

Building on a YMCA's health and physical activity promotion
capacities: A case study of a researcher-organization
partnership to optimize adolescent programming

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LIST OF ABBREVIATIONS

ASP: Active Script Program

BAEW: Be Active Eat Well

BMI: Body Mass Index

CDC: Centers for Disease Control and Prevention

HPC: Health Promoting Communities

HPHS: Health Promoting Health Service Project

IYM: It's Your Move!

MYP: Ma'alahi Youth Project

NSW: New South Wales

OPIC: Obesity Prevention in Communities

PDF: Portable Document Format

RCT: Randomized Controlled Trial

SCT: Social Cognitive Theory

TAAG: Trial of Activity for Adolescent Girls

TTM: Transtheoretical Model

WFL: Well for Life

ABSTRACT

North American adolescents are not meeting physical activity guidelines for health, thus, understanding how to increase this population's physical activity is crucial. Building on organizations' capacities to develop and sustain popular health promoting programs is a viable approach, but one that has rarely been used in physical activity intervention research.

To build on the capacity of a YMCA to promote physical activity to the teenagers they serve, the YMCA and I formed a participatory research partnership, developing and implementing means to evaluate and inform the YMCA teen program. Our partnership and our work served as the object of my case study with which I sought to understand the processes contributing to sustainable organizational capacity changes.

The specific case understudy pertains to two and a half years of qualitative data. I collected all email between me and YMCA partners, conducted semi-structured interviews with partners at specific time points over and conversational interviews throughout the case study period. Internal YMCA documents as well as those produced through our partnership, and field notes also informed the case. I used inductive and deductive thematic analysis to analyse the data.

Findings illustrate that workforce and organizational development capacities at the YMCA were increased through our partnership, resource allocation, and leadership. Specifically, through a shared leadership process, whereby, I would respond to YMCA partners' perceived needs, yet also guide them beyond those needs, partners and I combined our complementary objectives, knowledge, and skills to generate an integrated program vision, rationale, and evaluation results. This integrated program perspective provided YMCA partners with validation, reminders, and awareness regarding their work processes and the teen program. In turn, these intermediary outcomes contributed to practice changes YMCA partners have maintained and built upon, regarding programming, health promotion, and evaluation. Notably, contextual aspects of the partnership, namely, partners' reciprocity and patience contributed to its success.

This case study illustrates how a university researcher and a YMCA can partner to develop and implement a program evaluation, results of which can help YMCA partners make research-informed decisions, which may in turn positively impact physical activity and other organizational programs. Moreover, the findings indicate the participatory process contributed to YMCA partners' use of program evaluation results and to

their developing program evaluation competence. Lessons learned from this study may be applicable to other partnerships striving to increase adolescent PA participation as well as general organizational health promotion capacities.

ABRÉGÉ

Comme la majorité des adolescents nord-américains ne suivent pas les directives en matière d'activité physique pour une vie active saine, il est crucial que nous trouvions un moyen d'accroître leur activité physique. Aider les organisations à améliorer leurs capacités à mettre en place et à maintenir des programmes de promotion de la santé est une approche viable, mais elle a rarement été utilisée dans le domaine de la recherche interventionnelle sur l'activité physique.

Afin d'améliorer la capacité d'un YMCA à promouvoir l'activité physique auprès des adolescents, le YMCA et moi avons développé un partenariat de recherche participative. En partenariat, nous avons développé et mis en place des mesures d'évaluation du programme adolescent du YMCA. Notre partenariat et nos processus fut l'objet de mon étude de cas à travers lequel j'ai voulu comprendre les processus qui contribuent à des changements organisationnels.

Le cas consiste en deux ans et demi de données qualitatives. J'ai recueilli les courriels entre les partenaires du YMCA et moi-même et j'ai fait des entretiens semi-structurés et non-structurés avec les partenaires. Des notes de terrain ainsi que des documents internes du YMCA et de

notre partenariat ont également servis de données. J'ai effectué une analyse thématique de façon inductive et déductive.

Les résultats illustrent que des capacités de la main d'œuvre du YMCA et de l'organisation elle-même se sont améliorées grâce à notre partenariat, l'allocation des ressources, et le pouvoir d'influence.

Spécifiquement, un processus de pouvoir d'influence partagé (où d'une part je répondais aux besoins de mes partenaires du YMCA et d'autre part je guidais mes partenaires plus loin que leurs besoins perçus), le YMCA et moi avons réussi à mettre ensemble nos objectifs, connaissances, et expertises complémentaires pour générer une vision, raison d'être, et résultats d'évaluation du programme intégrées. Cette perspective intégrée à procurer aux partenaires de la valorisation, des rappels, et une prise de conscience que par rapport à leur travail et le programme adolescent lui-même. Ces résultats intermédiaires ont contribué aux changements de pratiques que les partenaires du YMCA ont maintenues et développées davantage, en ce qui a trait à la programmation, la promotion de la santé, et l'évaluation de programme. Enfin, des aspects contextuels du partenariat qui ont contribué à sa réussite.

Cette étude de cas illustre comment un chercheur universitaire et un YMCA peuvent collaborer pour développer et mettre en place une

évaluation de programme, dont les résultats peuvent aider le YMCA à prendre des décisions éclairées, ceux qui peuvent à leur tour, avoir un impact positif sur des programmes organisationnels d'activité physique ainsi que d'autres programmes organisationnels. De surcroît, les résultats indiquent que le processus participatif a contribué à l'usage que font les partenaires YMCA des résultats d'évaluation et aussi au développement de leurs compétences en évaluation de programme. Les leçons tirées de cette étude de cas pourraient s'appliquer à d'autres partenariats voulant accroître le niveau d'activité physique des adolescents, ainsi que des capacités générales de promotion de la santé.

PREFACE

The elements of the dissertation that are considered original scholarship and distinct contributions to knowledge are as follows:

1. The literature review: the literature review I present in Chapter 2 is my original work. It represents a contribution to knowledge given its focus on the adolescent population (rather than children and adolescents) and on physical activity intervention research targeting physical activity outcomes (as opposed to physiological outcomes of fitness). Moreover, this is the only review to synthesise the extant literature in the domain according to frameworks of health promotion, with an emphasis on capacity building and sustainability of physical activity promotion programs. I am currently preparing this literature review for publication in a peer reviewed journal.
2. The research that is the focus of this dissertation: First, few physical activity promotion interventions studies have used a capacity building approach and none of these has targeted a community organization that serves adolescents. In this sense, my study objective and approach are distinctive. Second, while participatory research has been used to increase levels of physical activity of children and adults,

to my knowledge, it has not been used for the teenage population (12-17 years), nor has this approach been used to partner with an organization offering physical activity opportunities to teenagers.

Third, given my study design I have been able to expose processes that contributed to the outcomes of my research. This entails a unique contribution to both the participatory research and physical activity intervention research literatures. Moreover, the study design made it possible for me to provide empirical evidence to corroborate other scholars' hypotheses regarding the processes and long term benefits of using a capacity building approach in health promotion research.

CHAPTER 1

INTRODUCTION

1.1 Adolescent Physical Activity

Regular physical activity helps to build bone mass and density, build muscle mass, control body weight, improve lipid profiles, develop efficient cardiorespiratory functions, and prevent and control feelings of anxiety and depression (Barnett, Hamel, & Ferland, 2002). To reap health benefits, individuals should maintain a physically active lifestyle across their lifespan. Yet in Canada, very few adolescents are physically active. Colley and colleagues (2012) estimate that among 6-19 year olds 9% of boys and 4% of girls accumulate 60 minutes of moderate-to-vigorous physical activity on at least six days a week. Moreover, Canadian children and youth spend twice as much time engaged in sedentary pursuits compared to light physical activity, and tenfold more time being sedentary compared to engaging in moderate-to-vigorous physical activity (Colley, et al., 2012). In the Canadian province of Quebec, children and youths' physical activity levels are comparable to the national averages (Canadian Fitness and Lifestyle Research Institute, 2012).

Perhaps more disturbing is the lack of improvement in physical activity level (measured by pedometer) observed in Canadian and Quebec children and youth between 2005 and 2011 (Canadian Fitness and Lifestyle Research Institute, 2012), and this despite physical activity promotion initiatives delivered through national and provincial organizations such as ParticipACTION (<http://www.participaction.com/>), Active Healthy Kids Canada (<http://www.activehealthykids.ca/>), and Kino-Québec (<http://www.kino-quebec.qc.ca/>).

An additional concern is the decline in physical activity levels consistently observed during adolescence (12- 17years), regardless of the type of physical activity measurement used (Cameron, Wolfe, & Craig, 2007; Canadian Fitness and Lifestyle Research Institute, 2012; Colley, et al., 2012). In Montreal, Quebec, a large study of secondary school students indicated that although participation in team sport activities was relatively high during early adolescence, it declined considerably in later years. Furthermore, although the percentages of both boys and girls participating in moderate intensity physical activity were relatively high throughout secondary school, these percentages declined steadily between grades 7 and 11. A steady decline was also observed for participation in vigorous intensity physical activity (Belanger, Gray-Donald,

O'Loughlin, Paradis, & Hanley, 2009). This seems incongruous with the fact that Quebec is one of two Canadian provinces providing mandatory physical education, taught by physical education specialists, in grades K - 12 (The Canadian Association for Health Physical Education Recreation and Dance, 2006).

Overall, it seems clear that efforts to engage Canadian and Quebec adolescents in physical activity are falling short. It is my position that we need to alter our approach if we are to observe improvements in teens' physical activity levels; this is the underlying premise of my dissertation.

1.2 Health and Physical Activity Promotion

Health promotion is the process of enabling people to increase control over, and to improve their health (World Health Organization, 1986). It "is carried out by and with people, not on or to people. It improves both the ability of individuals to take action, and the capacity of groups, organizations or communities to influence the determinants of health" (World Health Organization, 1998, p. 31). Health promotion strategies need to be comprehensive, multisectoral, multidisciplinary, participatory, adapted to the target population and its social and physical environments, and recognize the complex interactions between personal choices, social norms, and socio-cultural environmental factors (Green & Kreuter, 2005;

Jackson et al., 2006; Maibach, Rothschild, & Novelli, 2002; World Health Organization, 2004). Ideally, programs are tailored according to an in depth understanding of the specific target population and its context. Regarding adolescent physical activity promotion, for instance, an understanding of the barriers and facilitators to participation that teens face is necessary to design and deliver programs in which they want to partake.

Qualitative research provides insight indicating adolescent physical activity participation is influenced by enjoyment, but that enjoyment varies depending on the physical activity or sport, and the extent to which teenagers feel they are good at it (Allison et al., 2005; Brooks & Magnusson, 2007; Flintoff & Scraton, 2001). Teens who don't perceive themselves to be good at sports may find participation stressful and intimidating, thus reducing their enjoyment and deterring their participation (Allison, et al., 2005; Bramham, 2003; Brooks & Magnusson, 2007). This knowledge provides a rationale for teaching sports skills to increase teens' perceived competence. However, some point out this teaching strategy may not always be effective because some teens consider it boring (Smith & Parr, 2007). Notably, adolescents with low competency for a particular sport or physical activity may feel less anxious when participating with

beginners because they perceive their skill level is adequate (Humbert et al., 2006), and thus, find this type of sporting environment more enjoyable. On the other hand, some adolescents find enjoyment in physical activities that challenge them (Allison, et al., 2005).

Some studies have shown teenagers consider physical activity a space where they can enjoy time with friends and meet new people (Allison, et al., 2005; Brooks & Magnusson, 2007; Flintoff & Scraton, 2001; Humbert, et al., 2006). In fact, not having a friend with whom to be active may be a barrier to girls' physical activity participation (Dwyer et al., 2006). Other barriers to consider include lack of time due to school, part time work, or familial obligations; inadequate facilities (low quality, vandalised, unkempt); and cost and safety issues (Allison, et al., 2005; Dwyer, et al., 2006; Humbert, et al., 2006).

Individuals who work closely with adolescents, through community youth programs for instance, are well placed to understand the physical activity interests and concerns of the population they serve as well as various contextual factors that may influence physical activity participation. Yet, community organizations may lack the resources or expertise to adequately analyse adolescents' needs and address them. Some authors suggest universities initiate collaborations with community organizations to

help these organizations develop and implement sustainable programmes (Wetta-Hall, Ablah, Berry, Oler-Manske, & Molgaard, 2004), but in physical activity promotion research, this approach has rarely been used (I present this in further detail in Chapter 2). This approach may be especially warranted in Montreal, Quebec, since compared to municipalities elsewhere in Canada, those in Quebec are somewhat less likely to report that promoting sport opportunities is a high priority (Canadian Fitness and Lifestyle Research Institute, 2010). Thus, partnering with a university researcher may provide a much needed support for community organizations to improve their capacity to promote physical activity to the teenagers they serve. For my dissertation research, I sought to do just this and developed a partnership with a Montreal YMCA.

In the next chapter I present a review of the extant physical activity intervention research targeting adolescents, and outline the knowledge gaps that informed my study. Additionally, I provide an overview of capacity building for health promotion and review the capacity building research in physical activity. With this section of the literature review, I underscore the limitations of current research in physical activity capacity

building that helped to shape my research objective which I present in chapter 4, together with the methodology and specific methods used to address it.

CHAPTER 2

REVIEW OF RELEVANT LITERATURE

In this chapter, I begin by presenting the extant intervention research in the area of physical activity promotion targeting youth in grades 7-11 (i.e., 12-17 year olds; referred to throughout as ‘adolescents’ ‘teenagers’, or ‘teens’). To expose gaps in the knowledge, I discuss the physical activity promotion strategies used to date, the theories framing the studies, the use of qualitative methods in this research area, and current approaches to understanding sustainability. To broaden my sustainability discussion, I then define the capacity building approach and present some capacity building assessment frameworks. I conclude by exposing the paucity of physical activity promotion studies that have framed interventions around a capacity building model, as well as lessons that may be drawn from capacity building studies conducted in youth obesity prevention research.

2.1 Adolescent Physical Activity Promotion Intervention Research

The vast majority of physical activity promotion intervention studies targeting 12 to 17 year old youth (adolescents) have been school-based (Appendix A), but two systematic literature reviews found school-based interventions are effective in increasing the time adolescents are physically active during school hours, but not during leisure-time (de Meester, van Lenthe, Spittaels, Lien, & de Bourdeaudhuij, 2009; Dobbins, De Corby, Robeson, Husson, & Tirilis, 2009). Reasons posited include the strategies used in the school-based programs may have, unintentionally, focussed more on the mechanisms of behaviour change for school related physical activity (de Meester, et al., 2009) or, given the school focus, adolescents did not translate the physical activity messages at home or in the community (Dobbins, et al., 2009). A more recent systematic review included studies targeting children and adolescents and concluded: “[physical activity] promotion in the school setting leads to an increase in school-based [physical activity] and is associated with an increase in out-of-school, and even more importantly, in overall physical activity” (Kriemler et al., 2011, p. 929). While this updated review included 20 additional studies, only four of these focussed on teenagers (Gomes de Barros et al., 2009; Haerens, de Bourdeaudhuij, Maes, Cardon, & Deforche, 2007; Schneider, Dunton, & Cooper, 2008; Taymoori et al., 2008), and only one

assessed physical activity in and out of school separately, finding a significant increase in teens' school-related physical activity, a significant increase in active transportation among girls, but not boys, and no significant difference in teens' leisure time sports (Haerens, et al., 2007). Thus, Kriemler et al. (2011) overstate their conclusion for the adolescent population.

While schools are an important setting for promoting physical activity among youth (Parcel, Kelder, & Basen-Engquist, 2000), subsequent physical activity promotion research should focus on extending physical activity programs beyond the school to impact adolescents' total physical activity. A systematic review of 24 school and non-school based physical activity RCTs found that while there was no conclusive evidence of an effect on teen physical activity for programs restricted to the school setting, there was strong evidence of an effect for those including family or community involvement (van Sluijs, McMinn, & Griffin, 2008). Likewise, the European adolescent physical activity promotion literature indicates multi-component programs extending beyond the school setting have generally resulted in larger effect sizes than those focussed exclusively on the school (Crutzen, 2010). Hence, it seems clear at this point that multi-component interventions extending

beyond the school are needed. Yet, what is known about the effectiveness of specific strategies targeting various aspects of physical activity behaviour influence?

2.1.1 Physical activity promotion strategies

Perry and colleagues (2012) reviewed adolescent physical activity promotion intervention research, conducted over the past three decades, synthesizing strategies used and results according to domains of an ecological framework (intrapersonal, social networks, sociocultural and community, environment, and policy domains). Within the intrapersonal domain, these authors indicate promising strategies include teaching behavioural skills, such as self-monitoring. Similarly, strategies such as personal physical activity advice, health education to improve students' knowledge, and counselling sessions tailored to teenagers' physical activity level have met with success among European adolescents (de Meester, et al., 2009).

