible solutions and broaden the analysis of problems and opportunities (Gray et al.,

2009; Lasker et al., 2001; Weiss et al., 2002). Finally, synergy in collaboration involves *transformative* processes, such as changes in assumptions and ways of approaching issues at an individual level and on a community scale (Gray et al., 2009; Lasker et al., 2001; Weiss et al., 2002).

2.2.2 Partnership stages of development

The examination of partnership dynamics includes knowledge about the developmental processes through which partnerships are formed. Across theories and models, there's a general understanding that partnerships develop in stages, on a cyclical and ongoing basis (Butterfoss & Kelger, 2009; Florin, Mitchell & Stevenson, 1993; Kegler, Rigler & Honeycutt, 2010; Lasker et al., 2001). Frequent loops back to earlier stages are typical of health promotion partnerships "as they take on new issues, recruit new members or update action plans" (Kegler et al., 2010, p.2). There remains a lack of empirical information with respect to how partnerships form and develop (Granner & Sharpe, 2004). However, there are still a few models conceptualizing partnership functioning in terms of stages of development, including Butterfoss and Kegler (2009) Community Coalitions Action Theory (CCAT). The CCAT articulates structural, relational, individual, and contextual components of collaboration with stages of development to allow a wider analysis of partnership functioning. The CCAT describes three developmental stages: Formation, maintenance, and institutionalization, each of which describes specific dynamics that participate to influence partnership synergy (Butterfoss & Kelger, 2009).

The *formation stage* relates to a number of specific tasks and processes, the first one being the creation of the collaborative entity. According to the CCAT model, a partnership forms when a lead organization or a group of convenors seize an opportunity to resolve an issue and bring together stakeholders concerned with this issue (Butterfoss & Kelger, 2009; Florin et al., 1993; Kegler et al., 2010). These pioneers are critical in initiating collaboration between multiple parties and increasing early community participation (Butterfoss & Kelger, 2009). The success of partnership building lies on

their “technical assistance, financial or material support, credibility, and valuable networks” (Butterfoss & Kelger, 2009, p.246).

Partnership formation is also based on the recruitment of committed and diverse stakeholders (Butterfoss & Kelger, 2009; Florin et al., 1993; Osmond, n.d.). Lasker et al. (2001) indicates that synergy in partnerships results when the group of people becomes more heterogeneous and committed to resolving the issue. Each stakeholder brings distinctive strengths, and such diverse competencies are needed to carry out successful collaborative initiatives (Bond & Keys, 1993; Lasker et al., 2001). The degree to which partners actively engage in partnership work has shown to be greatly influenced by the perceived benefits and drawbacks of participation, as well as the support provided by the participant’s organization (Butterfoss & Kelger, 2009; Butterfoss, Goodman & Wandersman, 1996; Lasker et al., 2001).

The identification of partnership leadership takes place within the formation stage (Butterfoss & Kelger, 2009; Kegler et al., 2010). Successful leadership in this type of group is characterized as a “collection of qualities and skills that are not typically found in one individual, but rather in a team of committed leaders” (Butterfoss & Kelger, 2009, p.256). Leadership functions include the establishment of an operational structure and clear processes that will successfully guide the work of the partnership (Butterfoss & Kelger, 2009; Florin et al. 1993). The ability of the collaborative structure and processes to lead to synergy is reflected in the extent to which they strengthen sustainability of collaboration and the achievement of partnership goals (Butterfoss & Kelger, 2009; Cramm et al., 2013; Schulz et al., 2003;).

The *maintenance stage* of the CCAT framework involves activating partners’ resources through the planning and implementation of concrete actions towards meaningful community change (Butterfoss & Kegler, 2009). This stage is also concerned with sustaining the involvement of all members by ensuring that each sector has appreciable influence on the functioning of the partnership (Bond & Keys, 1993; Butterfoss & Kegler, 2009). Recruitment of new members takes place to acquire the necessary external

resources and skills to accomplish the collaborative work. Overall, the maintenance stage of partnership development, as proposed in the CCAT model, involves creating collaborative synergy (Butterfoss & Kegler, 2009).

Bond and Keys (1993) propose that synergy results from the co-existence of empowerment and collaboration. In their view, empowerment is seen when diverse sectors (or groups) simultaneously participate in the collaborative work in a meaningful and relevant way. Empowerment is fostered by a culture of inclusion that supports diversity and respect of interdependencies between members. It enables the ability of each sector to identify and activate their own set of resources, while acknowledging the value of others' contributions (Bond & Keys, 1993). Empowerment nurtures feelings of belonging and cohesiveness, which are important socio-emotional factors to support optimal collaboration (Butterfoss & Kegler, 2009; Chidambaram & Bostrom, 1996; Kivlighan & Miles, 2007).

To create synergy, empowered members have to focus their energy on a well-defined and proactive collaborative task. The definition of a common purpose and goals can help to bring stakeholders from different sectors and disciplines together (Bond & Keys, 1993; Butterfoss & Kegler, 2009). The maintenance of successful partnerships is associated to the establishment of a formalized structure of collaboration, with roles and responsibilities clearly articulated (Butterfoss & Kegler, 2009; Florin et al., 1993). The creation of work groups or subcommittees is a step towards structuring the collaboration effectively and establishing productive communication between partners (Butterfoss & Kegler, 2009; Florin et al., 1993). Roles within the collaborative structure should be brought in line with the distinctive strengths and interests of partners as a means to enhance synergy (Lasker et al., 2001). Boundary-spanning roles have shown to be particularly important in partnerships to incorporate the different perspectives that exist between sectors and thus, facilitate partners' interactions (Bond & Keys, 1993; Gray et al., 2009; Jones & Barry, 2011a; Lasker et al., 2001).

Acknowledgment of intermediate outcomes is also important to ensure the maintenance of collaboration (Butterfoss & Kegler, 2009; Florin et al., 1993). Positive changes can be observed at the partner level through skills and knowledge development, greater awareness of existing resources, and increased feelings of self-efficacy (Butterfoss & Kegler, 2009; Florin et al., 1993; Foster-Fisherman, Berkowitz, Lounsbury Jacobson & Allen, 2001). They can also be reflected at the organizational level through increased linkages to the broader community (Florin et al., 1993; Granner & Sharpe, 2004).

The CCAT model uses the term *institutionalization* to describe the stage where collaborative efforts result in measurable health and social outcomes (Butterfoss & Kegler, 2009). The term ‘institutionalization’ has led to some confusion among researchers as it often evokes images of a fixed or static state. A few authors therefore have opted for the term ‘sustainability’ to label this stage of development (Osmond, n.d.). At this stage, the continuity of collaboration can be threatened by the termination of external funds (Butterfoss & Kegler, 2009). However, a halt in financing does not necessarily coincide with the resolution of the health issue addressed by the partnership. Consequently, the survival of the partnership is dependent on how previous stages of development have successfully incorporated the sustainability dimension in collaborative processes (Butterfoss & Kegler, 2009). Sustainable processes include maintaining a positive perception of the benefits of the collaboration among partners, allocating sufficient time and resources to work on the partnership activities, and seeking financial support to maintain a financed collaborative infrastructure (Butterfoss & Kegler, 2009; Granner & Sharpe, 2004; Lasker et al., 2001)

Institutionalization or sustainability of collaboration in partnerships has been operationalized through multi-level indicators (Butterfoss & Kegler, 2009; Florin et al., 1993; Lasker et al., 2001). At the partner level, sustainability is promoted through the recruitment of new members and the long-term planning of leadership succession. At the organizational level, sustainability indicators include the adjustment of missions and new or expanded organizational services. These changes reflect integration of knowledge gained from the partnership work into organizational practices. The active involvement of

governmental agencies and the complexity of inter-organizational networks also participate in enhancing sustainability of collaboration. At the community level, sustainability is assessed on the basis of measurable changes in community policies, practices, norms and systems. Acknowledging the benefits and outcomes of the partnership can help to increase community outreach and promote greater citizen participation (Butterfoss & Kegler, 2009). The institutionalization stage should not be viewed as a point of termination, but rather as one phase of a continuous development cycle. The partnership is a dynamic entity, which constantly changes and evolves. The achievement of one health issue can bring to light other realities that need to be considered collectively, thereby maintaining the cyclical nature of partnership work (Butterfoss & Kegler, 2009; Osmond, n.d.).

2.2.3 Community context

The CCAT model acknowledges the influence of community contextual factors on partnership dynamics at all stages of development (Butterfoss & Kelger, 2009; Kegler et al., 2010). Other researchers call this dimension ‘external environment’ (Lasker et al., 2001; Schulz et al., 2003). Contextual factors include, but are not limited to: history of collaboration, socio-political climate, geography, economic conditions, community readiness to collaborate, and norms surrounding collaborative efforts (Butterfoss & Kelger, 2009; Kegler et al., 2010). Schulz et al.’s (2003) conceptual framework for assessing CBPR group dynamics identifies common contextual factors: previous collaboration, community response to problems, and geographic/cultural diversity.

2.2.4 Leadership

Leadership is a key theme in the literature on health promotion partnerships. It has been found to be the most influential factor of partnership synergy and the most measured aspect of partnership functioning (Gray et al., 2009; Jones & Barry, 2011a; Roussos & Fawcett, 2000). The notion of distributed leadership is evident in this type of group. Others use the terms ‘shared’, ‘collective’ or ‘integrative’ to describe this type of leadership (Jones & Barry, 2011a; Lasker et al., 2001). The complexity of the issue

addressed requires a cross-section of leaders to promote boundary-spanning efforts through informal and formal capacities (Jones & Barry, 2011a; Lasker et al., 2001; Weiss et al., 2002).

Partnerships benefit from having boundary-spanning leaders that have experiences in multiple fields to create some bridges between diverse sectors and improve collaboration (Bond & Keys, 1993; Jones & Barry, 2011a; Lasker et al., 2001; Weiss et al., 2002). Boundary-spanners show understanding and appreciation of interdependencies between multiple groups, which helps to create a culture of trust and acceptance for people to engage in positive interactions (Bond & Keys, 1993; Lasker & Weiss, 2003). The leadership of a partnership can promote synergy by articulating a clear, shared vision of the benefits that a diverse group of stakeholders can gain from working together (Butterfoss & Kelger, 2009; Lasker et al., 2001). The leadership is also involved in outreach and recruitment efforts to provide the partnership with the needed skills to accomplish the work (Lasker et al., 2001).

2.2.5 Administration and management

Another role that has shown to be valuable in the pursuit of collaborative synergy is overseeing the administration and management of the partnership (Gray et al., 2009; Jones & Barry, 2011a; Lasker et al., 2001; Weiss et al., 2002). This role is especially important for ensuring logistical support such as securing a convenient location for the partnership meetings, orienting new partners and documenting the progress of the partnership (Jones & Barry, 2011a; Weiss et al., 2002). Coordination activities are also embedded in the administration and management functions, including coordination of communication that occurs within the partnership and between the partnership and broader community (Jones & Barry, 2011a; Weiss et al., 2002).

2.2.6 Structure

Important leadership functions include the establishment of a formal operational structure within which roles, responsibilities and procedures are clearly defined (Butterfoss &

Kegler, 2009; Kegler et al., 2010). As mentioned earlier, the creation of working groups or sub-committees is a way to structure collaboration effectively. Additional elements that help to formalize the collaborative structure are mission and objective statements, role descriptions, and meeting schedules (Butterfoss & Kegler, 2009; Florin et al., 1993; Lasker et al., 2001; Schulz et al., 2003).

2.2.7 Processes

The establishment of a formal structure provides the framework for collaborative processes to take place and support synergy. Such processes include open and frequent two-way communication among the partners (Butterfoss & Kegler, 2009; Schulz et al., 2003). Frequent and productive communication has been shown to impact positively satisfaction and engagement among partners. Schulz et al. (2003) measured the communication dimension in terms of members' personal comfort level in expressing views and their perceptions with regard to others' level of comfort in expressing views. The communication dimension was also assessed through the extent to which the group members listen to each other and are willing to do so (Schulz et al., 2003).

Decision-making is another important dynamic of collaboration in partnerships (Butterfoss & Kegler, 2009; Butterfoss et al., 1996; Lasker et al., 2001; Schulz et al., 2003). It relates to the level of influence each sector or stakeholder has on the functioning of the collaboration. Successful partnerships engage people in a shared decision-making process to ensure meaningful participation by multiple sectors (Bond & Keys, 1993; Butterfoss & Kegler, 2009; Lasker et al., 2001; Schulz et al., 2003). Decisions need to be relevant to the partnership work and implemented to achieve progress in collaboration (Lasker et al., 2001; Schulz et al., 2003).

Conflict management and problem solving are key processes found in partnerships (Butterfoss & Kegler, 2009; Lasker et al., 2001; Schulz et al., 2003). According to Lasker et al. (2001), conflicts have the potential to foster partnership synergy as they provide an opportunity to pull together different opinions that can eventually stimulate new ideas and approaches. In working to solve any types of conflicts, the partnership needs to

demonstrate the ability to identify the fundamental issue underlying the conflict and generate several possible solutions to handle the problem (Kuziemyky & Varpio, 2010; Lasker et al., 2001; Schulz et al., 2003).

All of the above processes exert an influence and are themselves influenced by the working relationships among partners. Building positive and strong relationships is particularly time-consuming and requires significant efforts (Butterfoss & Kegler, 2009; Butterfoss et al., 1996; Lasker et al., 2001; O’Sullivan et al., 2013a; Schulz et al., 2003). Through their continuous interactions, the partners are entangled in a process to converge towards a culture of collaboration, where many challenges may arise out of the partners’ unfamiliarity with working with individuals from different professions and sharing resources and power (Jones & Barry, 2011a; Lasker et al., 2001).

2.3 The EnRiCH Project

The EnRiCH Project provided a suitable case study to explore partnership dynamics from an early developmental phase to the maintenance and institutionalization phases, and provides an interesting context to put the health asset approach and the theory of *salutogenesis* into practice. The EnRiCH Project represents a crossroad between two bodies of literature that complement and reinforce each other. By looking at partnership dynamics through an asset-based perspective, emphasis is placed on aspects of functioning that favour the synergistic potential of the partnership and therefore, its ability to successfully carry out the collaborative activities undertaken. This thesis study examines the dynamics of collaboration within the EnRiCH-Québec City partnership, in which regular contact was maintained during the The EnRiCH Project Intervention. The following section presented The EnRiCH Project Summary.

2.3.1 The EnRiCH Project Summary

The overarching purpose of The EnRiCH Project is to “develop new knowledge on essential elements of resilience-oriented intervention programs to enhance preparedness, response and recovery for Chemical, Biological, Radiological, Nuclear and Explosive

(CBRNE) events or natural disasters” (O’Sullivan et al., 2013a, p.3). A collaborative asset-mapping intervention was designed and implemented in 5 target communities to uncover the strengths within each community that can contribute to enhance adaptive capacity and resilience among high-risk population populations. The EnRiCH Project contributed to the development of empirical evidence on the effectiveness, appropriateness, and feasibility of this asset-based approach (O’Sullivan et al., 2013a; RHRP Research Lab, 2013b).

Phase 1 of The EnRiCH Project consisted of an environmental scan and extensive review of the literature on existing emergency preparedness programs and strategies to enhance resilience among high-risk populations across Canada and internationally. This step was followed by telephone interviews with key informants across Canada to learn about existing initiatives and lessons learned from past intervention strategies to promote preparedness and assist high-risk populations.

Phases 3 and 4 of the project included the design, implementation and evaluation of The EnRiCH community intervention in each of the targeted communities: Truro, Nova Scotia; The Region of Waterloo, Ontario; Gatineau and Québec City, Québec; and Calgary, Alberta (O’Sullivan et al., 2013a; RHRP Research Lab, 2013c). This intervention consisted of two distinct components: 1) an asset/need assessment, and 2) a collaborative asset-mapping task, which will be further described in Chapter 3: Methodology. Evaluation of the EnRiCH intervention focused on both the outcomes (summative evaluation) and the process by which the intervention was implemented in each community (process evaluation) (O’Sullivan et al., 2013a; RHRP Research Lab, 2013b).