Two types of interventions targeting intrapersonal influences have received considerable attention in the teen physical activity promotion literature. First, researchers have explored the effect of the pedometer as a self-monitoring and feedback tool. In their systematic review on the subject, Lubans, Morgan, and Tudor-Locke (2009) included five studies

focussed on adolescents and a sixth targeting children and young adolescents. In line with the previous discussion on multi-component interventions, the authors found pedometer step-count feedback can be effective in increasing teens' physical activity levels when combined with additional strategies such as social support or information about physical activity duration and intensity. One other pedometer intervention study has since been published and lends credence to this result. This 12-week RCT provided pedometers, a log book, one-on-one goal setting counselling, and rewards for achieving and maintaining goal behaviour to a Taiwanese sample of adolescent girls and resulted in an increase in steps in the intervention group compared to the control group (Lee, Kuo, Fanaw, Perng, & Juang, 2012).

Second, computer-tailored feedback has been used in several studies (de Bourdeaudhuij et al., 2010; Frenn et al., 2005; Haerens, et al., 2007; Haerens et al., 2006a; Patrick et al., 2006; Prins, van Empelen, Beenackers, Brug, & Oenema, 2010; Prins, Brug, van Empelen, & Oenema, 2012; Robbins, Gretebeck, Kazanis, & Pender, 2006; Sliotmaker, Chinapaw, Seidell, van Mechelen, & Schuit, 2010) with only two reporting no intervention effect (Prins, et al., 2012; Robbins, et al., 2006). Given the heterogeneity of these interventions (differing strategies,

duration, intensity), and the various evaluation designs used, it is difficult to draw conclusions. For example, studies ranged from a few sessions (Frenn, et al., 2005), to a few months (de Bourdeaudhuij, et al., 2010; Prins, et al., 2012; Robbins, et al., 2006; Sliotmaker, et al., 2010) to a year or more (Haerens, et al., 2007; Haerens, et al., 2006a; Patrick, et al., 2006). Some combined the feedback strategy with school environment (Haerens, et al., 2007; Haerens, et al., 2006a) or home environment (Patrick, et al., 2006) interventions. The computer programs used had varying theoretical bases, thus behaviour influences targets. Some used the Theory of Planned Behaviour (Haerens, et al., 2006a; Haerens et al., 2006b), the Transtheoretical Model (Frenn, et al., 2005), or multiple theories (de Bourdeaudhuij, et al., 2010; Robbins, et al., 2006). In one study, the computer-tailored feedback provided motivational tips to increase physical activity, and students were provided with an accelerometer (Sliotmaker, et al., 2010). With respect to setting, all were school-based except the Paces + program which was initiated in primary care settings (Patrick, et al., 2006). Finally, the intensity of the interventions varied, ranging from a few sessions per month (Frenn, et al., 2005) to one or two sessions per year (Haerens, et al., 2007; Haerens, et al., 2006a). Although, the most recent review of adolescent physical

activity literature concluded computerized tailored interactive feedback can increase adolescents' physical activity, in particular when used in the classroom and combined with curricular and school-environmental changes (Murillo Pardo et al., 2013), many questions remain regarding what constitutes an effective computer-tailored feedback program for the promotion of physical activity among teens. Must these programs target multiple ecological levels of physical activity behaviour influence? What program duration and intensity are optimal? Can similar effects be achieved by providing tailored feedback through another medium? Moreover, given that Canadian youth spend, on average, nearly eight hours per day engaged in screen-based sedentary behaviour (Active Healthy Kids Canada, 2012), are computer-based interventions the best physical activity promotion option?

Regarding the social network domain, existing literature reviews indicate parental and peer support have received some attention in the adolescent physical activity intervention literature (Jepson, Harris, Platt, & Tannahill, 2010; O'Connor, Jago, & Baranowski, 2009; Salmon, Booth, Phongsavan, Murphy, & Timperio, 2007; Timperio, Salmon, & Ball, 2004; Trost & Loprinzi, 2008). Many have explored the specific effect of parental involvement in teen physical activity promotion interventions. Authors of

two narrative reviews suggested family involvement holds promise for physical activity outcomes of adolescents (Salmon, et al., 2007; Timperio, et al., 2004), but their conclusion was drawn from only two studies. One systematic review focussed specifically on parental and/or family involvement in youth physical activity promotion research (O'Connor, et al., 2009). The authors included 35 studies, seven of which targeted adolescents. Given the heterogeneity of the study designs and lack of uniformity in reporting, “it was impossible to draw concrete systematic conclusions about which method was best for involving parents/families in physical activity interventions for children” (p. 144). Importantly, the authors analysed the studies targeting youth under age 12 and those 12-18 years old together, rather than separately, and underscore that the dearth of adolescent studies precludes drawing conclusions for this age group, a conclusion supported by others who have sought to understand the influence of parents/family on youth physical activity or obesity related behaviours (Camacho Miñano, LaVoi, & Barr-Anderson, 2011; van Lippevelde et al., 2012; van Sluijs, et al., 2008). More research is needed to ascertain the relative importance of parental and family support for adolescent physical activity. More importantly, such research must be used to inform intervention studies targeting this population.

Concerning peer support, one systematic review investigated the relationship between peer support and physical activity among 10-18 year olds (Fitzgerald, Fitzgerald, & Aherne, 2012) and found that peers and friends play an important role for youths' physical activity. This holds true for the twelve (out of 23) studies included in this review. Notably though, none of the studies included in this review were physical activity intervention studies (nine of the twelve studies focussing on the adolescent population (as I have defined it for this review) were cross-sectional). To my knowledge only four intervention studies have focussed some attention on this strategy, but none has assessed its specific effects on physical activity (Dzewaltowski et al., 2009; Lubans & Morgan, 2008; Lubans & Sylva, 2006; Peralta, Jones, & Okely, 2009). Subsequent intervention research should take into account the findings of Fitzgerald and colleagues (2012).

Regarding community involvement, the evidence, again, is sparse with literature reviews reporting either inconclusive or no evidence of an effect due to so few studies and differing results (Beets, Beighle, Erwin, & Huberty, 2009; Camacho Miñano, et al., 2011; de Meester, et al., 2009; Jago & Baranowski, 2004; Pate & O'Neill, 2009; Salmon, et al., 2007; van Sluijs, Kriemler, & McMinn, 2011; van Sluijs, et al., 2008). It is, however,

noteworthy that among the studies that sought to specifically impact teens' physical activity level (Appendix A), four were school-based with a community component (e.g., partnerships with recreational and other community organizations, community-wide mass media campaign); these met with some success. Specifically, in Australia, the Moorefit study included government and non government organizations on advisory committees for developing and implementing physical activity promotion strategies. The authors indicate the community partnerships were key to the success of the intervention as they provided expertise and resources adding to the range of activities that could be offered (Cass & Price, 2003). In France, the Intervention Centred on Adolescents' Physical Activity was specifically designed to be integrated into the community environment, by partnering with influential community members and focussing on developing tight collaborations with community organizations to enhance the potential for sustainability (Simon, Schweitzer, Oujaa, et al., 2008). In the United States of America, community linkages were an important part of both the New Moves program and the Trial of Activity for Adolescent Girls (TAAG). New Moves participants were exposed to myriad physical activities offered in their community, through visits to community centres and parks, and community instructors visiting their

school (Neumark-Sztainer, Story, Hannan, & Rex, 2003. In TAAG, schools and community organizations (e.g., YMCA, community recreation centres) were linked to develop and promote physical activity programs for girls. These programs were delivered on and off school grounds, before and after school (Webber, Catellier, Lytle, et al., 2008). None of the authors of these studies discuss drawbacks or challenges to the community component of their interventions. It would appear the community linkages were successfully developed, appreciated, and in some instances maintained (e.g., one year after the New Moves program, the school continued to invite community physical activity instructors to deliver activities). However, the specific effects of these strategies were not assessed.

With respect to the environmental domain, little is known, though successful programs have used strategies such as girls-only programs (Schneider, Dunton, & Cooper, 2008; Webber, et al. 2008; Pate, et al. 2005; Jamner et al., 2004; Neumark-Sztainer, et al. 2003), not requiring students to wear their physical education uniform (Schneider, Dunton, & Cooper, 2008; Jamner et al., 2004) non traditional PE (Schneider, Dunton, & Cooper, 2008; Jamner et al., 2004), and provision of additional physical activity opportunities (e.g., schools providing extra physical activity

equipment out of class time, or partnering with community organizations to provide additional physical activities) (Webber, et al. 2008; Haerens, et al., 2006; 2007; Lubans & Sylva, 2006). Overall, others have concluded:

[d]espite increased attention to the environmental domain in [physical activity] research, lack of measurement of environmental factors limits our ability to understand whether changes in the environment can increase [physical activity] in youth, such as by increasing opportunities to be physically active. (Perry et al. 2012; p. 132)

Finally, programs targeting the policy level have been rare. In one study, to improve selected health policies, meetings were held with school actors, parents and students (Sallis et al., 2003). Investigators only reported results pertaining to the physical education policies that were not successful in bringing about change; they suggest two years was insufficient for this type of intervention (McKenzie et al., 2004). TAAG investigators (Stevens et al., 2005) trained two teachers per school to advocate for physical activity with policy makers, but did not report results of this strategy. Investigators of the Healthy Youth Place study assessed policy changes, but provide no details other than to report “[t]he site coordinators reported an average of 26.5 implemented program, policy, or practice changes (range = 10 to 39)” (Dzewaltowski, et al., 2009, p. 591).

On the whole, despite the shift in discourse over the past decade from focussing on individual influences of physical activity toward focussing on multilevel and multisectoral influences, we still know little about strategies targeting the interpersonal, organizational, community, or policy levels of behaviour influence as most studies have focussed on the intrapersonal level within the school setting.

2.1.2 Theoretical frameworks

A recent review of the adolescent physical activity promotion literature suggests “the importance of targeting ecological domains beyond the intrapersonal level when promoting physical activity behaviors in adolescents” (Perry, et al., 2012, p. 131). Among the 41 adolescent physical activity promotion studies with physical activity level or frequency as a primary outcome (as opposed to indicators of fitness or body composition) (Appendix A), the theory most commonly used ($n = 13$) is the Social Cognitive Theory (SCT; Bandura, 1986). While this theory posits human behaviour results from an interaction between personal, behavioural, and environmental influences and can therefore be compatible with an ecological approach, it is broad and comprehensive and often not used in its entirety (McAlister, Perry, & Parcel, 2008). This is true of the adolescent physical activity promotion literature. Many of the

studies informed by the SCT aimed to either impact the self-efficacy construct specifically, or other psychological determinants of behaviour (e.g., outcome expectations, self-regulation), rather than the full theory (Jago et al., 2006; Jamner, Spruijt-Metz, Bassin, & Cooper, 2004; Lubans, Morgan, Callister, Collins, & Plotnikoff, 2010; Neumark-Sztainer, Story, Hannan, & Rex, 2003; Peralta, et al., 2009; Walker et al., 2002; Wilson et al., 2002; Zizzi et al., 2006). Others went beyond the intrapersonal level taking into account barriers and facilitators of physical activity (Romero, 2012) or seeking to create physical and social environments conducive to physical activity participation (Dudley, Okely, Pearson, & Peat, 2010; Dziewaltowski, et al., 2009; Lubans & Morgan, 2008; Lubans & Sylva, 2006; Pate et al., 2005; Ransdell, Dratt, Kennedy, O'Neill, & DeVoe, 2001), but in only one study was an interpersonal construct assessed, and the interactions between the levels of influence were not (Lubans & Sylva, 2006). Therefore, the SCT has served more as a guiding framework to develop physical activity programs that target intrapersonal and environmental influences of physical activity behaviour.

Ecological models can be used to extend the SCT and flesh out environmental interventions at several levels of physical activity behaviour influence, but only a few studies have been explicitly based on an

ecological model (McKenzie, et al., 2004; Simon et al., 2004; Stevens, et al., 2005). Two additional studies were based on school-specific frameworks that are ecological in nature. In Australia, Cass and Price (2003) used the WHO Health Promoting Schoolsⁱ framework and in Brazil, Gomes de Barros and colleagues (2009) used this framework and also the CDC's Guidelines for School and Community Programs.ⁱⁱ Importantly, none of the ecological studies examined the interactions across levels of physical activity behaviour influence.

Finally, Social Marketing (Kotler & Zaltman, 1971) and PRECEDE-PROCEED (Green & Kreuter, 2005) are two models that can help to design multi-component physical activity promotion programs extending beyond the school setting. Although they have been used extensively and with success in health promotion and intervention research they have rarely been used to promote physical activity in the adolescent population. Social marketing, a systematic approach to understanding and strategically responding to the characteristics of a target population and the contextual factors which influence behavioural decisions (Grier & Bryant, 2005; Storey, Saffitz, & Rimón, 2008) has been used in only three teen physical activity promotion studies. Bush, Laberge, & Laforest (2010) implemented a school-based physical activity promotion intervention,

designed according to principles of social marketing (e.g., analysis of the population, population segmentation, the marketing mix). Although the authors observed no significant increase in grade 8 students' level of physical activity, the program was successful in enticing students, particularly girls, to participate in the physical activities offered. The Middle-School Physical Activity and Nutrition study (McKenzie, et al., 2004; Sallis et al., 2001) used various media to promote the program and observed a significant increase in participants moderate-to-vigorous physical activity over the two-year intervention. Finally, TAAG investigators (Stevens, et al., 2005; Webber, et al., 2008) conducted an analysis of the target population, took into account population segmentation for the design of physical activity opportunities, and used media to promote the program. Some significant results regarding physical activity increases were observed. For its part, PRECEDE-PROCEED encompasses educational and ecological perspectives and requires a series of initial population and environmental assessments to inform program planning (Green & Kreuter, 2005), but has not been used to promote teen physical activity.

2.1.3 Physical activity promotion intervention research and qualitative methods

Health promotion models like PRECEDE-PROCEED and Social Marketing require formative research (e.g., needs assessment or focus groups to determine physical activity preferences, barriers, facilitators), to tailor programs to target populations and their contexts. To date, this practice has not been the norm in adolescent physical activity promotion research. Formative data have been collected to inform only six interventions (Bush, et al., 2010; Cass & Price, 2003; Dudley, et al., 2010; Ransdell, et al., 2001; Romero, 2012; Young et al., 2006). Some of these studies led to increases in teens' physical activity (Cass & Price, 2003; Dudley, et al., 2010; Romero, 2012; Young, et al., 2006) and some observed an increase in girls' physical activity enjoyment (Dudley, et al., 2010) or reported success in engaging girls in voluntary physical activity (Bush, et al., 2010; Romero, 2012). Notably, the three studies that included systematic formative research as the first phase of a multiphase mixed methods research design had a positive impact on participants' physical activity levels (Cass & Price, 2003; Dudley, et al., 2010; Young, et al., 2006). More research is needed to examine the added value of developing and implementing teen physical activity promotion programs from knowledge gleaned through formative research.

Collecting qualitative data during and following program implementation may lead to valuable insights. For instance, Cass and Price (2003), used meeting minutes to monitor the program, conducted interviews with staff to gain insight into the project's successes, and held focus groups with students at the end of the project. Where clear differences were not identified by the quantitative data, the qualitative data proved informative. For example, although no measured change in physical activity attitudes was found, qualitative data suggested behavioural changes that could indicate improved attitudes towards sports and physical education (e.g., less complaining during physical education). Finally, collecting process data and monitoring implementation can help to inform program modifications to, among other things, counteract barriers. Some investigators have noted anecdotal observations regarding barriers to teens' participation (Peralta, et al., 2009) or program implementation (Dale, Corbin, & Cuddihy, 1998; Saunders et al., 2012), but given they did not study these aspects, the authors could only hypothesize these issues negatively impacted the physical activity outcomes observed.

2.1.4 Sustainability

Literature reviews consistently highlight the lack of long term follow up measures, lack of sustained intervention effects (when follow-up measures taken), and lack of long term youth physical activity promotion programs (Crutzen, 2010; de Meester, et al., 2009; Dobbins, et al., 2009; Kriemler, et al., 2011; Salmon, et al., 2007; Timperio, et al., 2004; van Sluijs, et al., 2011). Among the studies focussing specifically on teen physical activity promotion only four studies took follow-up measures (Appendix A). Interestingly, in contrast to the two studies reporting lack of maintained effects on physical activity at three-month (Lubans & Sylva, 2006) and five-month (Slootmaker, et al., 2010) follow-ups, the two reporting maintained effects were multicomponent programs lasting six months or more (Saunders, et al., 2012; Taymoori, et al., 2008).

In six studies, investigators observed increasing program effects over the course of the intervention (Dale, et al., 1998; de Bourdeaudhuij, et al., 2010; Frenn, et al., 2005; Haerens, et al., 2007; Simon et al., 2008; Webber et al., 2008) suggesting, perhaps, a cumulative effect. This is in line with Dobbins and colleagues' (2009) conclusion that longer term adolescent physical activity promotion programs may be more effective. Hence, seeking to design and implement sustainable programs (rather

than only seeking sustainable program effects) may be important. Some have used strategies that may increase the potential for schools to continue delivering the physical activity program following the completion of the study. Such strategies include involving school staff in aspects of program design and/or promotion (Cass & Price, 2003; Dale, et al., 1998; Dudley, et al., 2010; Gomes de Barros, et al., 2009; Haerens et al., 2008; Haerens, et al., 2007; Neumark-Sztainer, et al., 2003; Peralta, et al., 2009; Stevens, et al., 2005); or providing training for classroom and/or physical education teachers (e.g., strategies to perform lifetime physical activity, fitness information, goal setting, program planning, skill-building, class management, and the importance of engaging girls in moderate-to-vigorous physical activity during class and appropriate physical activity equipment and choices) (Chatzisarantis & Hagger, 2009; Dale, et al., 1998; Gomes de Barros, et al., 2009; McKenzie, 2001; Pate, et al., 2005; Stevens, et al., 2005). Among these, only LEAP (Pate, et al., 2005) has been the object of a sustainability study (Saunders, et al., 2012). This one-year program provided school staff with physical activity promotion guidelines regarding instructional practices and the school environment. All intervention activities were informed by an ecological model, the SCT, and the Coordinated School Health Program,ⁱⁱⁱ coordinated by a staff team

in each of the 11 intervention schools, and delivered to 9th grade students. Three years following the intervention, four schools were deemed 'high implementers', "sustaining a substantial number of instructional and environmental elements" (Saunders, et al., 2012, p. 8 of 12). This was associated with higher physical activity among the 12th grade girls (the original LEAP cohort). At follow-up, schools that had experienced physical education teacher turnover did not meet the implementation criteria, but these schools were also classified as 'low implementers' immediately following the intervention. This, the authors suggest, could point to other organizational issues affecting implementation, but they did not assess this and acknowledge this limitation of their study (Saunders, et al., 2012).

On the whole, the extant literature raises some questions: is there a program duration threshold before which a positive impact on teens' physical activity may be observed? Should we be shifting our focus to understanding how physical activity promotion programs may be sustained by the settings where they are implemented? What barriers to physical activity promotion do implementation settings face? How might we increase settings' physical activity promotion capacities? Currently, an innovative study is focussing on program sustainability. For their 18-month school based physical activity promotion program targeting adolescent

girls, Okely and colleagues (2011) are using an action learning model and working with schools to provide support and develop action plans.

Interventions are guided by detailed formative research about the schools' social and physical environments, and schools are primarily responsible for developing and implementing the program. It is hoped that by giving schools ownership of the program and the opportunity to develop strategies which meet their specific needs, interests, and expertise, the programs will become embedded in schools' cultures, thereby maximising their potential to be sustained beyond the life of the project. This hypothesis is supported by a recent review of community-based participatory health research (Jagosh et al., 2012) as well as by health promotion frameworks like PRECEDE-PROCEED (Green & Kreuter, 2005) and social marketing (Grier & Bryant, 2005). Moreover, similar to the other studies discussed which provided training for school staff, some of the strategies being used are compatible with a capacity building framework (Hawe, King, Noort, Jordens, & Lloyd, 2000; NSW Health Department, 2001). Yet, like the others, this study is not framed around a full capacity building model. In the following sections, I will discuss how the explicit use of a capacity building framework could enhance adolescent physical activity promotion program sustainability.

2.2 Capacity Building

The specific concept of capacity building first appeared in a global health promotion conference report in 1998 (World Health Organization, 1998) and has remained on the health promotion agenda since (World Health Organization, 2000, 2006, 2009). Yet, there is no one accepted definition. In their systematic review of the capacity building literature in the public health and health promotion arenas, Simmons and colleagues (2011) identified three commonalities among 15 definitions and proposed a generic definition. According to these authors, capacity building is a *process or an approach* used to develop, enhance, or leverage a *collection of characteristics* (e.g., skills, knowledge, technical expertise, leadership, resources, commitment) for a *purpose* (e.g., addressing a health issue, problem solving, effecting sustainable change) that is context dependent. While this general definition provides flexibility, it offers little operational clarity. What are the characteristics of capacity building? How and why does one build capacity (or strengthen existing capacity) of a community or organization? To further understand capacity building, I will discuss its characteristics, purpose, and approach in turn.

2.2.1 Capacity building characteristics

In a recent literature review of community capacity building, Liberato and colleagues (2011) identified multiple capacity building characteristics and synthesised them into nine domains and six sub-domains (Table 2-1). An important contribution of this review is the detailed definitions of the domains and sub-domains the authors provide as given the context dependent nature of capacity building, various domains can mean different things to different authors in differing contexts. (For these detailed definitions, see Liberato and colleagues' (2011) additional files). Although derived from the community capacity building literature, I argue these domains and sub-domains are sufficiently generic to apply to both community and organizational contexts.

Table 2-1: Domains and sub-domains of Capacity Building

-
1. Learning opportunities & skills development
 2. Resource mobilization
 3. Partnership/linkages/networking
 4. Leadership
 5. Participatory decision-making
 6. Assets-based approach
 7. Sense of community
 - a) Commitment to action
 8. Communication
-

- a) Dissemination
 - 9. Development pathway
 - a) Shared vision and clear goals
 - b) Community needs assessment
 - c) Process and outcome monitoring
 - d) Sustainability
-

Source: Liberato, et al., 2011

2.2.2 Capacity building purpose

There is lack of consensus around the purpose of capacity building, though most concur with the general goal of sustainable change. The definition of sustainability is not clear either, however (Stirman et al., 2012). There is some agreement this construct can be conceived of as a dynamic process of program continuation, and the process by which continuation occurs varies. For instance, sustainability may involve the adaptation of a program to its changing environment over time (Shediac-Rizkallah & Bone, 1998). More recent work supports this, indicating the sustainability of innovations implies a process of change, and is influenced by such factors as the adaptability of the innovation, evaluation processes, and the skills and participation of key stakeholders, such as organizational staff (Scheirer, 2005; Stirman, et al., 2012).

Hawe and colleagues (1997) discuss sustainable program *effects* and argue this may not be the best ultimate goal of capacity building,

proposing “[a] better, or higher level indicator of program success may be that the intervention renders the community more competent, not only to address the health problem of current interest but to tackle other health issues” (p. 32). The authors suggest when the community (or organization) applies their enhanced capacities to subsequent health issues, the effects of the initial intervention are multiplied. As such, health promotion programs are conceived of as investments, the long term benefits of which cannot be fully apparent in the health outcome indicators measured, but rather in the capacity building indicators (Hawe, et al., 1997). Thus, problem solving is perhaps the most crucial aim of capacity building because, beyond program sustainability, what is important to sustain “is the capacity for individuals, organizations and communities to mobilise themselves, when required, to initiate new action for new health challenges” (NSW Health Department, 2001, p. 4).

2.2.3 Capacity building approach

In their review, Simmons and colleagues (2011) note the capacity-deficit approach inherent in many definitions and suggest, as others have (Chaskin, 2001), that a strengths-based approach be used instead. That is, capacity building endeavours should begin with the identification of *existing* capacities in the context where the work is to take place, and then

build upon, promote, or strengthen those capacities. Some suggest four main approaches to capacity building: (a) bottom-up organizational approach, (b) top-down organizational approach, (c) partnerships, and (d) community organizing (Crisp, Swerissen, & Duckett, 2000), while others propose 10 specific strategies (e.g., engage people and community, build networks, respond to needs, build trust) (Hawe, King, Noort, Gifford, & Lloyd, 1998). These strategies and approaches are not mutually exclusive; many assert for sustainable organizational capacity changes to occur, an integrated multidimensional, multilevel approach should be used, especially considering the numerous levels of influence at work in organizations (Crisp, et al., 2000; Joffres et al., 2004b; NSW Health Department, 2001; Nu'Man, King, Bhalakia, & Criss, 2007). Smith and colleagues (2001) provide guidance regarding an integrated approach and underscore the complex, non-linear process of change. In their model, the organizational capacity building process is conceptualised as an *interaction* among leadership, capacity development, organizational learning, and health promoting actions.

Overall, the characteristics targeted and the means by which they are leveraged depend on the purpose of the capacity building intervention and the context where it takes place (Liberato, et al., 2011). There is no

prescriptive formula (Heward, Hutchins, & Keleher, 2007). Nonetheless, one framework, developed from empirical research, accounts for myriad characteristics, offers flexibility regarding approach and purpose, and can be applicable to community and organizational contexts (NSW Health Department, 2001).

2.2.4 The New South Wales capacity building framework

The New South Wales capacity building framework (NSW Health Department, 2001) has been guiding capacity building efforts in health promotion throughout Australia (Heward, et al., 2007), some of which I will discuss in a subsequent section of this review. Its premise is that capacity building occurs within programs and/or within systems, and can aim to develop infrastructure, enhance program sustainability, and/or foster problem solving capabilities. The framework consists of three key action areas (workforce development, organizational development, resource allocation) and two elements of context for capacity building (leadership, partnerships) (Figure 2-1), and calls for capacity building initiatives to span the action areas and, when deemed relevant, the context elements as well. Additionally, it outlines five principles of effective capacity building: (a) respect and value pre-existing capacities, (b) develop trust, (c) be

responsive to context, (d) avoid pre-packaged ideas and strategies, and
(e) develop well planned and integrated strategies.

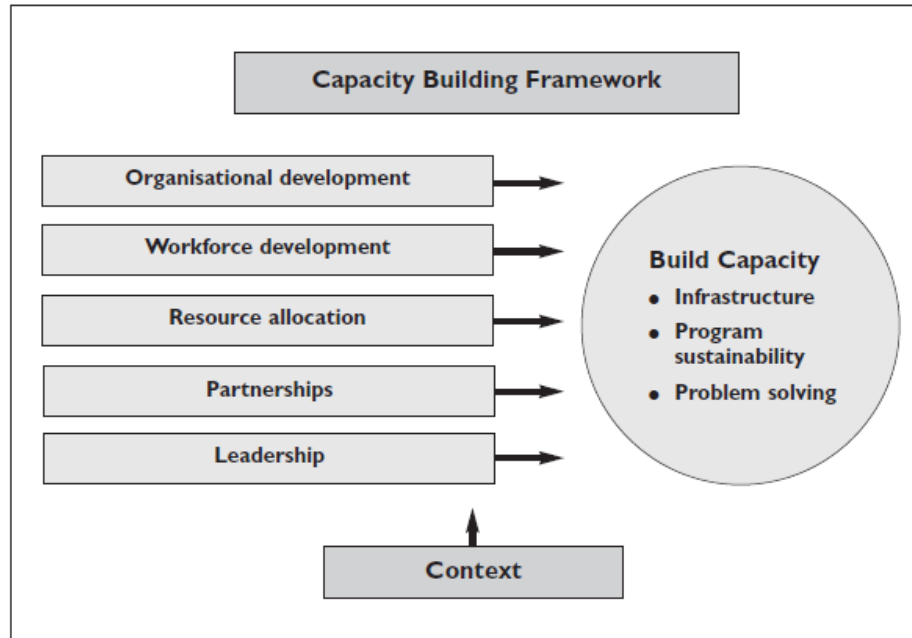


Figure 2-1: New South Wales Capacity Building Framework

Source: NSW Health Department, 2001

Although it includes only five domains, this framework is comprehensive. Indeed, in her review of capacity building literature, Simmons (2009) identified 87 characteristics of capacity and found the five NSW domains particularly useful to classify them. Further, this framework suggests strategies to address various facets of the five domains. Some have critiqued this framework asserting it does not include the characteristic 'stakeholders' commitment to action' (Liberato, et al., 2011;

Yeatman & Nove, 2002), but a close reading reveals the notion of building stakeholders' commitment to health promotion permeates the framework.

To summarise, this review of capacity building literature indicates:

1. Capacity building is a process to leverage a set of characteristics for a purpose.
2. Myriad characteristics constitute capacity and can be categorised according to five broad domains: workforce and organizational development, resource allocation, partnerships, and leadership.
3. Capacity building is a complex, non-linear process of change and should, therefore, target characteristics in more than one of the five domains in an integrated fashion.
4. Decisions regarding which characteristics to target and how to integrate them depend on the context and purpose of the capacity building intervention.
5. Capacity building interventions should strive for sustainability such that intervention targets (e.g., an organization and its staff) improve their capacity to address future health promotion issues, thereby multiplying the gains of the capacity building intervention.

It follows that assessment of capacity building interventions should be long term and, I argue, so should the interventions themselves.

2.2.5 Assessing capacity building interventions

A set of nine Likert scales to assess the quality of health promotion practitioners' capacity building initiatives have been developed and assess such things as the capacity of an organization to tackle a particular health issue, the capacity for organizational learning, the quality of program planning, and the likelihood a program will be sustained (Hawe, et al., 2000). Beyond this, no specific guidance to evaluate capacity building exists, though some suggest qualitative methods may be particularly appropriate to explore capacity building processes, given change may occur in unanticipated ways (Crisp, et al., 2000).

The Health Promoting Health Service Project (HPHS) in Scotland is a qualitative study that aimed to inform health promotion work across health services (Whitelaw, Graham, Black, Coburn, & Renwick, 2012; Whitelaw, Martin, Kerr, & Wimbush, 2006). The long term evaluation of the HPHS highlights how capacity is developed and enhanced over time offering, thus, empirical evidence supporting the multiplied gains thesis previously discussed (Hawe, et al., 1997). The first evaluation in 2006 (Whitelaw, et al., 2006) revealed a number of capacity outcomes which were strengthened over the subsequent six years (Whitelaw, et al., 2012). In 2012, contextual challenges (e.g., organizational commitment) identified

in 2006, had been successfully addressed and were identified as capacity outcomes (e.g., increased senior managerial support and effective project management structures and processes, resource mobilization and allocation). These outcomes altered the context such that the project could act as a lever within the Scottish National Health Service for additional health improvement activities previously not considered priorities. Gains were multiplied.

Notably, the five domains of the NSW framework operate throughout the phases of a capacity building intervention and evolve over time (Whitelaw, et al., 2012; Whitelaw, et al., 2006), pointing to the importance of assessing both processes and outcomes of capacity building. The context-mechanism-outcome heuristic of realistic evaluation (Pawson & Tilley, 1998) can be a helpful way to conceptualise capacity building processes and outcomes over time because outcomes of one phase become part of the context in a subsequent phase, trigger new mechanisms, and lead to additional capacity outcomes. The initial evaluation of the HPHS makes this evident as the authors used this heuristic to frame their analysis (Table 2-2). Finally, the HPHS study illustrates how the five domains of capacity building in the NSW framework can be contextual elements, processes, or outcomes and provides

evidence for the need to coordinate actions in the various domains to effect capacity building (Whitelaw, et al., 2006).

Table 2-2: Context, mechanism, and outcome findings from the HPHS evaluation (2006) and their relationships to the NSW domains of capacity building

	Findings from the First HPHS Evaluation (2006)	Capacity Building Domain
Context	<ul style="list-style-type: none"> - Low level organizational commitment - Responsiveness to broad health improvement policy agenda 	Organizational development & leadership
Mechanisms	<ul style="list-style-type: none"> - Developing health promotion competencies - Nurturing a critical mass of people within the organization ('multipliers') - Providing access to a 'tool'/framework - Providing access to skilled health promotion support - Fostering leadership and advocacy 	<p>Workforce development</p> <p>Partnerships</p> <p>Leadership</p>
Outcomes	<ul style="list-style-type: none"> - A shift in health promotion thinking, knowledge, skills as a consequence of training, support and experience - Improvements in social networks and links to organizations - Impacts on healthy public policy and organizational practice 	<p>Workforce development</p> <p>Partnerships</p> <p>Organizational development</p>

Source: Whitelaw *et al.*, 2006

Two empirically based capacity building models offer some direction for capacity building assessment as they distinguish processes from outcomes. One differentiates determinants, facilitators, and outcomes of capacity building (Hanusaik et al., 2007), whereas, the other accounts for baseline capacity, identifies capacity building facilitators, conceived of as intermediate outcomes, and suggests intermediate capacity outcomes may lead to long term capacity outcomes to sustain programs and improve targeted health outcomes (Joffres et al., 2004a). Compatible with these models, is the suggestion that capacity is a potential state, whereas, competence is an active state (Goodman et al., 1998). In other words, competence refers to how skillfully capacity is applied. Thus, we may consider two levels of capacity building outcomes: proximal capacity building outcomes, where an improvement or development of capacity in any of the five domains is observed, and distal capacity building outcomes, where stakeholders' are observed making competent use of their new and/or improved capacities. Indeed, this is representative of the processes and outcomes observed in the HPHS. Moreover, this calls attention to the need for researchers to engage in long term studies to contribute valuable knowledge regarding the processes of

developing and sustaining non-academics' capacities and competencies to do health promotion.