The final phase of the project was dedicated to the dissemination of lessons learned, and sharing intervention material/tools for the promotion of promising community practices. As part of these dissemination activities, the first EnRiCH International Conference on Whole-of-Society Engagement was held in Ottawa, Canada in November 2012 to bring together key members of the disability and emergency management communities to

discuss the findings from The EnRiCH Project. This event also provided the opportunity to launch ‘*The EnRiCH Collaboration*’, an international initiative involving approximately 60 Canadian and international partners committed to enhancing community resilience for all (O’Sullivan et al., 2013a; RHRP Research Lab, 2013d).

2.4 Preliminary conceptual model

The preliminary conceptual model below (Figure 1) maps the dynamics of partnership collaboration from key themes within the existing literature: (i) the elements of the CCAT model (Butterfoss & Kelger, 2009); (ii) the determinants of partnership synergy (Lasker et al., 2001; Lasker & Weiss, 2003); and (iii) items from the Jones synergy scale (Jones & Barry, 2011b). It depicts proposed relationships between the components of partnership functioning, synergy, and effectiveness, all within a framework of stages of partnership development. The preliminary conceptual suggests a stepwise approach to partnership development, with two arrows at each end of the developmental continuum to indicate the cyclical nature of partnerships. As the model illustrates, synergy is preceded by the establishment of a leadership role, collaborative structure and processes, and followed by the achievement of successful community change outcomes.

The model provides the knowledge base to understand and analyze the collaborative experience of the EnRiCH-Québec City partnership, from an early development stage to the maintenance and institutionalization stages of collaboration. Based on the analysis of the interviews and focus group discussions used in this study, the preliminary model has been revised to reflect the key dynamics involved in collaborative synergy in the EnRiCH-Québec City partnership. This empirically driven model can be found in Chapter 4.

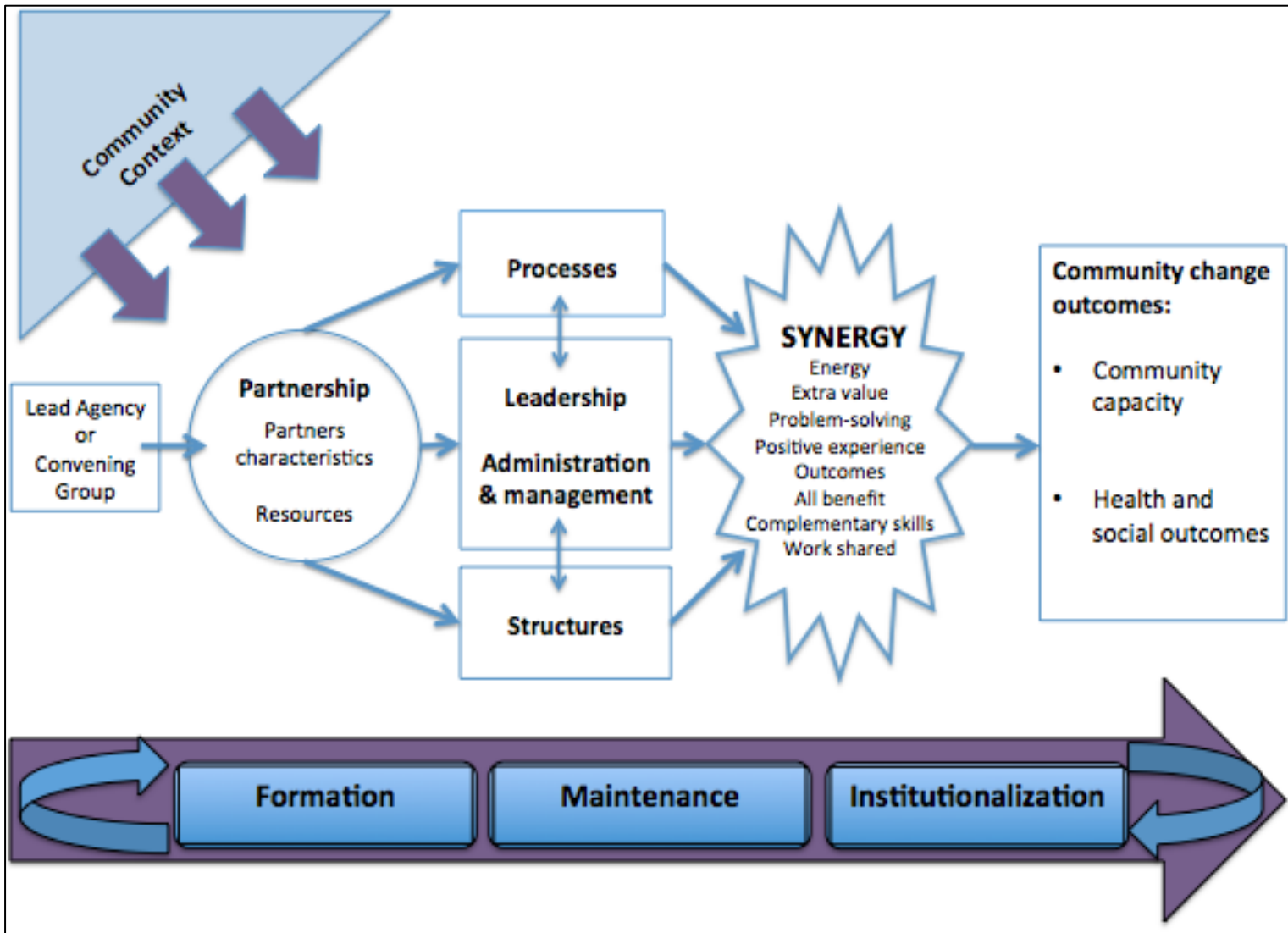


Figure 1: A preliminary model mapping dynamics of collaboration in health promotion partnerships

2.5 Summary

In this section, the literature pertaining to the health asset approach, partnership dynamics and synergy, and the EnRiCH Project was reviewed. The body of knowledge around the health asset approach can help to inform the study of partnership dynamics in light of how these dynamics support the identification and activation of community assets for enhancing emergency preparedness among high-risk populations. While much of the existing research looks at themes related to partnership collaboration, the literature is noteworthy by its lack of empirical evidence showing the processes through which collaborative functioning leads to synergy. In the next chapter on research methodology, the empirical evidence from examining Québec City participants' experiences of working on The EnRiCH Project initiative to enhance resilience in high-risk populations groups is used precisely to address this gap.

CHAPTER 3: METHODOLOGY

This thesis research is conducted as part of The EnRiCH Project, a community-based participatory research study focused on enhancing resilience and emergency preparedness among high-risk populations in four communities across Canada. The purpose of this thesis study is to explore the creation of partnership synergy through an understanding of the dynamics of the EnRiCH-Québec City collaborative partnership. The following chapter discusses methodological aspects of the study: (3.1) Research design, (3.2) The EnRiCH Project methodological framework, (3.3) Data sources, (3.4) Study sample, (3.5) Data analysis and writing, and (3.6) Validity.

3.1 Research design

This study used a qualitative approach to focus on understanding the dynamics of collaboration and synergy creation within the EnRiCH-Québec City partnership. As stated in the introduction, one of the objectives of this study is to describe the Québec City participants' perceptions and experiences of working together in the partnership. The qualitative approach was selected to generate rich and detailed reports from participants on various aspects of their collaborative experience, to create an exploratory model of the dynamics of synergy creation in the EnRiCH-Québec City partnership. Case studies are important for understanding the dynamics present within settings (Creswell, 2007; Eisenhardt, 1989).

This qualitative research followed case study format to capture the specific context of the EnRiCH-Québec City partnership in which collaboration is taking place. By grounding this study within the Québec City situation (i.e., issue of emergency preparedness, geographical location, relationships, players) and The EnRiCH Project intervention framework (i.e., chronology of research activities, data collection design), it allowed the researcher to gain a holistic and rich understanding of how collaboration was developed among partners (Marshall & Rossman, 2011). With such detailed description, the reader is better able to decide whether the findings of this study can be transferred to other partnership settings that share similar characteristics (Creswell, 2007).

Finally, this study incorporates a longitudinal design featuring three waves of data collection to explore the processes and dynamics of the partners' collaborative experience throughout The EnRiCH Community Intervention in Québec City (see section 3.2.2). This longitudinal aspect helped the researcher to develop a fine-grained look at the evolving nature of the EnRiCH-Québec City partnership.

3.2 The EnRiCH Project methodological framework

The following section provides the methodological background to this thesis study. It is subdivided into the following three sections: (3.2.1) The EnRiCH-Québec City partnership, (3.2.2) The EnRiCH Community Intervention Protocol in Québec City and, (3.3.3) Data collection of The EnRiCH Community Intervention.

3.2.1 The EnRiCH-Québec City partnership

The EnRiCH-Québec City partnership was created in response to an invitation from the Resilience and High-Risk Populations (RHRP) Research Lab of the University of Ottawa to participate in The EnRiCH Project and focus on the issue of emergency preparedness and resilience among high-risk populations. Throughout 2010, the EnRiCH research team developed entry into the Québec City community by consulting key members of the disability and emergency management networks, along with other public and private stakeholders, about the relevance of implementing a community-based intervention to improve emergency management strategies for high-risk populations. Following a year of consultation and planning, The EnRiCH Community Intervention was launched in Québec City in March 2011 through a community-government-university partnership, referred to in this document as “the EnRiCH-Québec City partnership”.

The EnRiCH-Québec City partnership is multi-sectored and includes governmental partners (provincial, regional, and municipal), professionals and volunteers from emergency management, health and social service organizations, tri-services (e.g., fire, police, paramedic), university-based organizations, community groups representing and advocating the needs of high-risk populations, as well as people living with functional

limitations (O'Sullivan et al., 2012). These partners were recruited upon approval from the University of Ottawa Research Ethics Board using the purposeful sampling technique. Recruitment was based on broad inclusion criteria to allow for a wide representation of individuals and organizations concerned with emergency preparedness and the protection of high-risk populations (O'Sullivan et al., 2012). Over the course of The EnRiCH Community Intervention, additional recruitment efforts were directed toward participants' social networks, using word-of-mouth as a snowball sampling strategy (O'Sullivan et al., 2012). Participants were provided with letters of information explaining the objectives of The EnRiCH Project Community Intervention Protocol. All participants signed a consent form (see Appendix A) approved by the university ethics review board prior to taking part in the research activities. The consent form stated that participation to the project was truly voluntary and that people could withdraw from the research process at any time.

211 Québec Regions was a key community partner that helped The EnRiCH Project develop entry into the Québec City community and promote the implementation of the EnRiCH Community Intervention through the active recruitment of community stakeholders. 211 Québec Regions is the first French language 211 service in North America and provides information and referral to a full range of community, social and government services to connect people with the resources and support they need (211 Québec Regions, 2013). Prior to EnRiCH, 211 Québec Regions was actively seeking out opportunities for collaboration with the municipality of Québec City with respect to the issue of emergency preparedness. To this point, these organizations had never worked closely together to explore ways of harnessing public and community resources to improve emergency preparedness in Québec City. As in other urban centres, emergency preparedness efforts in Québec City have struggled to engage representatives from high-risk population groups and community associations in collaboration with organizations with specific expertise related to disaster management, to leverage multi-sectoral expertise and develop a more integrative approach to assist people with functional limitations before, during and post disasters. Therefore, 211 Services perceived The EnRiCH Project as an opportunity to reach out and collaborate with key public

stakeholders hence its early interest and commitment to promote the EnRiCH Community Intervention in the community.

3.2.2 The EnRiCH Community Intervention Protocol in Québec City

Table 1 presents an *Overview of The EnRiCH Community Intervention Protocol in Québec City* with information about the research events, date, location, number of participants, and data collection design. The EnRiCH Community Intervention Protocol consisted of two distinct components: 1) *Asset/need assessment*, and 2) *Collaborative Asset Mapping* (O’Sullivan et al., 2013a). The *Asset/need assessment* component consisted of a full day session intended to engage participants in a discussion about the assets and needs of individuals and organizations in the community with regards to emergency preparedness and the protection of high-risk populations. This session was facilitated using the Structured Interview Matrix (SIM) technique (Corneil et al., 2011; O’Sullivan et al., 2013a).

The *Collaborative asset-mapping* component of The EnRiCH Community Intervention Protocol comprised of 3 phases: 1) an orientation session, 2) a 10-week online collaborative asset-mapping task, and 3) a tabletop exercise. The orientation session consisted of a full-day facilitated focus group to introduce the CHAMPSS Functional Capabilities Framework (O’Sullivan et al., 2013b), a classification system for identifying community services and programs addressing the functional needs and capabilities. These categories included: Communication, Housing, Awareness, Mobility/transportation, Psychosocial, Self-care and daily living tasks, Safety and security (CHAMPSS). The CHAMPSS Framework was used to categorize community assets within a spreadsheet that was posted online using Google Docs as a collaborative tool to allow the asset-mapping task to be completed through remote collaboration. The orientation session provided hands-on instructions for using the framework and Google Docs and offered an opportunity for participants to build or strengthen relationships (O’Sullivan et al., 2013a).

The online collaborative asset-mapping task consisted of a 10-week asynchronous process during which participants were asked to fill in the online spreadsheet (Google

Docs) with the following information about their organization: organization name, website link, general information (i.e., mission, purpose), contact information, key elements of the available programs/services offered, and the specific CHAMPSS categories addressed by the available programs/services offered (Kuziemy et al., 2012; O’Sullivan et al., 2013a). This provided an opportunity for participants to work together remotely on the development of a database of community assets, and become more aware of the organizations, programs and services available to support emergency preparedness and the protection of high-risk populations in their community (O’Sullivan et al., 2013a). The collaborative asset-mapping task served to facilitate intra- and inter-organizational contingency planning, and set the stage for the tabletop exercise (O’Sullivan et al., 2013a).

The final phase of the *Collaborative Asset-Mapping* component consisted of a tabletop exercise conducted during a half-day (4-5hours) facilitated focus group (O’Sullivan et al., 2013a). Participants in each of the targeted community were asked to work through a locally relevant train derailment scenario using the online spreadsheet they had previously created during the 10-week asset-mapping task. The tabletop exercise presented an opportunity for each community to assess its state of emergency preparedness and capacity to meet the needs of high-risk populations during such events (O’Sullivan et al., 2013). Consequently, it allowed participants to test their knowledge of emergency planning protocols, risks, hazards and community assets, and identify ways to address the shortcomings in current community or organizational contingency plans (O’Sullivan et al., 2013).

At the request of the Quebec City community group, it was decided to extend the EnRiCH Community Intervention and include a follow-up phase to make a retrospective assessment of the impact of The EnRiCH Community Intervention and discuss the way forward to sustain the collaboration established. This additional component involved hosting another full-day focus group session in Québec City to conduct a cost-benefit analysis at the individual, organizational and community levels. A work plan was discussed among participants to outline the next steps in terms of pushing forward the

agenda of emergency preparedness and the protection of high-risk populations in their community.