2.3 Capacity Building and Physical Activity Intervention studies

In physical activity promotion, we have little evidence regarding capacity building because only four physical activity promotion intervention studies have been informed by a capacity building model, and their focus has been on health, or health behaviour outcomes, not capacity building outcomes. These four Australian studies sought to strengthen physical activity promotion capacity in either the health (McKenzie, Naccarella, & Thompson, 2007; Sims, Huang, Pietsch, & Naccarella, 2004) or government (Thomas, Hodge, & Smith, 2009; Wen et al., 2002) sectors. I will discuss these studies in relation to the five domains of capacity building described in the NSW framework, namely, workforce and organizational development, leadership, resource allocation, and partnerships.

2.3.1 Health sector

The Victorian Active Script Program (ASP) (Sims, et al., 2004) was established in 1999 to increase the number of general practitioners in Victoria, Australia who deliver timely and effective physical activity advice to their patients. Organizational development was targeted by developing resources and interventions with the Divisions of General Practice and partnerships between Divisions. Workforce development strategies included training Divisions' staff to provide skills training and professional development for general practitioners' to influence their behaviour, attitudes, skills, and knowledge. Leadership was ensured through central management with Active Script Liaison Officers who oversaw and facilitated development and implementation of interventions and relationships between relevant stakeholders.^{iv} After two years, 670 general practitioners from 11 of the 31 Divisions had participated. Significant increases in their knowledge about duration and type of physical activity to recommend and their confidence to provide physical activity advice were observed, as were increases in the percentages of physicians providing the advice to patients and routinely assessing patients' physical activity levels. Moreover, Divisions were incorporating physical activity promotion into their future business plans. In 2003, experienced Divisions

demonstrated capacity for multisectoral collaborations to increase population activity levels, and the intent was to roll out the ASP to an additional 27 Divisions.^v Today, the ASP has evolved to *Lifescrpts*^{vi} a computerised program, available nation-wide, providing general practice with evidence-based tools and skills to help patients address lifestyle health risks. This format may be regarded as a means to sustain ASP, and may reach a larger audience with lower resource investment. However, it has yet to be evaluated. Will physicians' capacity be strengthened to the same extent as through the face-to-face training offered in ASP? There is some evidence to indicate that simple transfer of knowledge may not be sufficient and that experiential learning may be more effective (Hawe, et al., 2000; Nu'Man, et al., 2007). Moreover, will the computerised version require Divisions to work in partnership? Will it result in a loss of physical activity promotion capacity Divisions gained through the capacity building strategies employed in ASP? In other words, the program may be sustained, but will the capacity gains? Is this new program format conducive to multiple, unintended outcomes? Long term evaluation results are needed to assess the benefits of the new format of ASP.

Instituted in 2004, *Well for Life* (WFL) is another Victorian initiative (McKenzie, et al., 2007) and aims to improve nutrition and physical activity

for frail older people. During the first two years, 48 projects across eight regions of the Victorian Department of Human Services were funded for 12 months. Increases in staff skills, knowledge, and attitudes regarding the importance of health promotion for frail older people were observed, together with broader organizational development (healthy lifestyle, physical activity, and nutrition policy development, and development of assessment procedures and protocols, and health promotion resources). Partnerships in the form of new health professional networks and inter-professional relationships also grew out of the initiative. Agencies wanted to maintain WFL and indicated success factors such as commitment, leadership, and initial funds. However, lack of staff continuity and ongoing funding were viewed as possible impediments (McKenzie, et al., 2007). In 2009, the Department of Health provided funding for 29 agencies to implement WFL with an added emotional well-being component.^{vii}

Program evaluations indicate WFL helps seniors maintain or moderately improve various indicators of fitness. Moreover, in 2010, agencies were planning to sustain the program using such means as policy changes, continued training, partnerships, identification of new funding sources and integration of WFL into their budgets, and material resource acquisition (Department of Health, 2010). It is unclear, though, if agencies were

already using such means at this time. Given that by 2010, over 150 agencies had been involved with WFL (Department of Health, 2010), it is possible they mobilised funds through other means. Were these capacities developed as a result of the program? Were leadership and partnerships instrumental to the expansion? Process evaluation data could help to understand how the expansion took place and inform similar endeavours.

2.3.2 Government sector

Concord, A Great Place to be Active was a two-year community-based intervention (1997-1999) to increase the Concord city council's capacity to facilitate physical activity (Wen, et al., 2002). As project partners, council members were involved in planning and implementing community and other project events, and developed aspects of the intervention to fit into the work the council was planning for the area (e.g., social and environmental plans). Findings indicate increased commitment and skills to implement a community physical activity project and an increased understanding of the varied benefits of promoting physical activity through the Council. The Council made commitments to improve infrastructures (e.g., bicycle paths, pools) and environmental supports (e.g., signage), and allocated additional human resources for physical activity. The project led to a statistically significant decrease in

the proportion of sedentary women. Moreover, four walking groups grew out of the organised community events. This unintended, but positive, consequence speaks to the added value of capacity building, namely multiplied health gains, suggested by Hawe and colleagues (1997).

Six years later, in 2005, the VicHealth MetroACTIVE provided two years of funding to six city councils to strengthen their capacity to adopt integrated planning and to partner with communities and organizations to promote physical activity (Thomas, et al., 2009). Project officers facilitated implementation and VicHealth provided ongoing support through meetings, integrated planning courses, and a new Local Government Physical Activity Network. Evaluation results indicate all councils set up committees and conducted needs assessments, and many focussed on building internal capacity for integrated planning through training. Again, Councils' knowledge regarding physical activity promotion evolved and increased over the two years, with different units (e.g., traffic engineers, infrastructure) understanding how they could contribute. Many councils engaged in partnerships with each other and with external organizations and this supported their physical activity promotion initiatives. Pre-existing knowledge and skills and senior management support were identified as facilitators. With respect to organizational development, cross-council

planning and system changes were observed, and regarding resources, commitment to allocating human resources to project activities was observed and is being maintained (Hodge & Thomas, 2008). Finally, strong leadership skills and provision of a full time project officer were key factors for success (Hodge & Thomas, 2008).

These four studies provide some insight into how the five capacity building domains of the NSW framework (NSW Health Department, 2001) can be addressed to improve physical activity promotion efforts led by health and local government sectors. For instance, both the ASP and WFL used organizational leadership and the allocation of resources to assist with the development of the workforce (e.g., new knowledge), the organization (e.g., new policies), and partnerships (e.g., new networks). VicHealth MetroACTIVE aimed to adopt integrated planning (i.e., an organizational development goal) and to partner with communities and organizations to promote physical activity. For its part, the Concord city council developed its organizational capacity, allocated resources, and developed partnerships to achieve its physical activity facilitation goal.

While some of these studies' authors cite the centrality of leadership and adequate resource allocation to the success of capacity building initiatives, it would appear these four studies focussed more

energy on the workforce and organizational development domains. These programs were sustained, primarily, through injection of additional research funds (WFL, and government sector studies) or modification to a less resource demanding format (ASP). Notably, the NSW framework includes a 'resource allocation' domain, but does not explicitly discuss resource mobilization, as have other models (Labonte & Laverack, 2001a; Liberato, et al., 2011). The importance of improving organizational resource mobilization capacity was raised by Crisp and colleagues (2000) who wrote: "[w]hen assisting organizations or communities to gain control over health issues which affect them, there is a need to ensure that dependence on a funding body, or other external sources, does not result" (p. 100). This is further supported by organizational capacity assessment studies conducted in Canada (Faulkner et al., 2009) and Australia (Casey, Payne, & Eime, 2009). To assess the baseline capacity of Canadian organizations to promote the new ParticipACTION Faulkner and colleagues (2009) interviewed 49 key informants from local, provincial, and national organizations. Although they found Canadian organizations are committed to promoting physical activity, as illustrated by policy making efforts enabling increased financial resources to support physical activity promotion initiatives, findings revealed these funding sources are

often short term, and organizations cite acquisition of stable funding as a challenge that is linked with the retention of human resources. For their part, Casey and colleagues (2009) assessed the efficacy of a state-wide capacity building strategy to enable sporting organizations to broaden their focus from sport to health promotion and found financial resources and workforce development strategies facilitated organizational development. Yet, they noted organizations lacked the capacity to mobilise new funds. Strong and effective leadership is one way to help mitigate workforce and resource related challenges and to develop partnerships which, in turn, can provide complementary human and financial resources (Faulkner, et al., 2009). This highlights how capacity building domains may be integrated, which is an approach to enhance capacity building effectiveness of which many are proponents (Crisp, et al., 2000; NSW Health Department, 2001; Nu'Man, et al., 2007; Smith, et al., 2001; Whitelaw, et al., 2006).

With this review, I expose the dearth of physical activity intervention research framed with a capacity building model. I suggest that to promote physical activity in adolescent populations a promising avenue may be to strengthen the capacities of those who provide physical activity opportunities, such as recreational organizations. This approach may help

ensure physical activity interventions are sustained, and as I have discussed, the extant physical activity promotion literature points to the need for long term interventions to effect significant increases in teens' physical activity level. Additionally, strengthening a recreational organization's capacity to, among other things, develop partnerships with schools could result in multi-component, community-school physical activity interventions. Again, the physical activity promotion literature suggests such interventions are needed. Finally, to build the capacity building-physical activity knowledge, I suggest physical activity intervention researchers seek to understand the capacity building processes and outcomes, along with the health and health behaviour outcomes targeted. This will contribute to our understanding of the interactions between the five capacity building domains, the relative importance of each domain, and effective strategies to strengthen them. To this end, lessons can be drawn from a series of obesity prevention capacity building intervention studies that included significant physical activity promotion.

2.4 Capacity Building and Obesity Prevention Research

The Pacific *Obesity Prevention in Communities* (OPIC) project (Schultz et al., 2007; Swinburn et al., 2011) consists of a series of obesity prevention studies targeting adolescents in Fiji, Tonga, Australia, and New Zealand, and framed around the New South Wales capacity building framework (NSW Health Department, 2001). Although focussed on obesity prevention, the project studies are relevant to this discussion because they did include physical activity promotion and, more importantly, assessed changes in capacity. In each of these quasi-experimental community-based studies, key organizations in the intervention communities designed and implemented a program in schools, with the support of the researchers.^{viii}

The three-year *It's Your Move!* (IYM) (Mathews, Moodie, Simmons, & Swinburn, 2010) and *Ma'alahi Youth Project* (MYP) (Fotu et al., 2011b) studies targeted all five NSW capacity building framework domains with such strategies as promoting leadership of students and teachers to drive the implementation, providing agricultural training for the community, creating partnerships with other regional organizations and community groups, creating school policy changes regarding healthy eating and physical activity, and funding proposal preparation. The IYM program resulted in significant reductions in participants' weight and standardised

BMI^{ix} (Millar et al., 2011) and the MYP led to a significant reduction in participants' body fat (Fotu et al., 2011a). The process evaluation results reveal the project teams of the MYP and IYM successfully mobilised financial resources. Additionally, students who participated in the MYP workshops exhibited acquisition of leadership skills in the areas of intervention planning and implementation, and resource mobilisation (Fotu, et al., 2011b). The MYP investigators indicate that the partnerships developed were instrumental to the success of MYP, but that some partners' involvement was only slight and not all partnerships were sustained, and moreover, the project was still maturing when the funding ceased. More time could have helped to continue the intervention, solidify capacity gains, and deal with unforeseen contextual challenges.

Two additional three-year intervention studies were conducted in Australia and targeted children. *Be Active Eat Well* (BAEW) aimed to increase the community's capacity to promote healthy eating and physical activity and prevent unhealthy weight gain in children (Sanigorski, Bell, Kremer, Cuttler, & Swinburn, 2008). At the three-year follow-up, significant increases in capacity were observed across all areas measured (partnerships, problem solving, knowledge translation, and infrastructure) and contributed to a significantly lower amount of weight gain in the

intervention group children. *Romp & Chomp* (de Groot, Robertson, Swinburn, & de Silva-Sanigorski, 2010) aimed to increase the capacity of the community to promote healthy eating and physical activity to young children. This study's evaluation results indicated increases in the partnerships, resource allocation (e.g., health promotion specialist support), and organizational development domains of capacity. Challenges included staff turnover, unclear governance structures, lack of ongoing high level leadership, and accordingly capacity increases were not observed in the leadership or workforce development domains.

With respect to sustainable capacity changes, long lasting policy changes were achieved (organizational development domain) in both projects. However, at completion of BAEW, the community organizations had not yet achieved full ownership and effectiveness, and in *Romp & Chomp*, capacity to integrate the project into regular practices was not substantial. The authors suggest increased focus on building leadership and commitment to long term efforts could help with this aspect. Resource mobilisation was also a challenge for both projects. Several of the BAEW program components (interventions) were unsustainable due to insufficient resources; notably, within the infrastructure domain, financial investment achieved a lower capacity than social and policy investments

(Simmons et al., 2008). The *Romp & Chomp* implementation team managed to overcome the challenge somewhat by reallocating resources and increasing in-kind support, but the authors suggest greater transparency of these actions could have tempered frustrations regarding lack of financial resources and improved collaborations. Together, these studies point to the importance of capacity building interventions ensuring skill building in the area of resource mobilisation.

In some of these studies, gains beyond the goals of the projects were observed, providing thus, evidence supporting Hawe and colleagues' (1997) assertion that the added benefit of capacity building is its potential to multiply health gains. Specifically, given their new expertise, the BAEW team provided leadership to other communities addressing similar issues (Simmons, et al., 2008), and subsequent to the agricultural training provided in MYP, multiple positive and unintended outcomes have been observed, including large numbers of individuals and groups within and beyond the intervention regions growing vegetables to supplement family food supply or income, and some groups progressing from small-scale farming to commercial farming (Fotu, et al., 2011b). Moreover, the Romp & Chomp training offered to allied health professionals, child care workers, and settings to implement health promotion projects has now been

integrated into the statewide health promotion project, *Kids- 'Go for your life'* (de Groot, et al., 2010) which is part of the new *'Go for your life' Health Promoting Communities: Being Active Eating Well* (HPC: BAEW) initiative to promote healthy eating and physical activity that targets all age groups (from 0-12 year olds to older adults) in five Australian communities. The HPC: BAEW operates at a whole-of-community level and uses a multi-strategy, multi-setting capacity building approach and an ecological model to develop the program activities (de Silva-Sanigorski et al., 2010). Investigators are conducting process (extent to which program activities are implemented) and outcome evaluations, and while this evidence will add significantly to the obesity prevention, and indeed, health promotion knowledge bases, it would seem these authors are not evaluating the *capacity building* processes and outcomes. Nonetheless, this expansion of BAEW to HPC: BAEW will allow the initial projects (BAEW and *Kids- 'Go for your life'*) time to mature and evolve and may lead to further unanticipated outcomes along the lines of those described above.

In this chapter, I have presented existing intervention research in adolescent physical activity promotion and exposed knowledge gaps, in particular regarding sustainable interventions and intervention effects. I have suggested that promotional strategies, duration of programs, and

theoretical frameworks used in these studies to date have not been sufficient to develop sustainable physical activity interventions for teenagers nor to result in teenagers sustaining healthy levels of physical activity. I have proposed capacity building as a viable framework for helping those who deliver physical activity opportunities to adolescents to improve their practices, and have highlighted that this approach has been understudied in the realm of physical activity promotion. These knowledge gaps provide the rationale for my dissertation research.

Endnotes

- i <http://www.who.int/hpr2/gshi/localaction.pdf> consulted November 24th 2012
- ii <http://www.cdc.gov/mmwr/preview/mmwrhtml/00046823.htm> consulted November 24th 2012
- iii <http://www.cdc.gov/HealthyYouth/CSHP/> consulted December 10th 2012.
- iv Active Script Brochure consulted December 2nd, 2012 at:
<http://www.chronicillness.org.au/sig/Active%20Script%20brochure%20Nov%2003%20.pdf>
- v <http://www.health.gov.au/lifescrpts> consulted December 2nd, 2012
- vi <http://www.health.gov.au/lifescrpts> consulted December 2nd, 2012
- vii http://www.health.vic.gov.au/agedcare/publications/wellforlife_evaluation.htm
- viii To my knowledge, the New Zealand study (Living 4 Life) has yet to be published and no publications to date present capacity building results for the Fijian study (Healthy Youth Healthy Communities (HYHC) (Kremer et al., 2011)), thus, I do not discuss them.
- ix Body Mass Index (BMI) = body weight (kg) / [height (m)²]
- x http://www.goforyourlife.vic.gov.au/hav/articles.nsf/pracpages/Kids_Go_for_your_life?open consulted September 14th, 2012

CHAPTER 3

METHODOLOGY & METHODS

3.1 Objective

The overall aim of this work was to build on the physical activity promotion capacity of an organization offering physical activity opportunities to adolescents. Ultimately, I sought to understand processes and outcomes of capacity building to generate knowledge that may provide some concrete guidance for capacity building practitioners and researchers aiming to effect sustainable change in organizational settings.

Since capacity building is a process, learning through an actual capacity building initiative was important to uncover how such an endeavour operates and evolves over time to lead to positive and enduring changes. Moreover, in health promotion, such an approach is warranted because “if we want more evidence-based practice, we need more practice-based evidence” (Green, 2008, p. i23). Therefore, I partnered with a Montreal YMCA to build on their adolescent physical activity promotion capacity and to study the processes involved and the outcomes to which they contributed. Specifically, the YMCA and I

designed and implemented a program evaluation study and I used this work to advance my physical activity promotion capacity building goal.

3.2 Theoretical Frameworks Guiding the Study

The rationale for the objective of my study is grounded in health promotion which, particularly when driven by an ecological framework, calls for the collaboration of multiple societal sectors to produce and deliver programs targeting multiple levels of behaviour influence, including intrapersonal, interpersonal, organizational, community, physical environmental, and policy (Giles-Corti, 2006; Maibach, Abrams, & Marosits, 2007; McLeroy, Bibeau, Stickler, & Glanz, 1988; Sallis, Owen, & Fisher, 2008; Stokols, 1992, 1996; World Health Organization, 1986). Furthermore, the *WHO Global Strategy on Diet, Physical Activity and Health* (World Health Organization, 2004), indicates the need for comprehensive, multisectoral, multidisciplinary, and participatory strategies to “promote and protect health by guiding the development of an enabling environment for sustainable actions at individual, community, national and global levels that, when taken together, will lead to reduced disease and death rates related to unhealthy diet and physical inactivity” (p. 3). Finally, the need for a multi-sector approach (e.g., university-organization partnerships) to develop skills among practitioners, in

particular, to construct evidence in health promotion through the systematic documentation of community development initiatives, has been emphasised (World Health Organization, 2000, 2006, 2009). Thus, partnering with a YMCA to strengthen their program evaluation capacities is warranted under a population health promotion framework. Throughout my study, my interactions with YMCA partners were consistently informed by a capacity building framework in that I consistently worked toward building on partners' skills and knowledge of physical activity promotion. My broad and overarching capacity building framework is presented in Appendix B).

Developing the YMCA's social marketing (Kotler & Zaltman, 1971) capacities to help them enable and reinforce adolescents' physical activity practices also coheres with health promotion. Social marketing is a systematic approach to understanding and strategically responding to the characteristics of a target population, as well as taking into account contextual factors which influence behavioural decisions. Specifically, this model applies commercial marketing strategies to the planning, implementation, and evaluation of programs designed to influence the voluntary behaviour of target populations in order to improve personal and societal welfare (Storey, et al., 2008). Overall, social marketing is an

iterative process consisting of initial planning, formative research, strategy and program development, pre-testing of interventions and messages, implementation, and monitoring and evaluation (Grier & Bryant, 2005). Thus, implementing a process of program evaluation is a viable means for the YMCA to obtain information about their program and its participants which can inform their programming and promotional decisions, and allow them to monitor program participation. Again, my interactions with the YMCA were consistently informed by principles of social marketing, in particular, an understanding of the needs and desires of the adolescent population, population segmentation, and the marketing mix. The Social Marketing framework that informed my work with the YMCA is presented in Appendix C. Note that this framework is based on formative research about the teenagers, the YMCA, and the neighbourhood, as well as the adolescent physical activity literature.

3.3 Research Approach

Although the capacity building model has rarely been used in physical activity promotion research, academic researchers and practitioners cooperating to effect sustainable change is not a new idea; Kurt Lewin (1946) called for this in his seminal paper on action research. Action research is pertinent to understanding phenomena through change.

It is a research approach that engages academic researchers and non-academic stakeholders in a democratic and iterative research cycle of planning, action, and fact finding about the effect of the action (Brydon-Miller, Greenwood, & Maguire, 2003; Lewin, 1946). A central tenet of action research is that working collaboratively will lead to changes in the academics and non-academics alike; thus the approach integrates research, action, and education (Brydon-Miller, et al., 2003; Lewin, 1946). These three components make action research particularly compatible with my capacity building objective because capacity building calls for collaboration of stakeholders to effect sustainable change (action) in the form of, for example, skills and knowledge of the workforce (education) at the capacity building site (Hawe, et al., 2000). Moreover, since action research allows for modifying the research design over time, as required, it is congruent with the evolving and potentially unpredictable nature of capacity building (Crisp, et al., 2000; Simmons, et al., 2011).

Participatory research, for its part, has been defined as a “systematic inquiry, with the collaboration of those affected by the issue being studied, for purposes of education and taking action or effecting social change” (Green et al., 1995, p. 4). Although, this definition bears striking resemblance to that of action research, the literature is replete with

disagreements regarding differences and similarities between action research and participatory research (and several other terms such as participatory action research and community-based participatory research). One main area of dispute pertains to the extent to which stakeholders collaborate (e.g., which stakeholders groups have the greatest decision-making power). Lewin wrote that action research “needs the best of what the best among us can give, and the help of everybody” (Lewin, 1946, p. 46) and others have proposed various typologies of stakeholder engagement (Hart & Bond, 1996; Hart & Bond, 1995; Holter & Schwartz-Barcott, 1993; Munn-Giddings, McVicar, & Smith, 2008; Waterman, Tillen, Dickson, & de Koning, 2001; Appendix D). Many would argue that among the types of action research these authors propose, those with the highest degrees of non-academic partner engagement most closely resemble participatory research (Cargo & Mercer, 2008; Jagosh et al., 2011). It could also be asserted that participatory research differs from action research in that it does not necessarily include the ‘plan-act-fact finding’ cycle outlined by Lewin. Indeed, many participatory research studies follow traditional research designs (e.g., RCT, survey, ethnography, etc.; Macaulay, Jagosh, Pluye, Bush, & Salsberg, 2013).

A recent realist review indicates that community-based participatory health research can, among other things, lead to more relevant and useful research, and contribute to “sustaining health-related goals, extending programs and infrastructure, and creating new and unexpected ideas and activities” (Jagosh, et al., 2012, p. 334). To my knowledge, though, only twelve physical activity intervention studies have used a participatory research approach, and have targeted either adults (Cashman, Flanagan, Silva, & Candib, 2012; Estabrooks, Bradshaw, Dzewaltowski, & Smith-Ray, 2008; Kegler et al., 2012; Pazoki, Nabipour, Seyednezami, & Imami, 2007; Sharpe et al., 2010; Suminski, Petosa, Jones, Hall, & Poston, 2009; Wilcox et al., 2010; Zoellner et al., 2007) or children (Bryant et al., 2010; Hoelscher et al., 2010; Paradis et al., 2005; Schetzina et al., 2009). None has targeted an adolescent population. Notably, all of these studies were successful in increasing participants’ physical activity.

In this dissertation, I consider a collaborative study is (a) action research if the Lewinian cycle is used and (b) participatory research if non-academic research partners share research decisions with the academic partners regarding, at a minimum, the focus of the study and the interpretation and implementation or dissemination of the study results (Jagosh, et al., 2011). This degree of non-academic partners’ participation

is also used by the Canadian Institutes of Health Research to define Integrated Knowledge Translation (Parry, Salsberg, & Macaulay, 2009).

To build on the YMCA's capacity, I used a participatory research approach to advance my physical activity promotion capacity building objective. I followed the Lewinian action research cycle, continually planning means to achieve both the evaluation and capacity building objectives; taking action by, for example, guiding partners through the evaluation and suggesting ways to use results to promote physical activity; and assessing the effects of these actions on the YMCA to inform subsequent action planning.

3.4 Pragmatism

This study was problem centred and my methodological choices stemmed from my research objective; I was guided by the practical and applied research philosophy of pragmatism (Creswell & Plano Clark, 2011; Mertens, 2010). Pragmatism assumes that what is useful determines what is true (Mertens, 2010; Patton, 2002). Reality can, thus, be singular or relative; what is important is the knowledge produced is effective in practice (Mertens, 2010). It follows that the researcher can position himself or herself such that positive consequences are effected through the research (Mertens, 2010). The assumption is we can know through doing not just through conceptualization (Brydon-Miller, et al., 2003).

Pragmatism is a particularly appropriate paradigm for participatory research which may bring together partners with differing world views; participatory researchers must be comfortable with multiple paradigmatic stances and flexible if they are to reach consensus with their research partners and achieve mutually desired outcomes.

Pragmatism allowed me to work in partnership with the YMCA and conduct a mixed methods program evaluation study with them (some assert mixed methods research is grounded in the philosophical paradigm of pragmatism (Creswell & Plano Clark, 2011; Tashakkori & Teddlie, 2010)). Epistemologically, pragmatism allowed me to act as an agent of change (and an equal participant) in the participatory research study with the YMCA, on the one hand, and to observe and study our process and its effect on YMCA partners (in a non-participatory way), on the other. In the same vein, pragmatism made it possible to reconcile our co-constructed mixed methods evaluation with my personal qualitative study of this co-construction.

Research grounded in this philosophy is judged by its usefulness (Creswell & Plano Clark, 2011; Mertens, 2010). Indeed, pragmatists hold that the ethical goal of research is to “gain knowledge in the pursuit of desired ends” (p. 36). My objective was to engage in a collaborative

process with the YMCA to generate practice-based knowledge that may be useful to the YMCA and other practitioners and researchers engaging in capacity building initiatives. The true test of the value of this research will be how useful others find my assessment of the capacity building processes and outcomes presented and explained herein, in their own practice. As Brydon-Miller and colleagues (2003) wrote: “[c]onventional researchers worry about objectivity, distance, and controls. Action researchers worry about relevance, social change, and validity tested in action by the most at-risk stakeholders” (p. 25).

3.5 Case Study

“Case study is not a methodological choice but a choice of what is to be studied” (Stake, 2003, p. 134). Through an in depth study of the particular case, the aim is to gain a holistic understanding of the phenomenon (Patton, 2002; Stake, 2003). The case I report herein is the partnership between me and a YMCA, and the evaluation of the YMCA teen program we conducted together. This case study is an instrumental one in that I examined our collaborative work to shed light on organizational capacity building processes and outcomes (Stake, 1995, 2003). The object of a case study should be a specific, unique, and bounded system (Stake, 2005). Although I began collecting data May 7,

2007 and this is ongoing, this case study pertains to a precise time period. My account begins in December 2009, because prior to this, the YMCA underwent a change in management, significant staff turnover, and restructuring. Moreover, the current director of the YMCA took her position in April 2008 and the ensuing months were spent getting to know one another, our perceived needs, desires, intentions, and work ethic, as well as finding our footing regarding how we could work together. My data indicate that at the end of 2009, the organizational change had stabilised, the relationship between me and the centre director had formed, and our specific ideas for our partnered work were taking shape. By April 2012, several concrete and sustainable outcomes had occurred, marking a logical end date for the case. These time boundaries provide the data needed to address my research objective, while not being excessive. Note that an overwhelming amount of data can be a drawback to case study research (Patton, 2002). Moreover, the rationale for my *Ad Hoc* choice for the time frame is justified by my pragmatist research philosophy. (Findings pertaining to the May 2007 – December 2009 time period appear in Appendix E: International Congress on Physical Activity and Public Health poster.)

3.5.1 The setting

On the island of Montreal, there are 16 YMCA centres that are part of the YMCAs of Quebec Association. The YMCA I worked with has a teen centre that is run by the full-time coordinator and two part-time youth workers. As needed, the program also employs, part time, individuals with specific expertise (e.g., coaches, educators). The program offers a variety of social, educational, artistic, and physical activities for youth in grades 7-11 (12-17 years). These activities are offered Monday to Thursday between 4:00 and 8:00 and Friday between 4:00 and 10:00, and take place in the YMCA gymnasium, teen room, dance studios, kitchen, and also neighbouring parks, pools, and organizations (e.g., rock climbing centre). All activities pertaining to the case took place in this YMCA and its environs.

I chose to conduct my study with this YMCA for several reasons. First, I am particularly concerned with social health inequalities and the fact that physical activity levels are lowest among underserved populations (Cameron, et al., 2007), and this YMCA is located in and serves a low socioeconomic status community and offers low cost (or free) activities for teenagers. Second, this YMCA offers a teen program (for 12-17 year olds) and I am specifically interested in promoting physical activity

to this age group given it is a life-stage when physical activity levels typically decline (Canadian Fitness and Lifestyle Research Institute, 2012). Third, I approached three different community organizations that offer teen programming in the community and the YMCA was the one with whom my interests most closely aligned. Our common ground was an indication action was more likely to take place with them than with the other two organizations (Green & Kreuter, 2005). Finally, the YMCA has infrastructure conducive to promoting a large variety and number of physical activities, increasing thus, the feasibility of my planned study.

3.5.2 The partners

I partnered with the centre director, teen program coordinator, and two teen program youth workers. Given staff turnover, since 2007 I have worked with twelve individuals occupying these roles at the YMCA. During the specific time frame of this case study, I partnered with six individuals, all of whom hold bachelor degrees and have work experience in fields directly or indirectly related to psychology, social service, and social justice. Moreover, as YMCA employees, all received various training related to their job tasks during the course of my work with them (e.g., management, suicide prevention, sports (e.g., rock climbing), and sexuality education). As the findings chapters will attest, all partners

welcomed, and valued, my presence and contributions in their centre and we all worked very well together. Further details regarding each partner are outlined below. All partners are referred to with pseudonyms.

YMCA centre director

When I first approached the YMCA, Tina was the centre director. She left her position in the fall of 2007 and the current director, Cheryl, arrived in April 2008. This is Cheryl's first position as centre director. Previously, she held the aquatic coordinator's position at a different YMCA in Montreal. As centre director, Cheryl supervises a staff of five who coordinate administration; health, fitness, and recreation; and the community (teen, youth, and seniors programs) sectors, and reports to a supervisor within the YMCAs of Quebec Association. Cheryl works with 'open door' policy; I was, thus, able to stop by unannounced to speak with her. On several occasions, I also requested we schedule precise meeting times to which Cheryl always responded positively. Email was also an effective means of communicating with her. Until October 2010, she was the direct supervisor for the teen program coordinator. The community director, Carole, has since taken over this role.

YMCA teen program coordinator

The program coordinator is responsible for the teen program, including its development, promotion, and administration. Five individuals have held this full-time position during the time I have been collaborating with the YMCA: Jacob (- September 2008), Tony (December 2008 – January 2010), Rafael (April 2010 – June 2011), Ben (June 2011 – June 2012), Rachel (June 2012 – present). During the time boundaries of this case study, I partnered with Rafael and Ben, both of whom were in their late twenties and had educational and work experience in social service and social justice domains with adolescents, including at risk youth. My mode of working with Ben and Rafael was the same: we would email one another; I would stop by their office or the teen room unannounced; and we would schedule specific meeting times. I found them both to be fully available and committed to our work. Notably, Rafael did mention in May 2010 when he left the YMCA that he had wished he could have made himself more available to me and to our work.

YMCA teen program youth workers

Since June 2009, there has consistently been one male and one female youth worker employed by the teen program. These individuals are the primary staff to work in direct contact with program participants.