Table 1: Overview of The EnRiCH Community Intervention Protocol in Québec City

Event	Event Description	Number of participants
Component 1: <i>Asset/Need Assessment</i>		
<p>Asset/Need Assessment Session</p> <p>Date: March 30th, 2011 Location: Hôtel Pur, Québec City</p>	<ul style="list-style-type: none"> • Full day facilitated focus group session using the Structured Interview Matrix (SIM) (Corneil et al., 2011) • Asset/need assessment of individuals and communities with respect to emergency preparedness and the protection of high-risk populations 	N = 25
Component 2: <i>Collaborative Asset-Mapping</i>		
<p>Phase 1: Orientation Session</p> <p>Date: March 1st, 2012 Location: Hôtel Delta, Québec City</p>	<ul style="list-style-type: none"> • Full day facilitated focus group session • Presentation of the CHAMPSS Functional Capabilities Framework (O’Sullivan et al., 2013b) • Training on the use of the online collaborative asset-mapping tool (Google Docs) 	N = 22
<p>Phase 2: Collaborative Asset-Mapping Task</p> <p>Date: March – May 2012 Location: N/A</p>	<ul style="list-style-type: none"> • 10-week asynchronous process to develop the asset database remotely through Google Docs • Identify and learn about assets (organizations, programs, services) in the community. 	N/A
<p>Phase 3: Tabletop Exercise Session</p> <p>Date: May 25th, 2012 Location: Hôtel Delta, Québec City</p>	<ul style="list-style-type: none"> • Half-day (4-5 hours) facilitated focus group session • Tabletop exercise using a train derailment scenario to test knowledge of emergency planning protocols, risks, hazards and community assets. 	N = 23
<p>Phase 4: Follow-up Session</p> <p>Date: November 22nd, 2012 Location: Hôtel Delta, Québec City</p>	<ul style="list-style-type: none"> • Half-day (4-5 hours) facilitated focus group session • Retrospective assessment of The EnRiCH Community Intervention through a cost-benefit analysis at the individual, organizational and community levels. 	N = 19

3.2.3 Data collection of The EnRiCH Community Intervention

Table 2 presents the data collection timeline of The EnRiCH Community Intervention in Québec City. As mentioned above, The EnRiCH Community Intervention in Québec City involved four focus group sessions: 1) the asset/need assessment session, 2) the orientation session, 3) the tabletop exercise session, and 4) the follow-up session. These sessions were facilitated by a member of The EnRiCH research team and lasted from half a day (4-5 hours) to a full day (7 hours). Two audio recorders were placed at each table of participants to collect the data generated from the focus group discussions. Direct involvement as a research assistant in The EnRiCH Project has provided the opportunity to participate as an observer in the last three focus group sessions in Québec City.

Throughout The EnRiCH Community Intervention in Québec City, five telephone interviews (30-45 minutes in duration) were conducted at different points in time to follow-up on participants' experiences with working in partnership on the issue of emergency preparedness among high-risk populations and the collaborative asset-mapping task. Interviews were conducted in French and were audio-recorded with each participant's permission. A semi-structured interview guide (see Appendix B: The EnRiCH Interview Guide) was developed by the investigators of The EnRiCH Project to collect data with regard to various aspects of partnership dynamics (i.e, connectedness, engagement, leadership, decision-making process, communication, etc.). Some items of the interview guide were based on a 5-point reference scale where the participants were asked to provide a rating from 1 to 5 (1 being the lowest rate and 5 the highest rate). Probes were included to support the ratings and provide further elaboration on each item. The EnRiCH Interview Guide was used for all five interviews conducted with the Québec City participants. The author of this thesis conducted most of the interviews.

Table 2: Data collection timeline of The EnRiCH Community Intervention in Québec City

Data Collection Time	Source of Data	Number of participants
March 30 th , 2011	Focus group A: Asset/Need Assessment Session	N = 25
November 2011 – February 2013	Interview 1: The EnRiCH Interview Guide	N = 26
March 1 st , 2012	Focus Group B: Orientation Session	N = 22
March – April 2012	Interview 2: The EnRiCH Interview Guide	N = 18
May 2012	Interview 3: The EnRiCH Interview Guide	N = 14
May 25 th , 2012	Focus group C: Tabletop Exercise Session	N = 23
June 2012	Interview 4: The EnRiCH Interview Guide	N = 13
November 22 nd , 2012	Focus Group D: Follow-up Session	N = 19
November 2012 – January 2013	Interview 5: The EnRiCH Interview Guide	N = 16

3.3 Data sources

This thesis study used data collected through interviews, focus group sessions, and non-participant observations conducted as part of The EnRiCH Community Intervention in Québec City. More specifically, this study focused on data from Interview 4 (June 2012), the follow-up session (November 22nd, 2012), Interview 5 (November 2012-January 2013), and the non-participant observations conducted during the follow-up session. The rationale for selecting these data sources was to reflect as closely as possible the level of development reached by the EnRiCH-Québec City partnership since the start of The EnRiCH Community Intervention, and focus on how the participants were trying to ensure the maintenance and sustainability of the collaboration at this point.

Interviewing was the primary mode of data collection for this study as it is a method of choice for gaining insight and understanding of experiences, processes or behaviours (Rowley, 2012). The semi-structured EnRiCH Interview Guide (see Appendix B) was used to collect data. The use of a semi-structured interview guide provided the flexibility to probe for more information or ask clarifying questions to achieve greater understanding about the particular research subject (Barribal & While, 1994). As indicated in Table 2, 13 interviews were conducted in the 4th round of interviews and 16 interviews in the 5th round (29 in total).

Focus group was also used as another method of data collection. As stated by Williams (2007), to conduct a case study “the researcher must spend time on-site interacting with the people studied” (p. 68). The time spent on site during the follow-up session permitted non-participant observations of real time events and provided the context in which these events occurred (Yin, 2003). It also fostered the development of trusted relationships with the participants and a greater sense of the dynamics qualifying the partnership. As indicated in Table 2, 19 participants attended the follow-up session in Québec City. The follow-up focus group consisted of conducting a cost benefit analysis of the impact of The EnRiCH Community Intervention (see Appendix C: The EnRiCH Project Follow-up Session Protocol).

3.4 Study sample

Table 3 presents the participant tracking sheet of the study sample. The sample of this thesis research included the group of participants who attended the follow-up session (n=19) and those who completed Interview 4 and/or Interview 5. Accordingly, a total of (n=23) participants were purposefully selected for the sample of this study. The sample represented a mix between returning participants who were involved in previous phases of The EnRiCH Community Intervention, and new recruits who were identified by the Québec City participants as important contributors to the issue of emergency preparedness and the protection of high-risk populations. These new recruits were mostly participants' work colleagues who had been informed about The EnRiCH Project via word of mouth.

Demographic data were collected through the telephone interviews. These data included the type and role of the participating organization, as well as the position held by the participant within that organization. In order to preserve the confidentiality of the participants, they are identified according to the name and type of organizations they work for, rather than according to their job position within the given organization (see Table 4: *Participant Demographics*).

Table 4: Participant Demographics

Organization Type	Organization name
Independent (N=1)	<ul style="list-style-type: none"> • Information and Referral Services (211 Québec Regions)
Governmental (N=13)	<ul style="list-style-type: none"> • Ville de Québec • Agence de la santé et des services sociaux de la Capitale Nationale • Fire department • Office du tourisme de Québec • Service de police de Québec • Ministère de la Sécurité Publique du Québec • Ministère des Transports du Québec
Para public (N=1)	<ul style="list-style-type: none"> • Université de Laval
NGO (N=8)	<ul style="list-style-type: none"> • Regroupement des personnes handicapées de la région 03 (Capitale-Nationale) • Regroupement des personnes handicapées visuelles • Mouvement Personne D'Abord du Québec Métropolitain • Société Canadienne du Cancer • Centre d'Action Bénévole de Québec • Croix-Rouge Canadienne, Division du Québec • Service d'entraide communautaire Rayon de Soleil • Centre communautaire l'amitié
Total = 23	

3.6 Data analysis and writing

Data analysis involved coding Interview 4 and 5 transcripts and the follow-up focus group session. Coding for the follow-up focus group was done while listening to the recordings to ensure the context and examples of synergy were not lost in transcription. Data analysis also consisted of reviewing observation field notes for pertinent information. Directed content analysis was used as the qualitative method of analysis for this study. This technique is based on an integrated approach as it includes both a deductive and inductive coding process (Hsieh & Shannon, 2005). A provisional list of deductive codes was first developed based on existing theory and research findings from the literature (Miles & Huberman, 1994; Hsieh & Shannon, 2005). For example, this list included initial coding categories representing key concepts of partnership collaboration and synergy such as: Leadership, structure, engagement, group mix, relationships and trust.

Prior to coding immediately with the predetermined codes, transcripts were read to highlight all text referring to dynamics of collaboration supporting the success of the EnRiCH-Québec City partnership. The highlighted passages were then coded using the predetermined codes. According to Hsieh and Shannon (2005), this strategy is useful when the research goal is to “identify all instances of a particular phenomenon” (p.1281). The purpose of this study is to explore the creation of synergy through the study of dynamics of collaboration influencing the EnRiCH-Québec City partnership’s ability to make best use of community assets for emergency preparedness among high-risk populations. Therefore, it is important to identify as many manifestations as possible of the phenomenon of interest.

An inductive approach was also used to identify emergent themes related to aspects of collaboration supporting partnership synergy in Québec City. This inferential process included the development of descriptive codes to summarize text passages, as well as higher-level pattern codes suggesting thematic relationships between chunks of data

(Miles and Huberman, 1994). The purpose of directed content analysis is to “validate or extend conceptually a theoretical framework or theory” (Hsieh & Shannon, 2005, p.1281). This study extends the partnership dynamics knowledge, by examining it through an asset-based approach in order to gain a better understanding of what creates synergy in collaboration.

Meetings with supervisors were scheduled on a regular basis throughout the duration of the study to ensure data analysis was consistent and accurate. As previously outlined in the research questions, one of the planned outcomes of this study was to generate a model that describes the most important influences of synergy creation in the EnRiCH-Québec City partnership. A model was therefore developed to illustrate key driving elements (pictured as “cogs”) of partnership synergy that emerged from the data (see section 5.1).

3.7 Validity

Validity was established through triangulation of the data, prolonged engagement, debriefing sessions with The EnRiCH Project research team, as well as the provision of extensive quotations from the participants. Triangulation was achieved through the use of multiple data collection techniques: Interviews, focus groups, and non-participant observations. According to Lincoln and Guba (1965), the use of different methods strengthens the findings from a qualitative inquiry and makes the data believable.

Lincoln and Guba (1965) also recommend prolonged engagement between the investigator and the participants to develop familiarity with the culture of participating organizations and establish trusted relationships. The researcher’s involvement as a research assistant in The EnRiCH Project enabled immersion in the culture of collaboration characterizing the EnRiCH-Québec City partnership, thus enhancing the rigour and credibility of the findings. Finally, debriefing sessions with members of The EnRiCH Project research team ensured other key perspectives were considered about the way the collaboration evolved within the EnRiCH-Québec City partnership.

CHAPTER 4: RESULTS

In this chapter, the EnRiCH-Québec City partnership collaborative experience is described from an asset-based perspective to emphasize on factors that contribute to optimal system functioning. The results of this study are presented according to eight core themes, which describe the facilitators and barriers to collaboration as perceived by the participants of the EnRiCH-Québec City partnership. Barriers to collaboration are acknowledged to examine how the EnRiCH-Québec City partnership manages the challenges posed by multi-sectoral collaboration, and pursues efforts towards addressing the issue of emergency preparedness among high-risk populations.

4.1 Emergent themes

This section describes the eight key themes that emerged from the data analysis work. It is subdivided into two parts: (4.1.1) Facilitators to collaboration and, (4.1.2) Barriers to collaboration.

4.1.1 Facilitators to collaboration

The facilitators to collaboration, as perceived and experienced by the EnRiCH-Québec City partners, are presented in six emergent themes:

- (1) The issue of emergency preparedness resonated with local concerns and values.
- (2) Collaboration was driven by different but overlapping motives.
- (3) Leadership opened access to community expertise and increased motivation.
- (4) The partnership's work was shaped by moments of engagement.
- (5) Timely collaboration created beneficial arrangements.
- (6) EnRiCH was a catalyst to multi-sector collaboration.

1. The issue of emergency preparedness resonated with local concerns and values.

In Quebec City, the EnRiCH participants attached considerable importance to the issue of emergency preparedness given its wide-ranging implications for public safety and health. This was reinforced by the fact that many surrounding areas of Québec City have faced a growing number and complexity of disasters in recent years, the consequences of which contributed to a heightened sense of urgency in getting communities ready to respond to the unexpected impacts of threats. As described by one participant,

« On est confronté dernièrement, dans les dernières années, à beaucoup de catastrophes. On se pensait exempt de ça. Ce qui est arrivé effectivement dans le coin de Richelieu, ça a fait en sorte que ça nous interpelle. On a été confronté à ça, pis y'en avait pas avant. Avant, on avait des tempêtes de neige! (Rires)» (P63, Government, Follow-up session)

In this view, the issue of emergency preparedness and its known societal repercussions influence motivation for Québec City partners to engage in multi-sectoral collaboration. As much as there was acceptance of the seriousness of the issue, there was also a concern about a popular attitude that leads people to believe that Québec City is safe from major crisis situations. As stated by one participant:

« Comme quoi, on ne croit pas vraiment. T'sais, on a peut-être la pensée magique que ça l'arrivera jamais là. » (P14, NGO, Interview 4).

This “magical” way of thinking about the unlikelihood of crisis was perceived to result from low awareness of the potential risks threatening the Québec City population. Such an acknowledgment reinforces the need to address the issue in a collective manner to raise public awareness.

Moreover, the issue of emergency preparedness received great attention from municipal and provincial authorities. In fact, some participants remarked that the EnRiCH initiative was taking place at a time of growing political support for public security in Québec City. As indicated by one participant, the culture of public security seemed to be present more

than ever before, especially since the Québec Ministry of Health and Social Services recently made it one of its top priorities.

« Mais la culture de sécurité civile et le dossier de sécurité civile devient omniprésent maintenant, ce qui n'était pas avant là. C'est le ministère de la santé, en mai, qui a dit formellement que le dossier de sécurité civile c'est important pour lui, qu'il allait faire un plan ministériel. C'est la première fois qu'il fait ça là. C'est sûr que ça vient donner de la légitimité et de faire que le message est clair, que chaque établissement doit aussi se préparer là. » (P50, Government, Interview 4)

Having the governments supportive of the overall goal to enhance public safety and security in Québec City was perceived to give credibility and legitimacy to launch the EnRiCH community-research initiative. It also had the effect of eliciting strong and sustained participation from civil security authorities throughout the initiative, thus increasing the perception that the issue at stake was worth addressing. As stated by one participant, the commitment on the part of civil security authorities was a good indication of the interest to sustain the collaborative efforts surrounding the issue.

« Et d'autre part les, les principaux responsables d'la Ville de Québec ben sont présents. Donc, euh, c'est sur que si eux sont présents, ça met d'la crédibilité dans l'projet là. (...). T'sais pis ces gens-là ont pas d'temps à perdre. Alors, si y investissent du temps pour ça ben c'est parce qu'ils ont, ils ont, euh, intérêt à c'que ça se poursuive. » (P42, Government, Interview 4)

The recent history of emergency events in the Québec City area and the political attention being accorded to the issue of disaster preparedness, therefore helped enhance general attention and sense of readiness among stakeholders to come together, share their experiences and expand their knowledge on the topic.

2. Collaboration was driven by different but overlapping motives.

The extent to which partners engaged in the collaborative initiative was influenced by the organizational mandates and opportunistic attitudes with respect to collaboration. There was a general view among participants that their respective organizations strongly encouraged outreach activities and broader collaborations. For some, the establishment of

networks and successful collaborations in the specific area of emergency preparedness was linked to the very nature of their job responsibilities, as indicated by this quote:

« Moi, mon travail consiste justement à établir ces liens-là, à m'insérer, à faire des contacts avec euh les organismes communautaires mais surtout j'vous dirais les autorités publiques là. La sécurité civile, les agences de santé, les CLSC, les services d'ambulanciers, le service des incendies. » (P48, NGO, Interview 4)

While participants from public organizations spoke of their involvement in terms of supportive organizational mandate towards collaboration, some community stakeholders described their participation to be more driven by opportunism, that is, to seize the opportunity of collaboration to make the needs of high-risk groups known by those who have more political and economic power.

« Nous on y va beaucoup par opportunisme, c'est-à-dire là où on voit des opportunités pour les revendications qu'on porte. C'est-à-dire faire reconnaître les besoins, co-construire les solutions abouties. » (P8, NGO, Interview 5)

Organizational mandates and opportunistic attitudes therefore represent driving forces behind the gathering of diverse players in the issue of emergency preparedness and the protection of high-risk groups in Québec City. Although institutional partners and community stakeholders described the sources of their commitment as different, the evolution of the collaboration led to the realization that each sector was striving to achieve the same overarching objective. As stated by one participant,

« J'ai vu certains groupes peut-être plus en mode revendication que d'autres au niveau des représentants des personnes vulnérables. J'ai vu des partenaires institutionnels qui étaient plus dans « Nous on a un mandat. » Ça au début c'était très comme ça, pis je pense qu'avec le temps, c'a évolué vers quelque chose de dire : Ben en fait on fait tous partie un peu de la même patente, là. » (P8, NGO, Interview 5)

3. Leadership opened access to community expertise and increased motivation.

Leadership was a key theme describing the success of the EnRiCH-Québec City partnership collaboration. Over the course of the EnRiCH Community Intervention, partners generally identified two major organizational entities that were standing out

visibly as influential actors in the collaborative process: the Québec City's *Bureau de la sécurité civile* and 211 Information and Referral Services.

« On s'est comme rallié sur le fait qu'le 211 était peut-être le meilleur organisme, euh, avec la Ville de Québec là, dans une collaboration plus large pour, euh, vraiment monter un plan à long terme. » (P44, NGO, Interview 4)

These partners were exceptionally assigned a lead role given their early commitment to The EnRiCH Project, as well as the extent to which their respective work responsibilities aligned with the central issue of emergency preparedness in high-risk populations. The leadership “naturally” belonged to the partners working on mandates closely related to the topic of collaboration, as perceived by this participant:

« Y a des gens évidemment qui sont impliqués dans c'dossier-là depuis un p'tit bout d'temps, euh, c'est clair qui sont reconnus comme des leaders dans l'projet. (...). Y'ont pas d'besoin de s'voir donner le leadership ou de se voir reconnaître le leadership. Ces gens-là, par les responsabilités qui leur incombent, sont des leaders dans l'groupe. » (P54, Government, Interview 4)

It was clear to many partners that the 211 Services involvement was a catalyst to the collaborative work as it represented a critical access point to community resources and high-risk groups and, consequently, to opportunities to benefit from their valuable expertise and knowledge. The following exchange between two participants during the follow-up session shows how the participation of 211 Services was particularly meaningful and relevant in terms of opening access to a large repertoire of community resources in the Québec regions.

- *« Nous on a l'avantage majeur qui est le 211. Pour nous, sans le 211, le projet là –*
- *Y'aurait pas cette envergure là.*
- *Jamais! Jamais, jamais, jamais!*
- *On serait en train de créer le 211.*
- *Exactement! C'est l'accès comme ça [claquement de doigts] à 1500 organismes!*
- *Oui, c'est une base de données extraordinaire là.*
- *C'est hallucinant là! »*
(Dialogue between P26 and P44, Government and NGO, Follow-up session)

The leadership role assumed by 211 Services was important in initiating the collaboration through the active recruitment of partners and the development of a clear vision of the benefits to be gained from working in partnership. As demonstrated in the following excerpt, the 211 Services representative had the ability to articulate the benefits of mobilizing both the public and community sectors to strengthen preparedness at all levels.

« On est vraiment en mode de mettre en place quelque chose de simple, de fonctionnel qui va permettre un à la Ville d'établir des nouveaux partenariats avec des organismes communautaires qui oeuvrent auprès des clientèles vulnérables. Et deux, aux organismes communautaires de réfléchir à la réalité qu'il peut y avoir des catastrophes et que leur propre clientèle et leur propre service comme organisme peuvent être en danger. Donc on va les aider à se mobiliser et à se préparer et à, à être capable d'aider des clientèles si jamais y'a quelque chose qui arrive. » (P1, Independent, Interview 4)

Having the Québec City's *Bureau de la sécurité civile* exercise leadership along with 211 Services helped raise a strong and collective sense of legitimacy regarding the collaborative work. The *Bureau de la sécurité civile* was described as providing the functional operational leadership of the partnership, ensuring that things got done in an effective and efficient manner.

« C'est vraiment la Ville de Québec là – le bureau de la sécurité civile de la ville de Québec – qui a pris en charge, euh, le lead de l'opération et du groupe. Donc les réunions sont convoquées et menées par la Ville de Québec et sa conseillère en sécurité civile, madame (nom de P26). Donc, euh, c'est très bien, très bien organisé, très bien leadé, les réunions sont succinctes et c'est effectif. » (P45, Government, Interview 4)

As indicated in the above quote, the security advisor of City of Québec's *Bureau de la sécurité civile* stood out clearly as the convenor and operational leader of the partnership meetings. This leader was largely described in terms of individual attributes inspiring and empowering collective action. Passion and enthusiasm were repeatedly used to describe this personality. This left one participant with the impression that the individual would have taken the leadership position regardless of whether her current job aligned with the collaborative issue.

« Elle est très passionnée aussi, c'est génial! Pis, euh, j'pense même si ce n'était pas son poste que, elle aurait quand même pris le lead! [rires] » (P15, NGO, Interview 4).

Along the same lines, another participant described the pleasure of collaborating with a person who is driven by passion for the work, as it creates a contagious vibe of energy that motivates people, even those that are not typically concerned with public security.

« Franchement, c'est, c'est plaisant. C'est très plaisant. Parce que tu vois quelqu'un qui a – déjà qui aime sa job. Pis quand bien même, moi, la sécurité, tout ça, c'est pas ma passion dans la vie, je veux dire rien que le fait de voir quelqu'un qui est intéressé, ben ça motive, je pense. » (P8, NGO, Interview 5)

The leadership exercised by 211 Services and the *Bureau de la sécurité civile* has been critical in developing a vision of the benefits of collaboration, opening up possibilities for accessing existing community resources, and motivating partners through charismatic enthusiasm.

4. The partnership's work was structured by moments of engagement.

Over the course of the community intervention, the EnRiCH-Québec City partnership adopted a formal structure comprised of 3 subcommittees assigned to different but complementary tasks that align with the aim of collaboration. This structure was perceived as an effective way to ensure greater clarity in the objectives of the partnership and to promote engagement and contribution of all partners. As stated by City of Québec operational leader of the partnership,

« On trouvait ça un peu flou, on trouvait qu'il y avait beaucoup de gens. Donc ce qu'on a décidé c'est de faire trois sous-comités – de travailler vraiment en trois sous-comités. Le premier sous-comité allait avoir comme objectif d'identifier les populations vulnérables. Le deuxième avait comme objectif d'identifier les ressources. Et le troisième sous-comité a comme travail finalement de produire les outils qui vont permettre de réaliser le projet. » (P26, Government, Follow-up session)

This operational structure was established in order to tap into the diverse expertise of the partners, which ranged from institutional strategic and operational planning to field intervention with high-risk groups. Partners were appointed to the subcommittee which

could benefit most from their expertise in the achievement of each sub-objective. As coordinator of the partnership, the City of Québec leader was part of all subcommittees.

In the view of many participants, the collaboration was going through an important structuring phase where roles, resources and priorities of each partner needed to be better defined and coordinated. The result was a perception that the partnership would benefit from seeking strategic planning expertise from professional organizations in the first place, to help lay the foundation of a structured approach to collaboration. Partners who shared this view generally questioned the pertinence of having community-based organizations and at-risk people actively involved in the structuring process. This was reinforced by the belief that capacity for collaborative planning in the field of emergency preparedness belonged to partners with an understanding of the public security infrastructure in Québec City. As described by one participant, collaboration in the structuring phase was more effective when the group was mostly made up of participants who had knowledge of public infrastructures.

« À la dernière rencontre qu'on a eu cette semaine, euh, y avait plus de gens habitués d'travailler dans les structures qui étaient présents pis on – j'ai vu la différence de dynamique. Euh, puis pour se structurer ça, ça prend des gens qui sont capable de parler « structure » là. Euh, pis c'est ça qu'on avait autour d'la table fait qu'on – je pense qu'on a fait un bon, un grand pas en avant. » (P27, Para public, Interview 4)

When speaking of community stakeholders and high-risk groups' involvement, one participant indicated:

«Alors au départ, c'est correct qu'ils [organismes communautaires/populations vulnérables] soient là. Pendant un bout de temps, un peu moins, pis après ça ils reviennent à la charge dans le processus. Et ce sera à nous d'aller les chercher!» (P48, NGO, Interview 5)

This quotation captures the idea of “moments of engagement” in the EnRiCH-Québec City collaboration. Before entering the structuring phase of collaboration, the partnership needed to acquire a fuller understanding of the issue of emergency preparedness among high-risk populations. This brainstorming process greatly benefited from community

stakeholders and high-risk groups' involvement, as they provided insightful and informed opinions about the reality of the target population.

In view of the renewed engagement of community stakeholders following the structuring phase, the City of Québec and 211 leaders made clear that this group's expertise would be used in the more practical and downstream part of the collaborative work. This implied that community stakeholders would provide some feedback and input about contingency plans to advise about how to tailor such plans to the needs of high-risk populations during emergencies, as described by P1:

« Donc on va avoir un groupe qui va euh, si tu veux, s'assurer de bien structurer ça pour pas que personne perde de temps. Et puis ensuite on va mettre à contribution les organismes qui nous ont déjà alimentés pour dire qu'est-ce qu'ils voulaient pis qu'est-ce qu'ils ne voulaient pas surtout. Donc on va monter un système simple, on va monter des affaires, on va valider nos outils avec eux plus tard. » (P1, Independent, Interview 4)

The community-based stakeholders also shared the conception of structuring the collaborative work according to where their unique contribution lay within the issue of disaster resilience among high-risk populations. It seemed clear for many of the community stakeholders that their core contribution to the issue was in the field of prevention rather than response. With respect to the collaborative work, their roles were mainly defined under the auspice of support to public health and security experts. As stated by one participant,

« Nous on aura pas à intervenir carrément en situations de catastrophe dans l'sens que on n'aura pas à évacuer les gens ou tout ça. T'sais, on n'est pas un organisme qui est positionné pour faire ce genre de choses-là. Notre rôle y va se situer beaucoup plus en prévention, en amont, en terme de production d'information accessible, en terme de diffusion d'l'information, validation de la compréhension des gens et tout ça. Ça j'ai aucun doute qu'on est capable de le faire. C'est notre, c'est une de nos expertises. » (P15, NGO, Interview 4)

Within the EnRiCH-Québec City partnership, collaboration was therefore enhanced when structured in sub-committees defined by sectors of expertise and "moments of engagement". This approach was regarded as a way of ensuring meaningful and effective participation from all partners, especially that of community organizations and people

living with functional limitations, without having them engaged in every phase of collaboration.

5. Timely collaboration created beneficial arrangements.

The collaboration that took place within the EnRiCH-Québec City partnership yielded a number of significant advancements toward achieving the ultimate goal of enhancing adaptive capacity for disasters in high-risk populations. One of the most prominent outcomes was the establishment of a formal agreement between the City of Québec and 211 Services with regards to training community organizations to prepare for disasters, and managing volunteers in a state of emergency.

« On a déjà convenu – c’est rapide là – en quelques mois, y’a une entente qui s’est établie avec le 211 à l’effet qu’ils vont aider les organismes communautaires à faire leur propre plan de mesure d’urgence pour eux-mêmes même en cas de situations d’exception. Et aussi savoir comment on pourra faire la gestion de bénévoles, soit spontanés ou soit ceux qu’on sait d’avance qu’ils peuvent rendre des services auprès des citoyens. » (P11, Government, Follow-up session)

This agreement represented a critical opportunity to invigorate the relationship between the City of Québec and 211 Services at a time where the City was considering withdrawing its financial support from 211 Services.

« Moi j’fais le grand ménage parce que je regardais même la Ville – pis c’était probablement connu – elle envisageait de laissé tomber le 211 avec sa participation financière complètement. Avec ça [l’entente], ça a permis de récupérer ça parce que le 211 peut continuer de fonctionner. » (P11, Government, Follow-up session)

EnRiCH came at the time where a major project, called « le projet K », was being developed by the City of Québec *Bureau de la sécurité civile* to build the population’s capacity to manage crisis situations. One component of « le projet K » specifically focused on the protection of high-risk population groups. This consequently gave rise to the idea of combining EnRiCH with « le projet K » to enhance opportunities for the success of these collaborative efforts, and place greater emphasis on disaster preparedness in high-risk populations.

« *Donc vous comprendrez que quand on a vu les deux [initiatives], on s'est dit: on va y aller dans le même objectif, dans le même but et on va travailler sur la résilience des populations vulnérables.* » (P26, Government, Follow-up session)

As a result, the EnRiCH-Québec City partnership became known as K-EnRiCH.

The merging of EnRiCH with « le projet K » helped mobilize new partners, which contributed to the establishment of a more complete picture of the local context of emergency preparedness amongst high-risk populations. A 3-year work plan was developed and discussed with the partners during the follow-up session and inspire future actions by the partnership and the Québec community at large. The work timetable included the following tasks:

- The identification and disaster training of community-based agencies;
- The adaptation of the 72 hours Emergency Preparedness Guide to meet the needs of high-risks populations;
- The development of contingency plans for community-based organizations;
- A topography of Québec City's areas of vulnerability;
- The production of a wide range of communication channels, from Facebook to Braille.

The formation of the EnRiCH-Québec City partnership came at an opportune time to relaunch relationships between key partners through formal agreements, and establish creative arrangements such as the K-EnRiCH, to sustain the growth of the partnership.

6. EnRiCH was a catalyst to multi-sector collaboration.

The EnRiCH Project fulfilled symbolic functions in the overall collaborative experience. Partners offered analogies to describe the role EnRiCH had in facilitating collaboration, and bringing about changes at the individual, organizational and community levels. According to one participant, EnRiCH acted as a *unifying element* in a complex web of institutional and community services concerned about high-risk populations but that were working in an uncoordinated manner.

« Avant EnRiCH, c'était plus un paquet d'organismes soit communautaires ou soit formels ou institutionnels, comme la Ville, qui avait un souci des communautés vulnérables. Tout le monde avait de la bonne volonté mais c'était décousu et pas concerté. Donc toutes des initiatives en silos. Pour moi, la grande valeur ajoutée de ce qui a été fait avec EnRiCH c'est vraiment de nous rassembler. Ça change toute la donne! » (P11, Government, Follow-up session)

Therefore, The EnRiCH Project served as a rallying point for concerted action between public authorities, public and private sector providers and community stakeholders. Another participant described EnRiCH as an *impartial convenor* that has provided the partnership with a fresh and unbiased look at how to address the issue of emergency preparedness among high-risk populations in Québec City. This outside perspective has helped to raise many open questions challenging the status quo and accepted notions about how to solve the issue.

« Donc vous êtes arrivés avec un regard étranger, pis euh, j'dirais plein de questions et pas d'affirmations. Juste des questions. (...) Donc je trouve que c'était, c'était un cadre souple. Pis je... moi j'ai pas senti de partis pris, y avait pas d'partis pris: on est les amis de la Ville, ou on est les amis du Ministère, on est les amis de l'Agence, on est les amis des groupes communautaires. On est l'ami de la collectivité, c'est-à-dire de chacun des gens qui la compose, mais de aucun en particulier. » (P8, NGO, Interview 5)

As a result of its convening power, some community stakeholders compared EnRiCH to a *short-circuit line* that allowed them to bypass administrative hierarchies and establish links with institutional stakeholders that were otherwise difficult to reach. EnRiCH provided them with an opportunity for direct and unmediated dialogue transcending the usual, and often limiting, institutional structures.