Nathan has been with the program since June 2009. Cora left her position in June 2010 and was followed by Tamara (June 2010- September 2011), Tanya (September 2011 – October 2012), and Samantha (September 2012- present). Although, I did meet with the youth workers and the coordinator on specific occasions (I facilitated a SWOT analysis and ensuing reflections and planning; and often attended their staff meetings), for the most part, my communications with the youth workers took place during teen program hours in the teen room. I stopped by the teen room between 3 and 5 times per month, on average, to speak the youth workers and teens and to observe the program. Note that I also helped to deliver some activities for the girls (yoga, girls workout crew) and participated in some girls' night activities, and thus, interacted with the female youth worker through these activities, as well. I was viewed by YMCA staff and the teens as a valuable volunteer for the YMCA teen program.

The researcher

As the action researcher guiding our work and a partner who is part of the case I present here, it is relevant that I make my opinions and intentions about my study transparent. Typical of action researchers, I have political convictions that necessarily coloured my research focus, approach, and methods. I am disturbed by the social health inequalities in

Canadian society and believe they have no place. I am bothered by the fact that much of the knowledge generated through research is stored in academic journals that are inaccessible to most. I am not interested in conducting research for research sake. To quote Hilary Bradbury: “it’s more satisfying for me to help create desired change, rather than merely observe life go by” (as cited in Brydon-Miller, et al., 2003). I want the knowledge generated through my research to be put into practice and used to generate subsequent knowledge: “research that produces nothing but books will not suffice” (Lewin, 1946, p. 35).

I am patient. I accept that change happens slowly, building in small increments over time. I approach physical activity promotion and capacity building with this patience. I am often asked if I think it is possible to entice people to increase their physical activity levels. My answer is always the same: I refuse to believe we cannot understand and work around barriers, be they perceived or actual. This optimism tends to be common among action researchers (Brydon-Miller, et al., 2003). I also share with action researchers a willingness to be wrong and a belief that others know their needs better than I do (Brydon-Miller, et al., 2003). These characteristics helped me to listen to YMCA partners and to respond to their needs and objectives, rather than only addressing my own. Finally, I am flexible and

can handle uncertainty. Action researchers tend to need an ability to handle some chaos (Brydon-Miller, et al., 2003). I admit that early in this study I recognised I would need to increase my tolerance for ambiguity; this is one way my own capacity was built through this study. My mantra throughout was: “go where the project takes you”.

3.6 Methods

Capacity building is a process. Capacity evolves and unfolds overtime, and changes in capacity may occur in unanticipated ways (Crisp, et al., 2000; Simmons, et al., 2011). Therefore, to study the capacity building process, I used qualitative methods which are highly appropriate for studying how things work in a real-world, real-time context and for capturing the unexpected (Patton, 2002). Moreover, an in depth study of this particular capacity building case was warranted because “[t]here are styles of community and organizational development that operate on the premise ‘What we do is no more important than *how* we do it’” (p. 159). In fact, the director of the YMCA said: “to us it's more how we do things, than what we do” (Cheryl, discussion, May 27, 2010). Finally, process descriptions can help tell a story that provides the reader with insight that is *useful* to her or him, which aligns with pragmatism.

3.6.1 Field work

Throughout the period of this case study, I visited the YMCA once or twice per week, spending time with the teens in the Teen Zone, helping to run some teen program activities, attending teen program staff meetings, and meeting with YMCA partners to discuss our partnered work and the teen program. My presence at the YMCA allowed me to develop relationships with all partners to enhance our work process and establish mutual comfort discussing the teens, the YMCA, our goals, and our processes. Meetings with YMCA partners were both formal and informal and served as spaces to develop our program evaluation methods (e.g., plan data collection, develop data collection and analysis tools), interpret our results, and discuss means to disseminate and use them. Additionally, we would discuss the YMCA in general and the teen program specifically, community issues and activities, and potential future avenues for our collaboration. All meetings and discussions took place during partners' work day, and generally in their offices with their doors open. Interruptions were frequent, with YMCA partners having to respond to telephone calls and staff queries, or needing to address various operational issues. These interruptions allowed me to catch glimpses into their work and to better understand the context within which YMCA

partners and teen program participants act, which is necessary to achieve a holistic understanding (Patton, 2002). I documented my visits to the YMCA with field notes (720 pages of handwritten field notes).

3.6.2 Data collection

My data collection has been continuous to capture the evolution of my capacity building initiative with the YMCA. This data collection approach was vital to gain an understanding of the capacity building processes and outcomes present.

Interviews

One strength of observational field work is the outside researcher may notice things that are routine to people in the setting and, thus, may not bring up in interviews (Patton, 2002). I used my field notes to inform my interviews with YMCA partners, allowing me to collect more nuanced data than would have been possible without my field work. My interview guides (Appendix F) were also informed by capacity building literature (Chaskin, 2001; Germann & Wilson, 2004; Goodman, et al., 1998; Hawe, et al., 2000; Labonte & Laverack, 2001a; Labonte & Laverack, 2001b) and aimed to elicit partners' reactions and perceptions of challenges and

benefits regarding our partnership and program evaluation work and results.

I conducted two types of interviews over the course of the study. First, I used many of my discussions with partners as opportunities to conduct informal conversational interviews, guided by the sensitising concept 'learning' and my objective to understand capacity building processes and outcomes (Patton, 2002). This style of interview was appropriate because given the duration of my field work I did not have to rely on a single encounter with each partner. Also, the spontaneous nature of these interviews allowed me to pose questions 'in the moment', making them concrete for YMCA partners (Patton, 2002) and allowing me to adapt with the changing YMCA context. This holistic approach also helped ensure the relevance of my intervention. Second, I conducted open ended semi-structured interviews at key moments during the case study period (e.g., following submission of program evaluation reports, when partners stepped down from their positions at the YMCA, and when I was bringing this case study portion of my field work to a close). To establish trust and transparency, I would, at times, turn off the digital recorder at partners' requests, and all were aware of the interviews I conducted with their co-workers. Moreover, all partners knew they were free to not respond to

certain questions, though this never happened. I transcribed verbatim 21 digitally recorded meetings, discussions, and interviews between 30 and 90 minutes (24 hours in total), with five YMCA partners.

Email

My data corpus includes all email I sent to, and received from the teen program coordinators, the youth workers, and the centre director during the case study period. These email communications include such things as our requests of, and responses to one another, YMCA partners' reactions to documents I sent, and mentions of our actions and ideas. Moreover, given the emails chronicle the evolution of our relationships and our work, they are valuable to my process study objective. My inbox for the case study period comprises 571 PDF pages of email exchanges.

Documents

Various YMCA documents (action plans, flyers, program schedules) and the program evaluation documents derived from our partnered work added to the kaleidoscope of data helping to flesh out the details of the case.

3.6.3 Analysis

I used thematic analysis (Braun & Clarke, 2006) incorporating theoretical, or deductive, coding and inductive coding approaches, though my final analysis leaned more heavily on the latter as the former did not provide an adequate 'fit' for the data. I began by immersing myself in the field notes, transcriptions, and email, reading and re-reading, to absorb the full case and reflect on its chronology. Owing to the fact that I had been an active participant in the partnership and had engaged in some preliminary analyses of data throughout, I had some initial assumptions about the processes and outcomes of the case. Influenced by these, I generated some codes and themes from partnership synergy theory (Jones & Barry, 2011a, 2011b; Lasker, Weiss, & Miller, 2001), participatory research (Cargo & Mercer, 2008; Israel, Lantz, McGranaghan, Kerr, & Guzman, 2005; Jagosh, et al., 2012; Macaulay et al., 1999) and capacity building literatures (Chaskin, 2001; Germann & Wilson, 2004; Goodman, et al., 1998; Hawe, et al., 2000; Labonte & Laverack, 2001a; Labonte & Laverack, 2001b). This coding scheme helped to frame my analysis initially; however, I remained open to any themes I saw in the data staying close to YMCA partner's words and also developing latent themes (Braun & Clarke, 2006). I maintained a dynamic

interchange between the raw data and the literature, developing and refining themes and categories (Rossman & Rallis, 2003) until I saw nothing new in the data and the full corpus was coded. It is noteworthy that I did not triangulate the data sources, but rather converged them. I viewed each data source as one piece of the puzzle, each contributing to my overall understanding of the case (Baxter & Jack, 2008) I used NVivo 7 to organise coded data by units and labels, and to help collapse and expand, and categorise and re-categorise codes and broader themes. This software was also extremely useful given it allows for coding across data sources, helping to maintain order in the corpus and assisting with the subsequent phase: analysis of the temporal evolution of the case. Examining the chronology of the case was crucial since I was concerned with processes that contributed to outcomes. It is important to understand here that I do not refer to a linear chronology of events. Indeed, the case is rather complex with some processes and outcomes occurring repeatedly throughout. Yet, a progression is present. Examining the timing of data units within codes and themes and considering how the themes fit in a process-outcome matrix (Miles & Huberman, 1994), enabled me to eventually distinguish parts of the case which had previously seemed intertwined and inseparable chronologically.

Common to the qualitative data analysis process, I wrote throughout, using memos, found poetry (Butler-Kisber, 2005), and lengthy pieces of prose to help me consolidate the case, reflect on key aspects of it, and conceptualise patterns I saw in the data. I have included two poems and one piece of prose in between some of the chapters of this dissertation because these representations of the data help do additional justice to the case which cannot be fully represented through any one rendering. Furthermore, in qualitative case study research it is important to provide the reader with sufficient detail to recognise potential applicability of the findings to her or his context. Therefore, presenting the findings in a variety of forms may increase their accessibility, and thus, diffusion.

3.6.4 Trustworthiness

The findings I present here are my account of a co-constructed project of which I was part, and as such it was important I use multiple means to enhance trustworthiness (Patton, 2002). I did this through regular peer debriefing, prolonged engagement with the field, multiple data sources collected from multiple partners using multiple methods, and member checking (Merriam, 1998; Rossman & Rallis, 2003; Stake, 1995).

Peer debriefing

Throughout my study, I engaged in regular peer debriefing (Merriam, 1998; Rossman & Rallis, 2003) with Dr. Enrique García Bengoechea (PhD supervisor) who served as an “intellectual watchdog” (Rossman & Rallis, 2003, p. 69) as I modified design decisions, and engaged with the data and literature in the analysis and interpretation phases. Moreover, over the course of the case study period, I regularly shared my beliefs about the case with Dr. García who questioned my ideas, and encouraged me to keep an open mind and to journal my thoughts and feelings throughout. This was an important process due to the participatory nature of my research with the YMCA. It was important I recognise, reflect on, and discuss my biases with Dr. García. These reflections and discussions helped to further shape my actions with the YMCA, and also my interviews. This illustrates how my perception of our partnership work is a strength of my study (Patton, 2002).

Prolonged engagement with the field

Having been working in partnership for several years, YMCA partners and I have developed relationships and are comfortable speaking openly and honestly with each other; this contributes to the strength of the data I collect from them. On the other hand, it could be argued that given my relationships and my participation in our partnership work, I biased

partners' responses (Mertens, 2010). The two-and-a-half year study period was beneficial to counteract this possibility as it afforded me opportunities to pose partners questions multiple times, though framed differently, to collect corroborating or disconfirming data. Moreover, given I was motivated by a strong desire to effect change at the YMCA, I was cognizant of the possibility I would read into the data and identify themes that were, in fact, not present. To avoid this, I continually engaged with partners to verify my understanding and to clarify or further explore issues that had surfaced during previous encounters. This helped ensure I did not misinterpret their words, a potential limitation of conducting only one or two interviews with participants (Patton, 2002; Rossman & Rallis, 2003).

Multiple data sources and collection methods

The variety of methods and data sources adds to the dependability of my account (Mertens, 2010; Patton, 2002; Rossman & Rallis, 2003). These rich data helped me to describe conceptual findings with detail and illustrative quotations from YMCA partners to help the reader understand and relate to the case, and determine the applicability of our partnership's experiences to his or her own health and physical activity promotion, capacity building, and/or program evaluation context.

Member checking

Although my case study was not participatory, it is about a participatory research partnership. Hence, maintaining transparency was paramount and necessitated I validate my findings with YMCA partners (Merriam, 1998; Rossman & Rallis, 2003). I discussed my preliminary findings with them to elicit further information and to help direct my analysis. I also sent them summaries of findings requesting their feedback. My concern was that they feel represented in my account (Rossman & Rallis, 2003) and comments, such as these, confirm they do: “This looks fine, (...) I definitely recall those conversations and your report is accurate and I think pretty powerful” (Rafael, email, March 19, 2013), “That sounds like me” (Cheryl, discussion, February 20, 2012).

3.6.5 Ethical approval

This study was approved by the McGill University ethics board, REB III #243-0208 (Appendix G) and informed written consent was obtained from all YMCA partners (Appendix H). Additionally, a confidentiality agreement was signed with YMCA partners concerning sensitive internal documents they released to me for data analysis for our program evaluation study (Appendix I). Given the lengthy duration of my field work and the sometimes sensitive nature of our discussions, to

maintain partners' trust, I repeatedly explained how I would use the data. Moreover, I respected their wishes in instances when they asked I turn off the digital recorder or not use certain comments in my final report.

My findings are presented in the following four chapters. Chapter 4 details our process and its products. Respectively, chapters 5 and 6 present the initial impact of our work on the YMCA and ensuing effect of this impact. Finally, factors facilitating the processes and outcomes are described in Chapter 7.

CHAPTER 4

FROM COMPLEMENTARY TO COMBINED

The collaboration between me and the YMCA began with getting to know and understand one another so we could determine how best to work together. Herein, I will detail our complementarities as well as how we came to recognise, understand, value, and combine these complementarities to produce program evaluation products that met all parties' objectives and more.

4.1 Complementarity

YMCA partners and I have different expertise and perspectives, yet we complement each other, in particular with regard to our objectives, experience, knowledge, and skills.

4.1.1 Complementary objectives

Our different objectives were complementary in three main areas.

Physical activity promotion vs. Program evaluation

My initial objective was to work with the YMCA to build on their physical activity promotion capacities such that they could sustain changes I hoped we would implement together. While Cheryl, the YMCA director, agreed we needed to increase the number of teens participating in the program, she was particularly interested in evaluating the teen program.

Participant vs. Program (unit of analysis)

I wanted to collect teens' daily attendance to assess changes in their patterns of participation over time. The teen program coordinator, Rafael, was concerned with the feasibility of such data collection and questioned its need. His practice was to record only the number of teens in the centre each day and sum these daily totals to obtain the number of visits to the centre each month. I did not initially see the value of reporting visits and was concerned this program level data was not sufficiently rich to inform program promotion decisions.

Process vs. Impact

Being interested in physical activity promotion capacity building, I wanted to assess changes in YMCA partners' programming and promotion processes over time, and explore how those changes impacted teens' participation. Although Cheryl was concerned with the staff's processes, her evaluation objective was to determine the impact the program was having on the teens: "we want to know that what we are doing has value. We know intuitively that it does, but how can we measure that? How can we express it?" (Cheryl, discussion, May 3, 2011).

4.1.2 Complementary experience, knowledge, and skills

Initially, I was operating solely from a health promotion framework,ⁱ whereas, the YMCA framed their work around elements of positive youth development.ⁱⁱ Moreover, YMCA partners had no previous evaluation experience and were unsure how to proceed. In retrospect, Cheryl reflected: "I wanted to be able to measure things even not knowing what was important yet" (Cheryl, interview, February 13, 2012). I had the research skills to help them to set up a system to carry out a mixed methods program evaluation. Finally, as an outsider to the YMCA, I did not have their knowledge of the teens, the program, nor the context within

which the teen program operated. My knowledge was more theoretical, whereas, YMCA partners' was more practical.

4.2 Sharing Leadership

As our relationships developed and we discussed various ideas for our partnered work, we came to understand the value of the other's perspectives and to recognise the complementary nature of our respective objectives and areas of expertise. I agreed to focus my efforts on working with YMCA partners to evaluate the teen program and use the findings to inform, among other things, physical activity promotion decisions. We chose to assess program and participant level data, as well as program processes and impacts. Combining our complementarities in this way was achieved through a process of sharing leadership where, on the one hand, I responded to YMCA partners' needs and requests, and on the other hand, I guided them beyond their perceived needs.

Several examples regarding our data collection and analysis, and interpretation and use of findings illustrate this respond-guide process. First, to propose relevant quantitative and qualitative data collection and analysis tools, it was necessary I understand and respond to YMCA partners' needs as well as their concerns with the methods I was suggesting. Moreover, to implement the new rigorous program evaluation

methods, I needed to guide them, explaining the rationale behind the methods; helping to develop data collection and entry tools, and with the data entry itself; explaining how to record rich qualitative data; and submitting them results of analyses to demonstrate the value of the new evaluation system. A detailed depiction of this process is presented in Exhibit 1 following this chapter. Appendix J presents our data collection and entry tools.