« Ca nous a permis de, de court-circuiter les entrées qu'on nous imposaient à la Ville, de les contourner. (...) C'est-à-dire, de permettre aux personnes de parler directement aux acteurs clés, au lieu de nous imposer le filtre d'une direction des handicapés. Parce que c'est un non-sens, les spécialistes de sécurité doivent parler aux gens. [Ils ne] doivent pas parler aux gens qui parlent aux gens.» (P8, NGO, Interview 5)

In the experience of one other participant, the privileged access to institutional partners gave a new impulse to her involvement in emergency activities as it enhanced the

visibility of her expertise and showed her willingness to push forward the issue of disaster preparedness among high-risk groups.

« C'que vous autres vous m'avez apporté c'est une façon d'arriver à rencontrer ces gens-là face à face, donc à m'faire connaître et maintenant je suis capable de dire que je fais partie de la réponse et je vais faire partie de plus en plus de la réponse en cas d'une situation exceptionnelle dans la région: non seulement pour les clientèles vulnérables mais pour n'importe quel évènement extraordinaire qui va arriver ici. Y vont avoir le réflexe de m'utiliser à toutes sortes de choses dans la chaîne de communication avec les citoyens. » (P1, Independent, Interview 4)

EnRiCH was also referred to as a *translation platform* that facilitated the communication between very diverse partners involved in the collaboration. In fact, there was a perception that EnRiCH enabled the partnership to place itself in a mode of collaboration and understanding regardless of the clash of professional languages used across sectors.

« C'est comme un outil de traduction. On ne parle pas les mêmes langues, et on a besoin d'un outil de traduction. Pis EnRiCH, c'est une instance de traduction. Mais c'est-à-dire, pour nous tous et toutes, c'a été un outil qui nous a permis de nous comprendre, de créer des liens. (...). On arrive à être dans un mode collaboratif, parce qu'il y a cette espèce de type de traduction qui est là, qui nous permet de nous parler. » (P8, NGO, Interview 5)

Moreover, EnRiCH was found to be a *prioritization tool* for the adjustment of organizational mandates and action plans,

« Ça devient un levier mais également un outil de priorisation. » (P66, Government, Follow-up session)

The attention and interest that the issue of emergency preparedness in high-risk populations aroused within the EnRiCH-Québec City partnership has induced some institutions to realign their work agenda with this emerging collective priority.

« Moi aussi c'est mon mandat [mesures d'urgence] mais c'est un réalignement des priorités. Parce que ce n'était pas nécessairement ma priorité cette année de m'occuper des populations vulnérables sauf que l'occasion se présente, je la saisis! » (P27, Para public, Follow-up session)

Finally, EnRiCH was perceived to provide a *launch platform* for renewed and sustained collaboration beyond the lasting involvement of the University of Ottawa research team.

By the end of the EnRiCH Community Intervention, it became possible to identify which partner had been involved in the project since the start and, consequently, manifested real interest in long-term collaboration on emergency preparedness among high-risk groups.

« Y manquait cette rencontre là vraiment, l'ultime rencontre EnRiCH pour dire: Là, on part la machine! On sait qui est impliqué, on sait qui veut s'impliquer. Les gens qui sont ici veulent vraiment être ici. Y'ont pas été forcés ou quoi que ce soit. » (P26, Government, Follow-up session)

This section presented the findings describing the key facilitators to collaboration, as perceived by the participants of this study. The collaboration in Québec City was driven by a number of factors, including the high importance attached by participants to the need to strengthen local disaster preparedness capacity, an acceptance and appreciation of the complementary roles of the various sectors concerned, a mobilizing leadership, a collaborative structure that capitalizes on partners' skills, as well as the timeliness and catalytic role of The EnRiCH Project in supporting sustainable partnership growth.

4.1.2 Barriers to collaboration

The barriers to collaboration, as perceived and experienced by the EnRiCH-Québec City partners, are presented in two emergent themes:

- (1) Declining community sector involvement was a major concern.
- (2) Differential power relationships influenced level of trust.

1. Declining community sector's involvement was a major concern.

Many participants acknowledged the added value of engaging organizations not typically involved in emergency planning activities, especially those in the community and non-profit sectors. Community stakeholders were perceived as precious sources of information with regard to the needs, assets, priorities and dynamics of high-risk populations. Their contribution to the work was regarded as what made the collaboration particularly novel and worthwhile undertaking.

At the same time as the importance of involving community stakeholders was made clear, there was a general observation that the participation of this group was decreasing gradually over the course of the EnRiCH Community Intervention. This progressive change in the group's composition attracted particular attention from the City of Québec leader, as illustrated by the following excerpt:

« On dirait que les organismes communautaires y commencent à s'en aller là. Eum, pis que, parce qu'à quelque part c'est la Ville qui a pris ça en charge, ça je l'sais pas là. Mais moi, j'veux casser ça là, j'veux éviter que ce soit un regroupement de fonctionnaires là. Donc je sens comme une petite tendance à perdre mes organismes communautaires alors que le but c'est de travailler avec eux. Donc euh, c'est à peu près ça que je vois qui a changé mais euh, c'est ma job de les ramener. » (Participant 26, Government, Interview 4)

The participant questioned whether declining community sector involvement was due to having the City of Québec provide a leadership role in the partnership. This concern had an effect of raising participants' awareness about the necessity to broaden community participation to prevent the over-representation of governmental officials in the partnership. It also led to a clearer definition of the City of Québec leadership role for ensuring the sustainability of the collaboration. In fact, as the above quotation states, the City of Québec took responsibility and initiative for maintaining the involvement of the community sector.

The difficulty of sustaining community stakeholder engagement was also believed to relate to the specific resource-constrained conditions that exist in the non-profit and voluntary sector today, and which influence the capacity to invest in long-term collaboration. As described below, despite the significant advantages that community-based organizations could gain from pooling resources and efforts with other agencies, there's an underlying context of scarce economic resources that limits their capacity, particularly in terms of time, to do so.

« C'est toujours la même chose, un organisme communautaire, aye sont au minimum en terme de ressources donc, euh, ils travaillent tous au maximum de leur potentiel fait qu'à toutes les fois qu'on les ramènent dans quelque chose, même si ce serait payant pour eux-autres, euh, y ont pas l'temps. C'est un grand

grand problème. Le manque de temps, le manque de disponibilités, pis, t'sais, pis y dit y vont venir – t'sais, des fois tu vas être chanceux tu vas n'avoir quelques uns qui vont venir pis sont tellement contents d'être venu pis tout ça mais on frappe toujours à ça [le manque de temps]. » (Participant 1, Independent, Interview 4)

To address this concern, participants who played a role in the leadership for the group in Québec City reflected on the need to delineate better the responsibilities of community stakeholders and establish clear expectations for how they should be involved in the collaboration without creating an undue burden. As described by the City of Québec leader,

« J'pense qu'une fois engagés, ils [organismes communautaires] vont rester là. Faut juste qu'ils sachent exactement quoi faire. C'est ça: « Voici ce qu'on s'attend de vous autres. On vous demandera pas beaucoup de temps. » Euh, parce qu'on sait qu'ils sont extrêmement occupés. Euh, fait qu'on va voir la 'plus-value', on veut pas non plus leur donner tout cuit dans l'bec, on veut qu'ils nous aident. » (Participant 26, Government, Interview 4)

In the EnRiCH-Québec City partnership, the community stakeholders' sustained engagement in collaboration is a continuous challenge to achieve optimal functioning. The sustainability and effectiveness of collaboration therefore rely heavily on the partnership's capacity to make the most of community stakeholders' involvement while also respecting their need to protect their limited resources. The City of Québec leader identified this challenge as a core priority to help guide decisions and future actions in the partnership.

2. Differential power relationships influenced level of trust.

The collaboration revealed differences in power and sources of motivation between community stakeholders and municipal officials in the EnRiCH-Québec City partnership. The existence of such differences was presumed to be closely related to an ongoing subsidy war, which places community stakeholders in a position of financial dependence on funding bodies. Consequently, this left some municipal officials under the impression that community stakeholders' commitment to the partnership's work was motivated by

self-interest and the desire to receive greater attention from organizations who finance their work.

C'est comme si y'avait des guerres au niveau des subventions pis je le ressens dans mon travail. Euh, y veulent plus prouver quelque chose. Euh, y'ont tous la volonté là mais on dirait que parce que je suis de la Ville, ils passent beaucoup de messages [soupir]. En tout cas, c'est des conflits mais c'est des conflits qu'on se rend compte qui étaient déjà là, qui étaient déjà là. C'est des conflits perceptibles mais qui étaient déjà là. (Participant 26, Government, Interview 4)

Some municipal officials therefore had difficulty understanding and trusting the motivations of community members in the partnership's work. On the other hand, community stakeholders sometimes felt that partners did not always welcome their participation. While their contribution was generally acknowledged, there were still a number of individuals for whom community sector's involvement was seen as a disturbing element to collaboration, as perceived by this participant:

Euh, y a, euh, y a des gens avec qui on sent que c'est clair, c'est important que les, que le Mouvement [community organization] soit là pis qu'on est vu comme, euh, un élément positif qui rapporte. Pis y'en a d'autres, d'autres individus avec qui c'est une perception différente. On est plus l'élément dérangeant. (Participant 15, NGO, Interview 4)

This section presented the findings describing the key barriers to collaboration, as perceived by the participants of this study. The progressive withdrawal of community stakeholders was perceived as an important impediment to the sustainability of collaboration, together with a general feeling of mistrust generated by differential power relationships.

4.2 Emergent model

Figure 2 depicts the *Model of dynamics of collaboration influencing the creation of synergy in the EnRiCH-Québec City partnership*, which was derived from the emergent themes of this study. The concept of synergy is incorporated in the model to interpret the results from the perspective of how dynamics of collaboration have influenced the ability of the EnRiCH-Québec City partnership to propel the emergency preparedness agenda forward by leveraging on existing community assets.

The model uses the analogy of a gear system to show how the creation of partnership synergy is dynamic in nature and is influenced by a complex set of interrelated components of collaboration. The *cogs* represent the six core themes presented in section 4.1.1, which describe the perceived facilitators to collaboration in the EnRiCH-Québec City partnership. Each theme was placed into the model with a label: issue, motives, leadership, structure, timing, and community outsider (to refer to the catalytic and facilitating role of The EnRiCH Project research team in the collaboration). As in the case of a gear system, these facilitating components of collaboration “interlock” with each other to produce a cumulative and synergistic effect on the partnership’s work.

The model of Figure 2 pictures *wheel chocks* to represent the two themes presented in section 4.1.2, which are the perceived barriers to collaboration in the EnRiCH-Québec City partnership. These themes were labeled “Declining community sector’s involvement” and “Differential power relationships”. In a gear system, *chocks* prevent the rotating movement of the *cogs* in the same way as barriers of collaboration can compromise the mechanisms involved in the creation of synergy.

In this model, partnership synergy is conceptualized by the *spark* symbol to represent the energy that is released from a system of intertwined components of collaboration, whose effects are greater than the sum of the individual components. The concept of synergy helps to highlight the relationships between components of collaboration from which the EnRiCH-Québec City partnership draws its ability to make best use of community assets

to accomplish shared goals. An interpretation of the collaborative experience in Québec City in light of how the partnership was able to identify and leverage assets from multiple partners, suggests that synergy is about having “*the right people, in the right place, at the right time*”. In fact, results show that optimal collaboration in the EnRiCH-Québec City partnership happens when the right people, the right place and the right time intersect.

For example, The EnRiCH Project came at a time when many isolated initiatives were taking place in Québec City in response to a general concern and to the high priority attached by governmental agencies to the need for enhanced public safety and security. This public priority results from the recent history of emergencies affecting Québec City and surrounding areas, and the perception that many citizens are plagued with “risk blindness” and an erroneous belief that the city is safe from major crisis. The EnRiCH Project component therefore interacted with local concerns and values to create a timely opportunity for merging existing initiatives (i.e. K-EnRiCH) and strengthening relationships between critical partners (i.e. 211 and City of Québec) through the establishment of formal agreements to advance emergency preparedness among high-risk populations (i.e., provide emergency preparedness training for community organizations).

In addition to interacting with the local context, The EnRiCH Project was embraced by a participant who had a long-term vision of how the Québec City community could benefit from mobilizing diverse stakeholders to discuss the issue of emergency preparedness among high-risk populations through 211. This participant’s role in the community, and particularly her social capital, provided linkages to engage the community sector in the project along with public officials. This demonstrates once again the critical interaction between having the ‘right’ person in the ‘right’ position at the ‘right’ time, as it enabled the community partners to act synergistically for the promotion of The EnRiCH Project and the bringing together of stakeholders who shared the same vision of the collaborative work.

This conception of synergy suggests that barriers to collaboration affect the dynamic balance between having the right people, in the right place, at the right time. One of the

greatest challenges experienced by the EnRiCH-Québec City partnership was the gradual decline in community sector stakeholders' engagement. This touches on the 'people' component of the equilibrium necessary for synergy to occur. With the progressive withdrawal of community stakeholders came the loss of skills diversity to address the collaborative issue in a comprehensive and integrated manner. This has raised particular concern on the part of the Québec city's *Bureau de la sécurité civile* leader of the partnership, whose passion and commitment for the collaborative work have triggered an important reflection on how to meaningfully engage community stakeholders in long-term collaboration without draining their resources in time, staff and money. The idea of structuring the partnership's work around "moments of engagement" emerged as a way to tap into community stakeholders' expertise while respecting their capacity to invest energy in collaboration. This illustrates how leadership and structure in the EnRiCH-Québec City partnership are working together to ensure the heterogeneity of partners and a renewed synergistic balance.

The above examples, based on the results of this study, highlight the sporadic and temporary nature of synergy throughout the development of the EnRiCH-Québec City partnership. Synergy is not a permanent state, but rather the result of special circumstances in which the right people meet in the right place at the right time. This is illustrated in the model by the *spark* symbols that appear in a random fashion along the ascending *spiral* of partnership development. As described in the examples above, synergy can be expressed in many different ways and generate different implications for the development of the EnRiCH-Québec City partnership: it is what has allowed the unique gathering of multi-sectoral stakeholders in the first place, and what lies at the heart of innovative ideas such as the merging of The EnRiCH Project with "le Projet K" and the establishment of a substantial agreement between the City of Québec and the 211 Services for enhancing emergency preparedness among high-risk populations.

The varying sizes of the *sparks* indicate that synergy can occur at various levels of intensity, depending on the extent to which the partnership is capable of facilitating the involvement of a wide cross-section of stakeholder groups, while seizing timely and

locally-relevant opportunities to build on and expand current efforts within the community to further promote emergency preparedness among high-risk populations. Synergy triggers a positive feedback loop on the efficiency of collaboration, as it brings partners to experience simultaneously great progress in the collaborative work, feelings of passion, and the discovery that multi-sectoral stakeholders can share a common purpose despite differences in motivation. The feedback effect can be pictured as a lubricant between the *cogs* that improve overall partnership dynamics and growth.

CHAPTER 5: DISCUSSION

In this study, the overarching purpose is to explore the creation of synergy through the study of dynamics of collaboration within the EnRiCH-Québec City partnership, a community group working towards enhancing resilience and emergency preparedness among high-risk populations. This purpose is addressed through three research questions:

- What are key aspects of synergistic collaboration in community-based participatory research (CBPR) partnerships?
- How did the Québec City community partners perceive their collaborative experience?
- What is synergy in the EnRiCH-Québec City partnership and how can it help to highlight key dynamics of collaboration influencing the activation of assets for emergency preparedness among high-risk populations?

These research questions were answered in the literature review and results sections (Chapter 2 & 4). This emergent model presented in Chapter 4 provides the basis for discussing the main research findings in relation to the existent literature and identifying the implications of the study.