Second, given my capacity building objective, I wanted to ensure YMCA partners would be able to conduct data analyses (at least in part) themselves. Concerned analysis of qualitative data would be too cumbersome for them, I developed an evaluation framework to analyse the data deductively. Initially, this framework consisted of health promotion indicators which were not particularly meaningful to YMCA partners. To adequately respond to their needs, it was necessary I use their knowledge and language. The final framework is derived from the out-of-school-time program literature. It consists of 26 out-of-school time teen program characteristics that are associated with highⁱⁱⁱ recruitment and retention of participants, which is in turn associated with greater program impact. As such, it integrates both program processes and impacts. I organised the program characteristics according to categories of health promotion

actions. The framework, therefore, exemplifies how I integrated our complementarities by incorporating YMCA partners' knowledge and responding to their impact evaluation need while guiding them toward an understanding of health promotion theory and the importance of evaluating their processes, as well as program impacts. (See Appendix K for the program evaluation framework.)

Third, based on YMCA partners' requests, I conducted analyses for four time periods per year (once for each of the three program sessions and also the full year). I prepared reports of findings to, on the one hand, deliver the evaluation results that interest YMCA partners, and on the other hand, to encourage them to look beyond the results by including recommendations for action. To exemplify, given my objective of improving their physical activity promotion capacities, I made recommendations for program promotion and suggest how promotional means could be informed by our evaluation results, and their effectiveness assessed with our tools. (See Appendix L for excerpts from all program evaluation reports.)

4.3 Integrated Perspective of the Program

Through combining our complementarities we developed an integrated overall perspective of the program. We now have a new and shared program vision, an evidence-based program rationale, and program evaluation results that provide a more comprehensive portrait of the program than we each had initially. Importantly, these three products are different than what either the YMCA or I could have developed alone, and allowed us to achieve more than we intended.

4.3.1 Program vision

YMCA partners and I now view physical activity promotion as fitting within a youth development framework, which in turn, can be situated within a health promotion framework. This overarching health promotion framework provides a unifying vision for the work the YMCA does. As Cheryl explains:

I don't know that we would've thought of that angle of physical activity promotion or health promotion (...). That adds a different angle to it. Of course we want sports, we want kids to be active, but this is a more – I don't know how to explain it – this is a more valid term. And if we can say that we are working towards something that is important to the community, it helps reach a goal that is bigger than us, bigger than basketball on Friday nights. Bigger than just keeping teens off the streets (...). To me it lends to a much bigger *vue d'ensemble* [overall vision]. To me, as a director, that is important.

(....) So, I think you've kind of put that bug in our. We would have continued to create fun activities because it engages kids, we know it's important to them. I don't think I would have caught on to that angle quite as quickly if you weren't around. (Cheryl, discussion, February 20, 2012)

4.3.2 Program rationale

Our process-outcome program evaluation framework resonates with YMCA partners. They find it provides an evidence-based rationale for the full YMCA teen program and consider it a framework for action as well as for evaluation. As Cheryl said: “it will help us build our programs. Again, not necessarily what we’re doing, but how we set it up to succeed. Yes, absolutely” (Cheryl, interview, February, 13 2012). Likewise, Rafael expressed the framework took a weight off his shoulders by indicating to him that “it’s not about offering the right program” (Rafael, meeting, May 30, 2011), but rather, it’s about the way he and his team work with the teens. Cheryl further explained the framework provides justification for the way they work:

It certainly provides an excellent framework and structure to what we do (and have been doing) intuitively for the most part. So,

1. it affirms and confirms that we are on the right track mostly
2. it provides evidenced based research and rationale to take decisions on what we will keep, what we will stop, and what we will start in the future.

It will, I am sure, be very helpful for our planning. (Cheryl, email, February 9 2012)

Notably, I would not have produced this evaluation framework had I maintained my focus on YMCA partners' physical activity promotion practices, rather than responding to their evaluation need. Furthermore, the framework would have been quite different had the YMCA maintained their focus on the program impact, rather than also considering process, and had I not considered both youth development and health promotion knowledge. (See Appendix K for the program evaluation framework.)

4.3.3 Program evaluation results

Our program evaluation results reveal a more comprehensive portrait of the program than they would have had we not worked in partnership. Regarding our quantitative findings, for example, given my interest in teens' frequency and patterns of participation over time, I would have reported results such as those in Box 4-1. These are not particularly positive, indicating an elevated rate of attrition and no significant increase in participation.

Box 4-1: Examples of results representing my initial perspective

- In 2010, participation patterns for teens who return each session are moderately correlated each session.
- Between 2010 and 2011, there have been no statistically significant changes in rates of participation.
- 57% of winter 2011 participants did not return in fall 2011.

Similarly, had the YMCA conducted the evaluation alone, their results would have been more cursory given their practice of recording visits to the centre, but not the participation of each teen (Box 4-2).

Box 4-2: Examples of Results Representing the YMCA's initial perspective

- In 2011, teens made a total of 2385 visits to the centre compared to 2124 visits in 2010.
- Girls accounted for 27% of all visits in 2011 compared to 22% in 2010.

As shown in Box 4-3, by including program and participant level data, the assessment of changes in teens' participation is more detailed and encouraging compared to results in Boxes 4-1 and 4-2. Moreover, the combination of our approaches generated results that would have otherwise gone undetected. For instance, analysis of the number of teens in the centre each week indicates a significant increase. (See Appendix L for excerpts from all program evaluation reports.)

Box 4-3: Examples of results representing our combined perspective

- In 2010, 6 teens (0 girls) attended the teen program at least once each month. This 2.9% of the population accounted for 35.2% of all visits. In 2011, 10 teens (3 girls) attended at least once each month. This 6.7% of the population accounted for 39.6% of all visits.
- In fall 2011, 104 teens made 978 visits to the centre. Compared to fall 2010, this is 16% fewer teens, but 10% more visits.
- There was a significant increase in the average number of teens present in the Teen Zone each week in summer 2011 compared to summer 2010. This is particularly due to the significant increase in the average number of girls present each week.

Overall, by recognising and combining our complementarities we generated program evaluation products that met the YMCA's needs and concerns, as evidenced by such comments as: "Paula, I never told you how much easier your Excel file and comparison tables made my life when filling out the stats for the town as well as for Y Canada. Thank you!" (Ben, email, February 27, 2012) and, "I think it hit really what we wanted (...). Absolutely. Absolutely" (Cheryl, interview, February 13, 2012). Importantly, the products of our combined complementarities contributed to increasing YMCA partners' capacity beyond my initial intentions. I will detail these positive effects in the next chapter.

Endnotes

- ⁱ For example: PRECEDE-PROCEED (Green & Kreuter, 2005), socio-ecological models (McLeroy, et al., 1988), and capacity building (Hawe, et al., 2000)
- ⁱⁱ For example: YMCA purpose, mission, vision, values (Caring, Respect, Honesty, Responsibility, Inclusiveness); and 40 developmental assets (<http://www.search-institute.org/research/developmental-assets>)
- ⁱⁱⁱ In our evaluation framework, 'high retention' is defined as 50% or more of participants attending the program for 12 months or more

EXHIBIT 1 Shared Leadership

Guide and Respond:

Sharing the Leadership of the Development and Implementation of a Quantitative Evaluation

On April 29, 2010, during one of our first meetings about the participation data, Rafael and I discuss the Excel tool for recording teens' daily attendance, that Cheryl and I had begun developing.

"The personalized tracking of the kids is a lot more work than I was expecting, quite frankly," says Rafael. "It doesn't mean we're not going to do, it just means that I need to find a way to make it easy to do."

Rather than only recording if they are present or not, I mention it could be interesting to also record which activity teens do when they come to the centre.

"I see the value of what you're doing," he says, "but-- I haven't done it so I don't know how excessive it is. But, keeping stats every day-- I don't want to do that, quite frankly. But, I guess it's only 20 or 15 minutes at the beginning of the day. Every day."

I tell Rafael I will try to find a simpler data entry method and ask him what participation results he needs. He explains he, typically, collects the attendance sheets at the end of each month and manually counts the number of visits teens make to the program overall, as well as the number of visits for Mondays, Tuesdays, and so on; the number of visits girls make, and the number of teens coming from each of the neighbourhoods the YMCA serves; and verifies registration

forms to count how many new teens join the program each month.

With this new understanding, I go home and analyze the first few months of data, generating the results Rafael needs as well as others I feel are important. I prepare a table of these results and email it to Rafael.

A month later, on June 2, we meet again. Rafael tells me it has taken him three days, working on it off-and-on, to enter the April attendance data; noting however, that part of what took so long was setting up the Excel table and entering teens' names and demographic information. His old method, he says, took one hour.

"Did you have a chance to look at the table of results I sent?"

He opens my email message and points to the averages and standard deviations columns saying: "so, this is stuff I don't need."

I explain the potential uses for this extra information.

"I mean, it's interesting. I can see how it's interesting. But, is it more than I need? I think 'yes'. (....) Because, what I need at the end of the year is to be able to say: this is how many kids came ... for what activities, this activity was very popular (...), and where they are coming from." He goes on to say he also needs to assess weekly attendance to monitor the popularity of each program activity. I see an issue with this

and explain that, for example, on Mondays some teens may play pool in the teen zone while others may play ball hockey in the gym. This level of precision does not concern Rafael. He tells me he just needs to know the traffic on ball hockey days, "I'm not plugging in both [numbers], you know what I mean?"

I suggest that by recording daily participation for each teen, he will be able to extract the monthly totals he needs from the Excel spreadsheet and this may be easier than his current system.

"Okay, so let's do an exercise," he says. "Why don't you and I start processing some May numbers?" He opens the Excel file and begins entering attendance data. After a few minutes, he says: "it's a little bit slower, but it's not the end of the world. Now it's set up a little bit better. (....) What we can do is I can keep going on this, and then you can show me how pull out the totals, because that is what was a little clearer in the way I used to do it."

Over the summer, given Rafael's schedule, I do much of the data entry and try to come up with a system that would be feasible for him and generate his desired results. When we meet on October 6, I show him the new Excel tool.

"It's sexy" he says. "The plan was always that we set up a system that we can transfer [to me], right? I would really love it if you could bring [the Excel file] in November and you can walk me through it. We can enter a few numbers together, so you can show me how it works. (....) I would like to use your system, because it seems like [the results are] easily extractable. You can come in next week and we could plug it in. So, maybe I'll just take over next week. That way, the first time, and maybe the

second time, we can do it together, so if there are things I'm feeling like I don't understand-- And then, by December, I'll have done it twice with your help."

I agree to this and then come back to the issue of recording participation for each activity. He expresses an interest in the idea, but wonders how to set up the attendance sheet so the youth workers can record this information easily.

"Did you see the idea [for an attendance sheet] I sent you?" He rifles through his email and opens the sample attendance sheet.

"I like this" he says and begins making some formatting modifications. "This is such a good idea. (....) You're spot-on with this. It's perfect."

Rafael implements the new attendance sheet that day. I further develop the Excel tool to automatically compute monthly totals of the number of visits and number of teens for the full program and for each activity, and in December 2010, we implement the refined version.

On May 31, 2011, I ask Rafael if the participation results make it worth the time it takes to do the detailed data entry.

"It's a lot more precise, refined and stuff. And it was super useful. I think it's definitely useful to get it to the point where it can take less time. If we go back to what I started with, we're losing out a lot. But, at the same time we're still keeping the very raw needs taken care of. But, it's not the same level of understanding. Once you get a clear picture of how it's going on, it's hard to go back to the basic picture.

CHAPTER 5

FROM INTUITION TO INSIGHT

We had no clue what would attract the teens and keep them here. We had a sense, but we had no background in measuring. So, all we had were ideas and intuitions, and I was feeling that those ideas and intuitions were stopping us from trying things. (Cheryl, interview, February 13, 2012)

The new and shared perspective of the program served to hold a mirror up to YMCA partners, reflect their work back to them, and force them to look at themselves. On the whole, they found the process was validating, confirming many of their intuitions. Yet, they also found it reminded them of the importance of certain practices and heightened their awareness of various program aspects.

5.1 Validation

There's a tendency in this kind of work to think of it as just chilling out and I think the scientific nature of the work that you've been doing adds a much needed sense of credibility. (Rafael, interview, May 31 2011)

Our partnered work has been validating for YMCA partners, in particular given our methods and the results they produce. For instance, our program evaluation framework confirmed many of their intuitions regarding the value of what they offer teens through their program:

I find it confirming. Not confirming what you already know, but, kind of solidifying: “Oh, okay, the relationship that I have with the kids definitely does impact their coming to the program.” I think it’s always important for your assumptions to be backed up. (Ben, interview, January 9, 2012)

This confirmation was especially validating because our framework is evidence-based: “to me [it is] rewarding. To know that this is stuff that has been proven, things that we’ve tried” (Cheryl, interview, February 13, 2012), and “finding out information like that is a huge pick-me-up for the staff and it validates their job and the work that they do” (Ben, interview, January 9, 2012). Likewise, given our rigorous research process, YMCA partners find the results credible, and thus, the increases in program participation particularly validating. As Rafael commented: “it’s more important for me to see the raw data, seeing numbers go up and down, seeing if activities are working or not working, than it is for me to hear: ‘my, you’ve done a really good job with this’” (Rafael, interview, May 31, 2011). Also, regarding the increase in summer 2011 participation compared to summer 2010 (44% more teens; 93% more visits), he said:

“that was a huge thing. That was the best. I rode that for months!” (Rafael, interview, May 31 2011).

5.2 Reminders

I guess to me the biggest thing -- I wouldn't say it's a new learning, but a reminder. And it's good to be reminded of those things. It's just to continue with the stuff, and if you know that you're on a good trend, just to plug away and to keep doing it. That's what I've seen you do. And I think that's what you've brought to us to. (Cheryl, interview, January 7 2012)

To develop our program evaluation tools, determine implementation means, and discuss analyses and results, YMCA partners and I met regularly. Consequently, the guidance I provided to build on and advance our work was continual and enduring; this helped to reinforce the importance of the changes we were making to their practices. To illustrate, when considering factors that enabled us to work together, Cheryl said, “well, you’re persistent and tenacious! In a very good way. And that’s important for me because the more you knock on our door, the more we realise: ‘OK, let’s do this’” (Cheryl, interview, January 7, 2012). Specifically, our process served to continually remind YMCA partners of two main priorities: evaluation and program promotion.

Regarding evaluation, because my proposed quantitative data collection and entry process was new to partners and represented an increase in Rafael's workload, we had to add successive layers of complexity over time to eventually implement a system partners could maintain and that would generate meaningful and useful results. This kept the evaluation priority in the forefront of their minds.

Just knowing that it's important to [evaluate] and it's a priority has really I think helped us out a lot. Sometimes, what we have a lot of difficulty with is setting our priorities and not getting distracted because there are a lot of distractions (...) there are so many different tugs and pulls and distractions (...) But, knowing what our priorities are and why it's important, I think that's been the best learning. (Cheryl, interview, January 7, 2012)

With respect to program promotion, given my physical activity promotion goal, I regularly suggested means to promote the teen program and to use our results to inform promotional decisions; this helped YMCA partners focus on this priority. For instance, when I suggested a communications idea borne out of preliminary qualitative analyses, Cheryl said: "you are right. We have to prioritize that because otherwise it gets lost and we move on to something else. You're absolutely right. So that's a reminder" (Cheryl, discussion, December 16, 2010).

5.3 Awareness

For me, the effect is a prise de conscience [a realisation]. We are holding the mirror up to ourselves, which is not always pleasant, but it forces us to look at ourselves. So, the consequence is that we gain a certain awareness, or we are reminded of a certain awareness, of what we need to do. (Cheryl, interview, January 7, 2012)

The new and shared program perspective and the process by which we developed it evoked reflection among YMCA partners increasing their awareness about aspects of the program, its delivery, and its participants. For instance, YMCA partners found our meetings, discussions, and research interviews were in and of themselves beneficial because they required them to reflect on and to explain their processes as these comments exemplify: “you challenge us to explain either our purpose of doing something, our background, our methods, and it's good” (Cheryl, interview, Jan 18, 2012) and “obviously I learn from any of the reports you submit or something that you say, but possibly I learn more by the questions you ask me” (Cheryl, discussion, February 20, 2012). Also, as Tamara indicates below, our interactions afforded partners opportunities to assess the teen program from a broader perspective, which they don't often do because they are caught up in daily operations.