5.1 Discussion of results

Guided by the emergent model provided in section 4.2, the following discussion focuses on connecting the finding to the existing knowledge on partnership synergy, and presenting the implications of this research study.

5.2.1 Synergy and partnership development

The *Model of dynamics of collaboration influencing synergy creation in the EnRiCH-Québec City partnership* presented in Figure 2 can be contrasted with the preliminary conceptual model of Figure 1 provided in Chapter 2, which mapped the dynamics of synergistic collaboration based on a review of the literature. The preliminary model depicts the occurrence of synergy within a sequential process of partnership development made up of three stages – formation, maintenance and institutionalization – each comprising specific dynamics that participate to influence partnership synergy. In light of this model and based on the examination of empirical data from Québec City, it can be established that the EnRiCH-Québec City partnership is at the maintenance stage of partnership development. This stage is concerned with sustaining partners' involvement, planning and implementing competent processes and concrete actions, and identifying intermediate outcomes such as increased awareness of resources. Findings provided in Chapter 4 show consistency with these theoretical elements. In fact, the Québec City partnership is at a stage where it is working towards ensuring the sustainability of the collaborative initiative through the development of an action plan and structural processes that promote the meaningful involvement of partners, especially that of community-based organizations, while addressing specific objectives for emergency preparedness among high-risk populations. The follow-up focus group session of the EnRiCH Community Intervention was meant to enable participants to identify intermediate outcomes arising from the collaboration, and build upon these to progress towards the institutionalization of the partnership.

The preliminary conceptual model suggests that once the partnership reaches the maintenance stage of development, which is characterized by the establishment of a clear

working structure, leadership role and collaborative processes, synergy can be achieved. Consequently, synergy tends to be treated as an end state or a product of successful partnerships. According to Jones and Barry (2011a), this is in fact how most researchers view synergy in partnerships. The model emerging from the results of this study, however, proposes a more dynamic view of synergy and partnership development. Both happen under particular circumstances of collaboration where the right mix of people are in the right place at the right time, and this, at any stages of the partnership's lifecycle. These circumstances influence and are influenced by the process through which the partnership continuously strives to promote the inclusion of diverse stakeholders and ensure that the collaborative work is grounded in the local context and priorities, throughout the different stages of partnership development.

This empirical observation fits in with Bond and Keys' (1993) understanding of synergy in community boards. These authors maintain that synergy is not a permanent state. Rather, it occurs when collaboration and the empowerment of multiple groups (or sectors) co-exist. This understanding allows expanding the concept of synergy beyond a 'product' perspective, which is partly derived from a strict conception of partnership development according to sequential stages. Bond and Keys (1993) admit that the co-existence between empowerment and collaboration "does not occur easily, typically, or completely" (p. 39). This suggests that synergy is a state of optimal functioning that the partnership must constantly strive for throughout its lifecycle, and which, once achieved, can be easily lost if the necessary conditions of empowerment and collaboration are not maintained. It also implies that synergy may be expressed with varying intensity, depending on the extent to which multiple groups are simultaneously empowered and their skills are successfully combined.

Similar to Bond and Keys (1993) work, the results of this study support an understanding of synergy as a process or capability of a partnership to create and maintain the necessary conditions of collaboration that help the partnership to ensure that the work is congruent with the local context and seek the contribution of various stakeholder groups. The findings of this study are therefore consistent with research that confirms that synergy is

more than a product and can also be conceptualized as a partnership process, experience and capability that evolves throughout the partnership's development cycle (Jones & Barry, 2011a, b; Weiss, Miller & Lasker, 2002).

5.2.2 Involvement of the community sector

Current research on synergy also raises one of the greatest challenges of the EnRiCH-Québec City partnership, which is to maintain a diverse group composition throughout the collaboration (Bond & Keys, 1993; Lasker et al., 2001; Weiss, Miller & Lasker, 2002; Lasker & Weiss, 2003; Suarez-Balcazar, Harper & Lewis, 2005; Butterfoss & Kegler, 2009; Jones & Barry, 2011a, b). Bond and Keys (1993) describe how the gradual loss of one sector often underscores the need to enhance their inclusion and influence on the collaboration functioning. According to the work of Lasker and Weiss (2003), the ability of partnership to create synergy is strongly influenced by the way it involves community stakeholders “who understand the needs, assets, priorities, and dynamics of the community” (p.121). In this regard, they propose two types of partnerships who differ in their ability to involve community stakeholders and create synergy: the “lead agency” and the “community engagement” partnership models.

The EnRiCH-Québec City partnership tends to reflect the “lead agency” model, which refers to partnerships that are formed to help a private or public sector organization implement a predetermined program. In this model, the primary role of community stakeholders is one of support to the lead agency through the provision of information about the target population and additional skills to carry out the initiative (Laker & Weiss, 2003). This model has been criticized for limiting the partnership's capacity to create synergy, given that collaboration is mainly led by professionals and gives community stakeholders less opportunity to influence the collaborative work. The “community engagement” model, in contrast, holds greater potential for synergy as it promotes the involvement of community stakeholders in all phases of the partnership's work, including “understanding the problem, developing plans, taking collective action, and refining the partnership's actions over time” (Lasker & Weiss, 2003, p.127).

This information may provide insights as to why the EnRiCH-Québec City partnership is faced with a decrease in the involvement of the community sector, and thus, limited capacity to create synergy. Results support this assumption as the City of Québec leader of the partnership has expressed concern that the gradual decline in involvement was possibly due to her providing the overall coordination of the collaborative work. Moreover, the EnRiCH-Québec City partnership's structure, established around "moments of engagements", does not optimally support the ongoing participation of the community sector in the collaborative work, as advocated in the "community engagement" model. However, research also indicates that meaningful participation does not necessarily imply that each sector exert an equal influence on the collaborative work (Bond & Keys, 1993; Lasker et al., 2001). Rather, it depends on how well roles are brought in line with particular interests and skills of partners (Lasker et al., 2001). The results of this study highlight how the EnRiCH-Québec City partnership aims to achieve this alignment between roles and expertise while supporting a context-sensitive approach to respect the extent to which community stakeholders are able to invest resources in the initiative.

The findings of this study therefore bring awareness to the importance of taking into account the specific resource-constrained conditions of the non-profit sector when trying to involve community stakeholders in long-term collaborative efforts. Consequently, it gives rise to a reflection about practical ways to involve this particular sector in a context-sensitive manner to both preserve the integrity and optimize the potential of community resources to create synergy. In view of the above considerations, synergy can be referred to the ability of the EnRiCH-Québec City partnership to ensure meaningful participation of a diverse array of people by creating workarounds (i.e. structure of "moments of engagement") that deals with the specific contextual influences each sector brings to the collaborative work.

5.2.3 Community readiness

The notion of 'right people, right place, right time' also refers to contextual factors of collaboration, which have been describe in the literature as important influences to the

formation of partnerships and community participation (Sandoval et al., 2012; Kegler & Rigler & Honeycutt, 2010; Schulz et al., 2003). Among these is the concept of community readiness, which provides a valuable perspective to understand Québec City's responsiveness and acceptance of the need to engage in collaboration around the issue of emergency preparedness among high-risk populations (Andrews, Newman, Meadows, Cox & Bunting, 2012; Kegler & Rigler & Honeycutt, 2010; Edwards et al., 2000). Edwards et al. (2000) defines nine stages of readiness ranging from 'no awareness' of the community issue to 'professionalization', which implies in-depth knowledge about the existence of the issue by highly trained professionals, leaders and community stakeholders. They also define six dimensions of readiness, including leadership support and community attitudes towards the prevention of the issue (Kegler & Rigler & Honeycutt, 2010; Edwards et al., 2000).

The successful implementation of the EnRiCH Project initiative in Québec City can be further explained in light of Edwards et al.'s (2000) stages and dimensions of community readiness. In fact, the results of this study show that participants were generally informed and concerned about the potential implications of disasters for the community of Québec City and its high-risk populations groups, and maintained favourable attitude towards organizing efforts to address this issue. Moreover, initiatives and networks were already in place in Québec City to promote the expansion of efforts to enhance emergency preparedness and the protection of high-risk groups. 211 Services and the City of Québec emerged as local experts and active leaders to support The EnRiCH Project initiative from the outset in a credible manner, and solicit participation from community stakeholders not typically involved in emergency preparedness activities. The community readiness framework therefore provides an interesting research avenue to further support the concept of partnership synergy according to the notion: 'Right people, right place, right time'.

5.2.4 The catalytic role of a community outsider

The results of this study illustrate how The EnRiCH Project research body assumed multiple facilitation roles within the EnRiCH-Québec City partnership: a unifying

element, impartial convenor, short-circuit line, translation platform, prioritization tool and launch platform. This underscores the important role an outside body can play in fostering positive interactions among partners to support the discovery and activation of collective assets. The catalytic role of an outsider has been acknowledged in the literature for helping community systems find solutions and drive their own development (Bergdall, 2003). Bergdall (2003) reflects on this topic by describing how effective catalysts “hold up a mirror” to enable the community to “look realistically at itself” and develop interventions adapted to the local culture (p.3). Consequently, the role of outsiders is one of facilitation as it encourages people to do things on their own rather than imposing one way of working to address the issue. Cook (2009) states that the mere fact that the outsider comes from a different place and have no stake in the issue, produces a different response in the community that can be catalyst for change. In fact, he describes how communities often talk to outsiders entirely differently and that, by trying to explain the issue to someone who has no stake in the matter, communities come up with the solutions they need to deal with the issue.

In summary, several findings of this study are supported by the existent literature on partnership synergy. Examining the dynamics of collaboration in light of how the EnRiCH-Québec City partnership was able to harness partners’ resources to address the collaborative issue leads to a more profound understanding of the process of synergy creation and the conditions of time, place and people that are conducive to optimal collaboration.

CHAPTER 6: CONCLUSION

This chapter summarizes the contributions of the research study to the body of knowledge around synergy within health promotion partnerships and presents implications for practice. It also reviews the limitations of this study and the possibilities for future research in this area to carry findings forward. Lastly, this chapter re-examines the research questions and objectives posed in section 1.2, and recapitulate the work that has been done to answer them.

6.1 Contribution to knowledge

This study provided a model derived from an analysis of the dynamics of collaboration within the EnRiCH-Québec City partnership to conceptualize the creation of synergy. This model broadens the vision of synergy and partnership development from the preliminary model based on a review of the literature, to introduce a more dynamic approach based on finding a balance between having the ‘right people, in the right place and at the right time’. This empirically driven model helped to explore dynamics of collaboration in light of how they have influenced the ability of the EnRiCH-Québec City partnership to combine and liberate the assets of diverse partners in the search for solution to address the issue at stake.

This research also helped to address the gap identified in the literature regarding knowledge about functioning processes that enable partnerships to realize their full potential of collaboration and consequently, their ability to achieve the ultimate collaborative goal (Lasker et al., 2001; Weiss, Miller & Lasker, 2002; Lasker & Weiss, 2003; Butterfoss & Kegler, 2009; Jones & Barry, 2011a, b). It also contributed to address the lack of empirical evidence about collaborative processes that enable partnerships to experience high level of functioning. It described facilitators and barriers to collaboration in relation to synergy creation, at a stage where the Québec City partnership is actively working on maintaining the collaboration that has taken place since the beginning of the EnRiCH Community Intervention. The findings of this study emphasize synergy as a

process over a product, which therefore participates to highlight the underlying functioning mechanisms that influence partnership effectiveness. Also Jones and Barry (2011b) indicate that most studies on synergy come from the private sector literature, which is mainly concerned with the product of a synergy rather than the process by which collaborative entities tend towards it. This study therefore contributes both to extending the understanding of synergy as a process and building empirical knowledge about synergy within health promotion partnerships.

The notion of ‘Right people, right place, right time’ is not new and has been applied to other research areas, including strategic workforce management and synergy in the workplace (Hagen, 2012). In the field of community-based participatory research (CBPR) partnership, however, use of this notion to describe synergy in multi-sectoral collaboration is novel. In this study, the notion has proved to be effective in providing a framework to understand the interplay between dynamics of collaboration that emerged from the data, and discussing the changing impact of some elements (i.e., involvement of the community sector) on the ability of the EnRiCH-Québec City partnership to optimally pool assets of partners. This study shows the importance of pursuing a better understanding of the creation of synergy in CBPR partnerships because of the potential benefits and challenges it brings about in partnership functioning and effectiveness.

6.2 Implications for practice

The findings presented in this study may add to the EnRiCH-Québec City partnership’s appreciation of the importance of synergy for accomplishing more than single organizational entity can. Moreover, the conceptualization of synergy offered in this study – ‘right mix of people, in the right place, at the right time’ – may raise awareness from the EnRiCH-Québec City partnership as to how to optimize partners’ complementary assets (skills, perspectives, resources) in a timely and locally sensitive fashion to draw up creative solutions to address the issue of emergency preparedness.

The model presented in the discussion section (Chapter 5), derived from an analysis of dynamics of collaboration in the EnRiCH-Québec City partnership, provide the basis for developing new measures and observations around the concept of synergy. The Weiss synergy scale reflects synergy as a product and therefore measures this construct in terms of partnership performance by asking the question “how well is a partnership able to do certain things” (Jones & Barry, 2011b, p.42). In addition to measuring partnership performance, the Jones synergy scale also includes a measure about partnership experience by asking questions such as “how often does the partnership experience certain things” (Jones & Barry, 2011b, p.42).

In light of the findings of this study, synergy could be measured by asking the general question of ‘how does the partnership strive to ensure the right mix of people, and seize timely and locally-relevant opportunities for collaboration?’ Other indicators of synergy could be developed around inclusion processes by which partnerships ensure the meaningful involvement of community stakeholders and create workarounds that deals with specific contextual influences (i.e., constrained resources). Indicators could also provide information about community readiness to carry out collaborative efforts. Finally, since the role of The EnRiCH Project as a community outsider has been particularly important in enhancing collaboration in the EnRiCH-Québec City partnership, measures of synergy could be developed or adapted to try to identify and evaluate the catalytic functions of this external role in CBPR collaboration.

6.3 Limitations of the study

This study has several limitations that should be acknowledged. First, the findings of this study are specific to the case of the EnRiCH-Québec City partnership, which limits the generalizability of the results to other settings. Different dynamics of collaboration to support synergy may emerge in other partnerships. However, external validity in qualitative research can be enhanced through the use of thick description of the setting in which the study is conducted, to allow other researchers to apply findings in similar situations (Creswell, 2007). This thesis study tried to improve the generalizability of

research findings by providing thick descriptions of The EnRiCH Community Intervention within which the Québec City partnership was established.

Second, the study sample (N=23) was purposefully selected to include the group of participants involved in the last data collection phases of the EnRiCH Community Intervention: the follow-up focus group session, and the 4th and 5th round of telephone interviews. This was to draw an up-to-date portrait of the dynamics of collaboration shaping the EnRiCH-Québec City partnership. This study sample consisted of a mix of returning participants from previous phases of The EnRiCH Community Intervention, and new recruits who were identified as potential contributors to the partnership's work. Consequently, the regular attendees were more likely to offer detailed descriptions on the evolving dynamics of collaboration within the partnership, compared to the new members. This may have influenced the results by placing more weight on the experiences of participants with greater knowledge about the partnership's work.

Finally, while this research study examined dynamics of collaboration in relation to how they might influence partnership synergy, The EnRiCH Interview Guide (Appendix B) was not initially designed to explore this relationship. Awareness of the literature on synergy emerged as The EnRiCH Community Intervention was taking place, and it proved to be particularly relevant in understanding participants' collaborative experience from an asset-based perspective. However, this may have reduced the validity with which inferences about the relation between dynamics of collaboration and synergy were made.

6.4 Future research

This research explores synergy within the EnRiCH-Québec City partnership and how this concept can help to highlight key dynamics of collaboration influencing the ability of the partnership to successfully leverage assets for enhancing emergency preparedness among high-risk populations. As a next step, it would be helpful to further validate the model of synergy creation provided in this study by conducting more case studies with CBPR partnerships in different contexts. Within The EnRiCH Project program, a useful research avenue would be to validate the model of synergy creation in the Québec City partnership by applying it to the experience of other EnRiCH communities (Truro, Waterloo, Gatineau, and Calgary), which have participated in the same intervention. This is especially interesting since research show that partnership functioning is influenced by different cultures, such as national cultures, personal identity cultures, subcultures of disciplines and organization cultures (Jones & Barry, 2011b). Other case studies may therefore find other dynamics of collaboration that shape the creation of synergy in CBPR partnerships. It would also be interesting to go back in the community of Québec City in a few years from now to see how the collaboration has evolved without the presence of a community outsider and facilitator to collaboration, such as the EnRiCH research team.

As mentioned earlier, the concept of community readiness corresponds well to the principle of having ‘the right people, in the right place, at the right time’. Future research could explore the creation of partnership synergy according to the Community Readiness Model provided by Edwards et al. (2000), which describes stages and dimensions of readiness that determine whether a collaborative initiative such as The EnRiCH Project can be successfully implement and supported by the community to bring about community change.

This research examined the occurrence of synergy in the Québec City partnership within the duration of The EnRiCH Project Collaborative Asset Mapping Intervention (November 2011 – January 2013). An important question in relation to synergy is

whether the outcome generated from the partnership's work is a better outcome than each partner could provide on its own. For example, the EnRiCH-Québec City partnership could produce a new emergency management plan that would take into greater consideration the needs and assets of high-risk populations. The question is, however, whether this emergency management plan would be better than what each single organization could produce on its own. While findings of this study have shown the ability of the Québec City partnership to produce synergistic outcomes, more longitudinal studies are needed to establish whether having synergy in CBPR partnerships leads to improved community change outcomes.

6.5 Research questions and objectives revisited

As outlined in the introduction, this study posed three main research questions and objectives, which were all considered and addressed in this document. A list of the deliverables is provided below:

1. What are key aspects of synergistic collaboration in community-based participatory research (CBPR) partnerships?

Objective: Provide a description of the functional components supporting synergistic collaboration in health-promoting partnerships.

Chapter 2 of this thesis research provided a review of the literature on components of partnership functioning that influence a partnership's ability to generate synergy. They include community context, leadership, administration and management, structure, and processes. The concept of structure refers to having formalized roles, responsibilities, and objectives to increase partnership effectiveness. Processes involve functioning mechanisms such as communication, conflict management, decision-making and positive relationships. These components were contextualized within partnership stages of development and provided the building blocks of the preliminary model of dynamics of collaboration (Figure 1) found in Chapter 3.

2. How did the Québec City community partners perceive their collaborative experience?

Objective: Use semi-structured interviews and focus group discussions to provide a description of the participants' experiences in collaborating within a multi-sectoral partnership.

Interviews and focus group discussions were conducted using The EnRiCH Interview Guide (Appendix B) and Follow-up Session Protocol (Appendix C). A detailed description of participants' perceptions and experiences of working together in the partnership is found in Chapter 4: Results, and is organized into facilitators and barriers to collaboration.

3. What is synergy in the EnRiCH-Québec City partnership and how can it help to highlight key dynamics of collaboration influencing the activation of assets for emergency preparedness among high-risk populations?

Objective: Provide an inductive analysis and conceptual model of the dynamics of collaboration influencing the creation of synergy within the EnRiCH-Québec City partnership.

Chapter 5 provided an interpretation of synergy in the EnRiCH-Québec City partnership, based participants' experiences, which was used to develop an empirical model of dynamics of collaboration that influenced the creation of synergy (Figure 2). The model highlights relationships between facilitators and barriers to collaboration, as well as synergy. The analysis found that creation of synergy in the EnRiCH-Québec City partnership was about having *“the right people, in the right place, at the right time”*.

BIBLIOGRAPHY

- 211 Québec Regions. (2013). *What is 211?* Retrieved December 15th, 2013 from <http://www.211quebecregions.ca/en/211.php>
- Andrews, J. O., Newman, S. D., Meadows, O., Cox, M. J., & Bunting, S. (2012). Partnership readiness for community-based participatory research. *Health Education Research, 27*(4), 555-571. doi:10.1093/her/cyq050
- Antonovsky, A. (1996). The salutogenic model as a theory to guide health promotion. *Health Promotion International, 11*(1), 11-18
- Antonovsky A., & Sourani, T. (1988). Family sense of coherence and family adaptation. *Journal of Marriage and Family, 50*(1), pp. 79-92.
- Barriball, K. L., & While, A. (1994). Collecting data using a semi-structured interview: A discussion paper. *Journal of Advanced Nursing, 19*(2), 328-335.
- Bergdall, T. (2003). Reflections on the catalytic role of an outsider in asset based community development. *Unpublished Manuscript. Asset-Based Community Development Institute, School of Education and Social Policy, Northwestern University*. Retrieved September 3rd, 2013 from <Http://www.Abcdinstitute.org/docs/ABCD-Outside-Catalyst.Pdf>
- Bond, M. A., & Keys, C. B. (1993). Empowerment, diversity, and collaboration: Promoting synergy on community boards. *American Journal of Community Psychology, 21*(1), 37-57. doi:10.1007/BF00938206
- Brunner, E., Maier, M., Gritsch, A., & Jenull, B. (2009). The university - A coherent setting?: Measuring students' sense of coherence. [Die Universität - ein kohärentes Setting? : Messung des studentischen Kohärenzgeföhls] *Pravention Und Gesundheitsforderung, 4*(1), 66-70.
- Butterfoss, F.D. & Kegler, M.C. (2009). The Community Coalition Theory. In R.J. DiClemente, R.A. Crosby and M.C. Kegler (Eds.), *Emerging Theories in Health Promotion Practice and Research* (chapter 9). Retrieved December 15th, 2012 from <http://books.google.ca/books?hl=en&lr=&id=vfIIIjU9xMC&oi=fnd&pg=PA237&ots=Q4DdBJGTvD&sig=81rHR2GYUrDsL-1XCcAsLYvvK-8#v=onepage&q&f=false>
- Butterfoss, F. D., Goodman, R. M., & Wandersman, A. (1996). Community coalitions for prevention and health promotion: Factors predicting satisfaction, participation, and planning. *Health Education and Behavior, 23*(1), 65-79. doi:10.1177/109019819602300105
- Canadian Interprofessional Health Collaborative. (2010). A National Interprofessional Competency Framework. Retrieved February 24th, 2014 from:

http://www.cihc.ca/files/CIHC_IPCompetencies_Feb1210.pdf

- Corwin, L., Corbin, J.H., & Mittelmark, M.B. (2012). Producing Synergy in Collaborations: A Successful Hospital Innovation. *The Innovation Journal: The Public Sector Innovation Journal*, 17(1): article 5. Retrieved February 24th, 2104 from: http://www.innovation.cc/scholarly-style/lise_corwin_v17i1a5.pdf
- Chidambaram, L., & Bostrom, R.P. (1996). Group development (I): A review and synthesis of development models. *Group Decision and Negotiation*, 6(2), 159-187. doi: 10.1023/A:1008603328241
- Cook, R. (2009, December 4). Change and the role of the outsider. [Video file]. Retrieved from <http://www.youtube.com/watch?v=u07SNPrnO0g>
- Corneil, W., O'Sullivan, T., Lemyre, L., McCrann, L. & Kuziemsky, C. (2011). *Instructional video of the Structured Interview Matrix*. Retrieved December 19th, 2013 from <http://www.enrichproject.ca/publications-and-resources.html>
- Cramm, J. M., Phaff, S., & Nieboer, A. P. (2013). The role of partnership functioning and synergy in achieving sustainability of innovative programmes in community care. *Health and Social Care in the Community*, 21(2), 209-215. doi:10.1111/hsc.12008
- Creswell, John W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Edwards, R. W., Jumper-Thurman, P., Plested, B. A., Oetting, E. R., & Swanson, L. (2000). Community readiness: Research to practice. *Journal of Community Psychology*, 28(3), 291-307.
- Eisenhardt, Kathleen M. (1989). Building theories from case study research. *Academy of Management Review* 14: 532-550.
- Eriksson, M., & Lindström, B. (2008). A salutogenic interpretation of the Ottawa charter. *Health Promotion International*. 23(2), 190-199.
- Eriksson, M. (2007). *Unravelling the mystery of salutogenesis: the evidence base of the salutogenic research as measured by Antonovsky's Sense of Coherence Scale*. (Doctoral dissertation). Fokhälsan Research Centre, Helsinki
- Eriksson, M., Lindström, B., & Lilja, J. (2007). A sense of coherence and health. salutogenesis in a societal context: Åland, a special case? *Journal of Epidemiology and Community Health*, 61(8), 684-688
- Eriksson, M., & Lindström, B. (2006). Antonovsky's sense of coherence scale and its relation with quality of life: A systematic review. *Journal of Epidemiology and Community Health*, 61(11), 938-944
- Federal Emergency Management Agency (FEMA). (2012). *Whole Community*. Retrieved

November 27th, 2013 from <http://www.fema.gov/whole-community>

- Florin, P., Mitchell, R., & Stevenson, J. (1993). Identifying training and technical assistance needs in community coalitions: A developmental approach. *Health Education Research*, 8(3), 417-432.
- Foot, J., and Hopkins, T. (2010). *A glass half full: how an asset approach can improve community health and wellbeing*. Improvement and Development Agency, London.
- Foot, J. (2012). *What makes us healthy? The asset approach in practice: evidence, action, evaluation*. Retrieved January 15th, 2012 from <http://www.assetbasedconsulting.net/uploads/publications/WMUH.pdf>
- Foster-Fishman, P. G., Berkowitz, S. L., Lounsbury, D. W., Jacobson, S., & Allen, N. A. (2001). Building collaborative capacity in community coalitions: A review and integrative framework. *American Journal of Community Psychology*, 29(2), 241-261. doi:10.1023/A:1010378613583
- Graeser, S. (2011). Salutogenic factors for mental health promotion in work settings and organizations. *International Review of Psychiatry*, 23(6), 508-515. doi:10.3109/09540261.2011.637909
- Granner, M. L., & Sharpe, P. A. (2004). Evaluating community coalition characteristics and functioning: A summary of measurement tools. *Health Education Research*, 19(5), 514-532.
- Gray, E., Mayan, M., & Lo, S. (2009). What makes a partnership successful? lessons to be learnt from families first partnership edmonton. *Currents: Scholarship in the Human Services*, 8(2)
- Hagen, A. (2012, November 12th). Right People, Right Place, Right Time... Wrong Mantra? [Web log comment]. Retrieved October 29th, 2013 from <http://strategicworkforceplanning.blogspot.ca/2012/11/right-people-right-place-right-time.html>
- Hsieh, H., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health*, 19, 173-202.
- Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (2001). Community-based participatory research: Policy recommendations for promoting a partnership approach in health research. *Education for Health*, 14(2), 182-197. doi:10.1080/13576280110051055

- Israel, B.A., Eng, E., Schulz A. J., & Parker, E.A. 2005. Introduction to methods in community-based participatory research for health. In *Methods in Community-Based Participatory Research for Health*, Israel, B.A, Eng, E., Schulz, A.J., Parker, E.A. (eds). Jossey-Bass: San Francisco, CA; p.3-26.
- Jones, J., & Barry, M. M. (2011a). Exploring the relationship between synergy and partnership functioning factors in health promotion partnerships. *Health Promotion International*, 26(4), 408-420. doi:10.1093/heapro/dar002
- Jones, J., & Barry, M. M. (2011b). Developing a scale to measure trust in health promotion partnerships. *Health Promotion International*, 26(4), 484-491. doi:10.1093/heapro/dar007
- Kada, O., Brunner, E., & Maier, M. (2011). The hospital: A coherent setting? [Das Krankenhausein kohärentes Setting?] *Pravention Und Gesundheitsforderung*, 6(4), 299-304.
- Kegler, M. C., Rigler, J., & Honeycutt, S. (2010). How does community context influence coalitions in the formation stage? a multiple case study based on the community coalition action theory. *BMC Public Health*, 10 doi:10.1186/1471-2458-10-90
- Kickbusch, I., & Quick, J. (1998). Partnerships for Health in the 21st Century. *World Health Statistics Quarterly*, 51(1): 68-74.
- Kivlighan Jr., D. M., & Miles, J. R. (2007). Content themes in group dynamics: Theory, research, and practice, 1997-2002. *Group Dynamics*, 11(3), 129-139.
- Kuziemsky, C., O'Sullivan, T., & Corneil, W. (2012). An Upstream-Downstream Approach for Disaster Management Information Systems Design, *Proceedings of the ISCRAM Conference*, Vancouver, BC. Retrieved April 2012, from <http://www.iscramlive.org/ISCRAM2012/proceedings/138.pdf>
- Lasker, R. D., Weiss, E. S., & Miller, R. (2001). Partnership synergy: A practical framework for studying and strengthening the collaborative advantage. *Milbank Quarterly*, 79(2), 179-205.
- Lasker, R. D., & Weiss, E. S. (2003). Creating partnership synergy: The critical role of community stakeholders. *Journal of Health and Human Services Administration*, 26(1-2), 119-139.
- Lincoln Y.S. and E.G. Guba. (1985). *Naturalistic inquiry*. Beverly Hills, CA.
- Lindström, B. & Eriksson, M. (2005). Salutogenesis. *Journal of Epidemiological Community Health*, 59: 440-442.
- Lindström, B., & Eriksson, M. (2006). Contextualizing salutogenesis and Antonovsky in

- public health development. *Health Promotion International*, 21(3), 238-244.
- Marshall C. and G.B. Rossman. (2011). *Designing qualitative research, 5th ed.* Thousand Oaks: Sage.
- McLean, J. (2011). *Asset based approach for health improvement: redressing the balance.* Glasgow Centre for Population Health.
- Miles, M.B., and Huberman, A.M. (1994). *Qualitative data analysis, 2nd ed.* Thousand Oaks, CA: Sage.
- Morgan, A. (2012) Thinking and acting differently: An asset model for Public Health [PDF document]. Retrieved December 15th, 2011 from http://www.gcph.co.uk/assets/0000/3027/Glasgow_2012_Antony_Morgan_25_01_12_.pdf
- Morgan, A., & Davies, M., & Ziglio, E. (2010). A Salutogenic Approach to Tackling Health Inequalities. In *Health Assets in a Global Context: Theory, Methods, Action* (Chapter 2). Retrieved January 20th, 2012 from <http://site.ebrary.com.proxy.bib.uottawa.ca/lib/oculottawa/docDetail.action?docID=10403676>.
- Morgan, A., & Ziglio, E. (2007). Revitalizing the evidence base for public health: An assets model. *Promotion & Education*, Suppl 2, 17-22.
- Mosley-Hänninen, P. (2009). *Contextualizing the Salutogenic Perspective on Adolescent Health and the Sense of Coherence in Families: A study among adolescents and their families in the Swedish speaking Finland.* (Masters thesis). Retrieved June 12th, 2012 from <https://publications.theseus.fi/handle/10024/3067>
- O'Sullivan, T.L., Corneil, W., Kuziemy, C., Lemyre, L., & McCrann, L. (2013a). *The EnRiCH Community Intervention: Collaborative Asset-Mapping to Enhance Resilience for High-Risk Populations*, a publication prepared on behalf of The EnRiCH Collaboration. Retrieved December 19th, 2013: <http://enrichproject.ca/publications-and-resources.html>
- O'Sullivan, T.L., Toal-Sullivan, D., Charles, K., Corneil, W. & Bourgoin, M. (2013b). *The CHAMPSS Functional Capabilities Framework for Mapping Assets and Needs for Support.* Retrieved December 19th, 2013 from: www.enrichproject.ca
- O'Sullivan, T. L., Kuziemy, C. E., Toal-Sullivan, D., & Corneil, W. (2012). Unraveling the complexities of disaster management: A framework for critical social infrastructure to promote population health and resilience. *Social Science and Medicine*
- Osmond, J. (n.d.). Community coalition action theory as a framework for partnership development. Retrieved December 5th, 2012 from www.dshs.state.tx.us/wellness/PDF/ccat-10.29.08.pdf

- Resilience and High Risk Populations (RHRP) Research Lab. (2013a). *The RHRP Research Lab*. Retrieved November 27th, 2013 from: <http://www.enrichproject.ca>
- Resilience and High Risk Populations (RHRP) Research Lab. (2013b). *About the EnRiCH Project*. Retrieved November 27th, 2013, from: <http://www.enrichproject.ca/enrich.html>
- Resilience and High Risk Populations (RHRP) Research Lab. (2013c). *Target Communities*. Retrieved November 27th, 2013 from: <http://www.enrichproject.ca/target-communities.html>
- Resilience and High Risk Populations (RHRP) Research Lab. (2013d). *EnRiCH International Network*. Retrieved November 27th, 2013 from: <http://www.enrichproject.ca/enrich-international-research-network.html>
- Rowley, J. (2012). Conducting research interviews. *Management Research Review*, 35(3-4), 260- 271.
- Sandoval, J. A., Lucero, J., Oetzel, J., Avila, M., Belone, L., Mau, M., et al. (2012). Process and outcome constructs for evaluating community-based participatory research projects: A matrix of existing measures. *Health Education Research*, 27(4), 680-690.
- Schulz, A. J., Israel, B. A., & Lantz, P. (2003). Instrument for evaluating dimensions of group dynamics within community-based participatory research partnerships. *Evaluation and Program Planning*, 26(3), 249-262.
- Suarez-Balcazar, Y., Harper, G. W., & Lewis, R. (2005). An interactive and contextual model of community-university collaborations for research and action. *Health Education and Behavior*, 32(1), 84-101. doi:10.1177/1090198104269512
- Weiss, E. S., Anderson, R. M., & Lasker, R. D. (2002). Making the most of collaboration: Exploring the relationship between partnership synergy and partnership functioning. *Health Education and Behavior*, 29(6), 683-698. doi:10.1177/109019802237938
- Williams, C. (2007). Research Methods. *Journal of Business & Economic Research*, 5(3), 65-72
- Wood, D. J., & Gray, B. (1991). Toward a Comprehensive Theory of Collaboration. *The Journal of Applied Behavioral Science*, 27(139): 139-62.
- Yin, Robert K. (2003). *Applications of case study research, 2nd ed.* Thousand Oaks, Sage.

Appendix A: Consent form

This Appendix is the Consent Form that has been given to the key informants, once they agreed to participate in the follow-up session of The EnRiCH Community Intervention. This form has been sent to the University of Ottawa ethics board for approval before the beginning of the study.



uOttawa

Université d'Ottawa
École
interdisciplinaire des
sciences de la santé
Faculté des
sciences de la santé

University of Ottawa
Interdisciplinary
School of Health
Sciences

Formulaire de consentement

Titre du projet de recherche :

Augmenter la résilience parmi les populations à haut risque pour maximiser la capacité de prévention, d'intervention et de récupération en cas de catastrophe (EnRiCH)

Chercheur principal :

Tracey O'Sullivan
Faculté des sciences de la santé, Université d'Ottawa

Co-chercheurs :

Louise Lemyre, Linda Garcia, Jeff Jutai, Sanni Yaya, Craig Kuziemy, Wayne Corneil, Behnam Behnia

BUT

Ce projet a été mis sur pied afin de répondre au besoin de mener des recherches sur les mécanismes de soutien requis pour rehausser la résilience des populations à haut risque avant, pendant et après une situation d'urgence communautaire. L'objectif global du projet est de concevoir, de mettre en œuvre et d'évaluer des programmes d'intervention adaptés, afin de rehausser le degré de préparation chez les populations à haut risque dans quatre communautés au Canada.

À la demande des groupes communautaires qui participent au projet, nous avons décidé de continuer les activités d'EnRiCH pour inclure une phase de suivi. Cette phase inclura une séance de groupe semblable aux séances précédentes, pour discuter des activités des membres du groupe qui se relie à la tâche d'identification d'atouts, ainsi que la mise à jour du degré de préparation aux situations de catastrophe ou le développement au niveau communautaire.

VOTRE PARTICIPATION

Cette étude est menée dans quatre villes canadiennes. Nous demandons aux participants de prendre part à un groupe de discussion dans leurs communautés d'une durée approximative de quatre heures. Cette discussion portera sur la mise à jour de l'exercice d'identification d'atouts qui a été fait dans le cadre d'une phase antérieure du projet, et soulignera les prochaines étapes pour la collaboration. Suite à la session, les

participants seront appelés à participer à une entrevue téléphonique, 30 minutes de durée, afin de faire un rapport sur leurs expériences lors de leur participation à cette tâche de collaboration.

Vous êtes invité(e) à participer, en raison de votre participation antérieure au projet. Si vous acceptez, votre participation à l'étude comprendra la participation à un groupe de discussion d'une durée de quatre heures, et un suivi téléphonique de 30 minutes. Une collation et des boissons seront offertes pendant le groupe de discussion; si vous avez des allergies ou des intolérances alimentaires, veuillez nous en faire part.

Le groupe de discussion et l'entrevue téléphonique seront enregistrés sur un magnétophone. Tous les enregistrements audio seront transcrits (tapés à la dactylo) et analysés. Ceci nous permettra de veiller à ce que l'information soit recueillie de façon précise. Aux fins de cette étude, nous vous demanderons aussi de répondre à quelques questions générales (par exemple, votre âge, votre rôle actuel à titre de fournisseur, depuis combien de temps vous occupez cet emploi ou faites du bénévolat dans ce rôle actuel).

AVANTAGES ASSOCIÉS À VOTRE PARTICIPATION

Votre participation dans cette étude contribuera à l'identification de mécanismes de soutien pour les populations à haut risque. À un niveau personnel, vous aurez la chance de découvrir des informations qui pourraient être pertinentes dans le cadre de l'organisme dans lequel vous travaillez.

RISQUES

Cette étude est centrée sur la préparation aux situations de catastrophes. Donc, en participant à cette étude, il est possible que vous éprouviez du stress ou un inconfort psychologique ou émotif en discutant de ce sujet. Veuillez prendre note que vous pouvez refuser de répondre à certaines des questions, soit lors du groupe de discussion ou de l'entrevue. Vous avez également le droit de vous retirer en tout temps de l'étude.

À tout moment, si vous ressentez le besoin d'un suivi ou de conseils, je vous donnerai les numéros de téléphone des services psychologiques offerts dans votre région. Si vous éprouvez des émotions négatives après avoir participé à cette discussion, n'hésitez pas à en discuter avec le facilitateur, Dr Wayne Corneil, qui est un psychothérapeute agréé offrant des consultations aux intervenants d'urgence.

Veillez noter que si vous décidez de vous retirer du groupe de discussion alors que le groupe est en cours, il ne sera pas possible de séparer les réponses que vous avez fournies jusqu'à ce moment du reste des données, car les données sont recueillies à partir des enregistrements du groupe de discussion.

ANONYMAT ET CONFIDENTIALITÉ

Afin de protéger votre identité, votre nom ne sera pas utilisé sur les enregistrements et les documents que nous conserverons. Les réponses écrites ne permettront d'identifier les participants que par un numéro. Compte tenu du type de groupe de discussion, il y a une interaction entre les participants et donc, l'anonymat ne peut être garanti. Les participants peuvent être cités dans les rapports de recherche, mais aucune des citations

ne contiendra le nom des participants ou des renseignements permettant de les identifier. Aucun identificateur personnel ne sera utilisé dans les rapports de recherche, les présentations ou les publications associés à cette étude.

Seule l'équipe de recherche aura accès aux données. Toutes les données imprimées seront conservées dans un classeur verrouillé dans mon laboratoire de recherche. Les fichiers de données électroniques seront conservés dans un répertoire verrouillé par un mot de passe et seuls les membres de l'équipe de recherche et le personnel d'assistance à la recherche auront accès à ce mot de passe. L'information recueillie pour cette étude sera conservée pendant 20 ans; après cette période, tous les documents et matériel imprimés et électroniques, y compris la liste de participants, seront détruits.

RÉTRIBUTION

Une rétribution de 25,00 \$ vous sera versée par l'Université d'Ottawa lors de la séance de discussion en groupe, afin de vous dédommager pour toute dépense relative à votre participation à cette étude.

SIGNATURES

Votre participation est volontaire et vous êtes libre de vous retirer de l'étude en tout temps. En apposant votre signature à la page 4 de ce formulaire, vous indiquez que vous avez compris l'information relative à votre participation au projet de recherche et que vous acceptez de participer. Si vous devez obtenir l'approbation de votre organisation, le signataire concerné peut également signer à la page 4.

Pour toute question concernant vos droits à titre de participant à cette recherche, n'hésitez pas à communiquer avec moi ou avec le responsable de la déontologie en recherche de l'Université d'Ottawa, par courrier, par courriel ou par téléphone :

Adresse postale: Responsable de la déontologie en recherche
Subventions de recherche et déontologie

Nom du participant (écrire en lettres moulées) : _____

Signature du participant : _____

Date : _____

Nom du chercheur (écrire en lettres moulées) : _____

Signature du chercheur : _____

Date : _____

Approbation de l'organisation (au besoin) : _____

Date : _____

Appendix B: The EnRiCH Interview Guide

This appendix presents The EnRiCH Interview Guide that was used to assess connectedness and other aspects of collaboration in the Québec City community group, throughout the EnRiCH Community Intervention. Additional probes have been incorporated into the interview guide as the community intervention unfolded, to capture new and emerging dynamics of collaboration. These additions are indicated with an asterisk (*).

The EnRiCH Interview Guide

Reference scale for the questions where they are asked to provide a rating (1 = lowest; 5 = highest).

*Definition of **connectedness***: the extent to which you feel connected or linked with a web of people, organizations, resources and information in your community.

1. Please describe the organizations you work with in your community.
Probe: In your work, do you do any direct care for people with functional limitations?
2. Please indicate the number of community organizations you work with on a daily basis (weekly? monthly?) in the context of performing the duties for your work (paid or unpaid).
3. Connectedness has been defined as (give definition). On a scale of 1-5, how would you describe the extent of your connectedness in your community?

Probe: Are you satisfied with this level of connectedness? If not, how would you like to change it?
4. On a scale of 1 to 5, please rate how your organization supports or encourages collaboration?
 - Probe: Please explain your rating
 - Probe: What type of support is provided for collaboration?
 - Probe: What challenges have you encountered in trying to collaborate? Can you provide a specific example?
 - Interviews 2-4: Has this changed since your last interview?
5. Using the same rating scale, how confident do you feel about your ability to fulfill your responsibilities in a disaster response in the event of a community disaster (such as an ice storm, flood or fire)?
 - Probe: Please explain your rating

6. On a scale of 1 to 5, how would you describe the potential of this collaborative group who are participating in the EnRiCH project to sustain its activities over the next year?
 - Probe: Please explain your rating
7. Using the same rating scale, how would you describe the political climate in your organization with respect to supporting collaboration with the participants in this EnRiCH group in your community?
 - Probe: Please explain your rating
8. On a scale of 1 to 5, would you say you have the resources (equipment, money, people) you need to sustain collaboration with this group?
 - Probe: Please explain your rating
9. On a scale of 1 to 5, how likely is it that you will participate in the online component of the collaborative task over the next month?
Probe: Please explain your rating
10. What do you hope to get out of your participation in the EnRiCH session (project)?
11. Please rate your sense of belonging to this EnRiCH collaborative group in your community using the same 1 to 5 rating scale. (Interviews 2-4)
 - Probe: Please explain your rating
 - Probe: What was your sense of ownership over the group? *
 - Probe: Do you feel you can express your opinion within the group? *
 - Probe: What do you think about the trust/openness amongst the group? *
 - Probe: Over the past months, has the degree of trust and openness between group members increased, remained the same, or decreased? *
12. Please describe how this collaborative group has structured itself.
 - Probe: What type of leadership has evolved within the group?
 - Probe: Has it been effective?
 - Probe: What makes that type of leadership successful? What are the skills found in the leader? *
 - Probe: To what extent do members share roles and tasks? *
 - Probe: What are the relationships like? How would you describe the relationships?
 - Probe: How satisfied are you with your influence in the group? *
 - Probe: Does this group have the right mix of people?
 - Probe: What, if anything would you change about the structure?
13. Has your participation in the project influenced the way you work?
 - Probe: What benefits have you gained from working with this group? *

14. Please describe whether your perceptions of preparedness for disasters has changed or remained the same over the course of this project.
 - Probe: Have you done anything differently in terms of your own preparedness for disasters?
15. Has the group identified any common goals after the EHRIT Mapping Session?
Probe: How was this process accomplished?
16. Please describe the level of commitment among the group.
 - Probe: Are you satisfied with the way the people and organizations work together? *
17. Have any new people joined the group?
 - Probe: How were they integrated?
 - Probe: What were the challenges that new members faced in integration?
18. Please explain any relationships between this group and the connectedness in the community at this time.
19. Have there been any major changes in the community within the past month?
20. How does this collaborative group make decisions with regards to the contingency plans?
 - Probe: How committed to you feel to the decisions that are being made by the group? *
 - Probe: How much is the group able to make the necessary decisions in order to keep the project moving forward? *
21. How does this group communicate internally? Externally? Informally? Formally?
22. Do people with functional needs participate fully in contingency planning with this group?
 - Probe: What accommodations are made to facilitate this?
23. In the past month, have there been any major changes in the direction this collaborative group is going?
24. Please describe the process that has evolved to develop the contingency plans in your organization and in the community.
 - Probe: Do you feel your viewpoint is reflected in the contingency plans (or the work that has been accomplished to date)?
 - Probe: Is anything missing from the plans?
25. Has the work of this collaborative group had any influence on the resilience of this community?

- Probe: What kind of influence you saw the process having in the community if there was any? *
26. Is there anything that you've liked to seen done differently with regard to the project?
Is there anything you want to add on (the sessions, the group, where are we going)?

Appendix C: The EnRiCH Follow-Up Session Protocol

This Appendix presents the follow-up session protocol that guided the cost benefit analysis of the EnRiCH Community Intervention at the individual (micro), organizational (meso) and community (macro) levels.

The EnRiCH Follow-Up Session Protocol

Comment voulez-vous mesurer le succès d'EnRiCH?

Revenant sur les événements récents comme la tempête tropicale Sandy, pensez à l'implication que cet événement a eue sur vous, votre organisation et la communauté en général.

AVANTAGES:

Remémorez-vous le temps avant EnRiCH et réfléchissez à ce que c'était pour vous, votre organisation et la communauté.

Qu'est qui a changé à la suite de votre participation à EnRiCH pour vous, votre organisation et la communauté?

- Quels sont les avantages personnels qui ont découlés de votre implication dans le projet EnRiCH (micro)?
- Quels sont les avantages obtenus pour votre organisation suite à la participation au projet EnRiCH (mésos)?
- Quels sont les avantages obtenus pour la communauté suite à l'intervention EnRiCH (macro)?

COÛTS:

Pour obtenir ces avantages, quels ont été les investissements (coûts)?

- Comment avez-vous contribué à cette initiative (micro)?
- De quelle manière votre organisation a-t-elle contribué à cette initiative (mésos)?
- Comment la communauté a-t-elle contribué à cette initiative (macro)?

L'AVENIR DE EnRiCH:

Quelle est votre vision de l'avenir d'EnRiCH d'ici à l'année prochaine?

Quels seraient les investissements requis pour maintenir EnRiCH dans la ville de Québec?