It's really easy to get bogged down on what happens on a daily basis in the [the Teen Zone]. There's always something going on (...) and we don't often take the time to step back and look at the space from

a broader perspective. I feel that was useful (...) to be able to have that time to think about it in the bigger picture, because we're always going when we're open. (Tamara, meeting, March 18th, 2011)

Program evaluation results were another source of awareness, providing YMCA partners with explanations for things they had observed, for example:

[The qualitative report] gave me a bit more insight into the kind of discussions that happen in the Teen Zone. (...) in terms of the quality of the interactions, this type of report gives me a reassurance that there are worthy interactions going on there, which is important. (....) I know that there's something going on behind the scenes, and it is due to the quality of the interactions. (...) this just gives me a bit more insight into actually what is going on; which is very good. (Cheryl, discussion, July 7, 2011)

Similarly, results have sometimes altered partners' perspective of the program. One year after we began the process of developing and implementing the more rigorous method of tracking teens' participation, Rafael noted:

if we go back to what I started with, we're losing out a lot (....) it's not the same level of understanding (....) It changes your perspective a little bit when you look at it through a more detailed lens." (Rafael, interview, May 31 2011).

One example is the deeper level of understanding regarding girls' participation partners now have. Prior to our program evaluation work, YMCA partners had observed that far fewer girls participated in the

program, but did not know the actual ratio of female to male participants. Moreover, they thought the girls did not come as often as the boys. Our data show that the girls participate in fewer numbers (20-30% of all participants) than the boys, but their participation frequency is no different. This surprised both Rafael and Cheryl. In fact, when reflecting on what he had learned from the participation reports, Rafael referred to the girls: “it’s just that they come at a very specific time. So, that’s cool because that changes the way we talk about our program a little bit. So, that’s been a nice ‘a-ha’ moment” (Rafael, interview, May 31 2011).

My differing objectives, knowledge, and experience contributed to YMCA partners’ increased awareness because I often represented our findings from a perspective to which YMCA partners were not accustomed. To illustrate, I included teens’ surnames in evaluation reports which surprised Cheryl, until she began to reconsider the reasons behind their typical confidentiality practices:

It kind of surprised me when I saw the names, so it was little bit of a gasp reaction. So, it took me a while to get used to that. But, after a while it occurred to me that it's a very interesting way of looking at things because we tend to shy away about talking about very specific things in specific teens and naming them. And it just got me thinking: are we doing a greater disservice by not talking so openly? (Cheryl, discussion, July 7, 2012)

Thus, my representation of our findings was one means the YMCA was able to see their work in a different light.

In the next chapter I describe how validation, reminders, and awareness YMCA partners acquired through our collaboration, permitted them to move from acting on their intuitions to acting more often and with assurance on insight, in particular with respect to their decision making, communications practices, and overall evaluation practices. Exhibit 2 foreshadows this discussion by illustrating Cheryl's perspective of some of the program evaluation processes and outcomes.

Endnotes

ⁱ Here, Ben refers to three indicators in our program evaluation framework: 1) Hire program staff who develop real connections with participants; 2) Form strong relationships with new members within the first two to three months; and 3) Stay informed about what is going on with teens outside of the program in at least three different ways. (See Appendix K for the full program evaluation framework)

EXHIBIT 2 Found Poetry

This found poem, entitled *What kind of impact are we having?*, represents Cheryl's reflections about program evaluation. It is indicative of her program evaluation objectives and knowledge (complementary to my own), the insight our program evaluation work has begun to provide, and her desire to maintain the evaluation practices and to push them farther.

What kind of impact are we having?

We need to keep the teen program participation stats
That's the one thing that's for sure
It's important for a lot of reasons

To measure ourselves and to measure our progress
To communicate with members, donors, stakeholders, the community

Our numbers, our percentage of growth
It's really important that we're truthful with our representation
We have to be very, very accurate
What kind of impact are we having?

But, the numbers only tell part of the story
We want to know that what we are doing has value
We know intuitively that it does, but
How can we measure that?
How can we express it?

We may run an activity with only six teens
Is it worth it?
We will invest huge amounts of time and energy and resources
How do I justify that?
Yes, numbers are important, but
I need something more
To justify and explain the importance of what we do

What kind of impact are we having?
What is the depth of our interactions?
Not only the numbers

The tendency is to plunk down a number
To throw out a few success stories
And there you go
It sounds wonderful. It is heartwarming
And most of it is true
It's not a lie

But, it isn't giving us an accurate picture
We need to find a way to create an accurate portrait
Even though it may not always be in the most positive light
It's hard to present that portrait
because you always want a number

The qualitative adds more to that
We've seen what richness that brings
It is refreshing, it provides insight

What kind of impact are we having?
We need to be true to ourselves
We need to be true to our population
We have to give an accurate picture

CHAPTER 6

FROM MODIFIED TO MAINTAINED

Consistent with my broad primary objective, through my work with the YMCA we have increased their capacity. Yet, given the processes I have described, our achievements are somewhat different; in fact, they go beyond my objectives. Our work led to changes in YMCA partners' general programming and promotional practices, and given the benefits they perceive, they have sustained and expanded our evaluation practices, and intend to continue in this vein.

6.1 Programming and Promotion Practice Changes

The validation, reminders, and awareness YMCA partners have gained from our work have contributed to their using our new program perspective (vision, rationale, and description) to inform their decisions and improve and augment their communications practices.

6.1.1 Informed decisions

Our program evaluation tools and the reports of results impacted YMCA partners' programming and leadership decisions given the insight they proffered. The quantitative data entry tool automatically generates some descriptive statistics, thereby, allowing the coordinator to monitor program attendance in a way he otherwise could not. Although Ben expressed it could be tedious to complete the data entry each month, he found the process worthwhile to be "able to see visually which teens come often" (Ben, interview, January 9, 2012), and to monitor specific teens' attendance. In turn, this coloured his decisions, as the following illustrates:

It's interesting to go through [the Excel data entry sheet] to see who showed up a lot. (...) I go through to see someone who's come 15 times in a month and has dropped down to 2 times per month. And I find it's cool to do that, and try to see the difference between summer participation and fall participation. So, for someone like BH it's the same, but for someone like BP it's completely different. He's hardly here anymore, but he was here almost every day in the summer. So it's interesting to see that, and to see what we can offer in the fall that is similar to the summer. (Ben, interview, January 9, 2012)

Similarly, Ben indicated the evaluation framework affected his observations of the program and staff-teen interactions:

The biggest thing that you mentioned to me is that high retention is influenced by the relationship that is forged between the member and the staff.ⁱⁱⁱ I see myself constantly looking for that now. I saw it with Nathan [youth worker] when he was out for a month with his shoulder injury. The kids would constantly be asking for him. (Ben, interview, January 9, 2012)

Consequently, he reinforced this aspect with his staff more often and with greater consciousness.

It will constantly come up in conversations. Even when they were talking about one-on-one interventions [with the teens] in the meeting last week. We mentioned that the relationships that we forge with the kids is incredibly important and they're going to come back for those reasons, more than just the basketball and the chilling in the Teen Zone. (Ben, interview, January 9, 2012)

Finally, given the quantitative data entry tool provides a “snapshot of the program” (Ben, meeting, June 9, 2011) the coordinator can easily inform staff about changes in teens’ participation to encourage and support them. This email from Ben to the youth workers (and supervisors and I) illustrates this.

Date: March 28, 2012

From: Ben

To: Nathan; Tanya [youth workers]; Cheryl; Carole [supervisors]; Paula

Hi all,

(...) I've completed the stats for February of this year. We had 375 visits from 92 different teens. This is a huge leap from last year's February where we had 178 visits from 59 different teens.

With this said, it appears as though the hockey stats from last year were not taken as accurately as this year's (Great job Nathan). This would likely have accounted for about 50 to 75 more visits in February of 2011, bringing the total to 250, still at least 125 less than this year.

Good job guys!

With respect to program evaluation reports, Cheryl's comment explains their effect regarding their programming decisions.

We have a notion of what we should practice. We have certain ideas of best practices. Sometimes it feels like we're trying to work towards them, but your numbers confirm, or actually give more weight to trying out certain things. Or just a hunch, or "I used to do this at another centre" or "I've heard that the best way to run it is..." or "other youth zones in the Y's do this." We have those hunches, and usually we're pretty good. (...) your analysis helps to give us the confidence to say "okay, let's give this a go", or "I was leaning this way but now this really pushes us" (...) Or even to take the decision to go a certain way. Sometimes we waffle. (Cheryl, discussion, Feb 20, 2012)

Specific illustrations of this are presented in Box 6-1 where both coordinators indicate the participation reports helped them to make decisions, either because they offered support for ideas they already had or provided some insight.

Box 6-1: Coordinators' Views of Participation Reports

October 6, 2010. Discussion between Rafael and me

Paula: Last time we spoke, you mentioned the spring participation report was helpful; that you found it 'reaffirmed and realigned'.

Rafael: Yup

Paula: How?

Rafael: Well, you put recommendations and stuff in those, right? So, I took a look at it, and these are things I was planning on doing, but I hadn't really taken any action on. Let me see if I have it for you.

Rafael gets up and retrieves the printed report from his filing cabinet because he remembers having written some notes on it.

So, here you go, you can see-- this was four or five months ago—so, you can see I wrote down here [rock]climbing, girls' night, boxing, and we've done that.

He continues to read through the report, then points to one heading and says: "Oh here we go: 'Implement a systematic promotion strategy including assessing teens' interests to increase teens repeat attendance.' So, [implementing] Youth Council seemed like that would satisfy a lot of those needs.

January 9, 2012. Interview between Ben and me

Paula: So, looking at the two stats reports I sent, how do you see yourself using that information in terms of, say, program planning or promotion ideas?

Ben: Well based on these, and also based on dialogue that we were having with a lot of the female members recently, I think we need to kind of jump the gun a little bit and not wait for all the girls to be in place to create girl-specific programs, and just create it (...) I think I've kind of been waiting for a serious commitment from a lot of the girls, to see that they can show up on a regular basis. But, really say: 'listen, we have dozens and dozens more girls than we had this time last year, or this summer compared to last summer'... I think they've shown that they will come out for fun things. They've shown that they will come out for things that interest them. So, let's create something that will interest them and put it there, rather than waiting for them to-- You know what I mean? Create the program before there is actually an audience for it, rather than waiting for the audience, because the girls have shown that they will come out for fun stuff. (...)

Paula: Had you not seen this report would that have been your choice anyway? Had you not had an objective awareness of how many girls are coming now as compared to before?

Ben: No. I definitely would not have (...). Knowing that there are so many girls in July 2011 versus July 2010, let's say, actually reading it in [the summer 2011 participation results report] I think allowed me to make that decision. (...) Had I not seen this I probably would still wait for the audience to create itself, for us to then offer activities, rather than saying we're going to offer the activity even without the audience here because

they will flock to it. They've shown that they will flock to things. So that's probably what [the summer 2011 participation report] has highlighted for me.

Likewise, preliminary analyses of qualitative data indicated to Rafael that he and his team were, perhaps, not following through on their programming ideas to the extent they could be. The qualitative data collection tool was later modified to help the teen program team with this. Qualitative findings also indicated partners were not offering many leadership opportunities through the teen program. This confirmed Cheryl's impressions and acted as a reminder to underscore leadership, as exemplified by her request, in January 2012, that I pay close attention to this aspect in subsequent qualitative analyses.

6.1.2 Improved communications practices

It has been very confirming, validating things that we kind of had a sense about. But having a sense about it doesn't allow us to present it to other people. It doesn't allow us to do a lot of things. I guess, the bigger picture has allowed us to kind of go after ... to really name what it is we actually do. Because we talk about that: what we do, this is our method, etc. But, this allows us to actually say: this is our method. This is exactly how we do it. And there's no two ways about it. This is the method we use, and this is how we get success.
(Rafael, interview, May 31 2011)

YMCA partners have an increased capacity to communicate about the teen program to other YMCA staff, the YMCA board of directors, YMCA donors, and the community. Given we have documented and analysed programming improvements and a steady increase in teens' participation, particularly among girls, partners are confident in their ability to accurately portray the evolution of the program and are motivated to do so. To illustrate, Cheryl commented:

Every month I give a report to our board. And I'm very happy. I like increasing. [To report] "we've increased by this many teens, or this much percent, or currently we have this." Announcing that we are currently keeping accurate stats (...) It's important for me to share that; whereas, in the past I've never been able to. I would give a report: "we started a new hockey league." That's great, but I much prefer to say: "we've started a new hockey league with four centres totaling this number of participants." To me that's important. So [the participation results have] allowed me to do that. (Cheryl, interview, July 7, 2011)

Additionally, partners recognise that individuals who are outsiders to the teen program perceive it as unstructured and offering little more than a venue where teens lounge around and play a few sports. There is also a perception, within the YMCA, of a "built in inequity" (Cheryl, interview, February 13, 2012) when the teen program is compared to other YMCA programs due to, for example, the amount of resources invested

for what appears, at times, to be very few teens. Cheryl has said our work can help to “pre-empt criticisms” and to “back up the program in the literature and say: ‘look our numbers are going up, but it’s not just about the numbers, it’s also about the quality of interactions’” (Cheryl, interview, July 7, 2011).

Our work has also contributed to YMCA partners’ communications with neighbourhood residents who hold a variety of attitudes, knowledge, and beliefs about the teen program, including negative perceptions or lack of awareness of the program. Cheryl explains this value of our work:

It’s a matter of perception, because I’ve noticed (...) if I don’t share the information, people tend to make up their own version. (...) it was confirmed today by [a community member] – “Cheryl we used to have 50,000 kids coming and now there is no one.” So, if I keep saying the numbers, there is a captive audience to listen to that. And without those numbers, I can’t say it. I can say: “there’s a whole bunch of teens”, but, it doesn’t mean anything. (Cheryl, interview, July 7, 2011)

6.2 Program Evaluation Competence

YMCA partners now demonstrate program evaluation competencies by adapting our data collection tools to the evolving needs of the program and transferring our methods to other organizational sectors. During the year Ben held the position, he modified the

quantitative and qualitative data collection tools to account for program changes and new data collection needs we identified. He also developed new tools to help develop and assess new program activities (e.g., survey for new Friday Teen Night activity, ball hockey league attendance sheet). Moreover, YMCA partners now collect data on a variety of things from aspects of their work processes (e.g., number and duration of meetings, qualitative data for other programs) to specific events they hold. One illustration pertains to the spring 2012 family fun race they held. When I asked if they had recorded participant data to compare with subsequent races, Cheryl replied: “of course we have a record of the participant info - we have actually learned a thing or two from you over the past years :)” (Cheryl, email, May 29, 2012).

Additionally, once the value of the evaluation tools and results had become evident to partners, Cheryl began talking about transferring our methods to the youth programs (6-12 year olds): “we can learn from what we've done with the teens” (Cheryl, interview, July 7, 2011), and: “I cannot help but think, as well, of how we can start to apply some of these principles to our programming for our [community] sectorⁱⁱ as a whole” (Cheryl, email, February 9, 2012). In March 2012, Ben began facilitating

this next step, working with the program coordinator to adapt and implement the quantitative evaluation tools.

Finally, our work has increased YMCA partners' confidence in their program evaluation knowledge and skills. Cheryl has said "we can be a leader", and all partners recognise their capacity to help other YMCAs develop and implement tools needed to assess participation in their programs, as the following illustrates.

Ben came back from a meeting (...) and what we found out is that many, many, many of the [YMCA teen] centres never have a clue about who is participating, don't even take attendance, can't name any of the participants, can't track the participants (...). And so, when the idea comes out that maybe we should start tracking our people, I'm sure that causes a lot of stress and a lot of reflection, and Ben comes back, like: "phtt—we're done." Which I'm very, very glad about because then we can move on to other things. And then I think he can also feel good and be a model to the others and say: "look, we've done this and we are doing it well. If you want, we can tell you how we are doing it." So, that is really, really encouraging. (Cheryl, interview, February 13, 2012)

6.3 Benefits Beget Benefits

The positive effects our work had on YMCA partners led to their experiencing additional benefits. Regarding our quantitative evaluation work, for example, Cheryl said it is “fantastic to be armed with those numbers” (Cheryl, discussion, Dec 6, 2011), and explained her audiences are impressed she is able to report accurate and detailed program participation statistics, and moreover, find the number of teens and visits she reports to be quite high. Thus, not only are our program evaluation findings validating for YMCA partners in and of themselves, but communicating them procures partners further validation.

Moreover, YMCA partners have expressed that communicating program evaluation results may help to mobilise resources. Cheryl said results are helpful for recruiting volunteers as well as for speaking with their donors about the program, indicating people want to be associated with something successful, and saying: “where it’s really helped is when it comes to our donors. They want to see that we’re ‘doing good’ with [their money]” (Cheryl, interview, January 7 2012).

The sum of benefits YMCA partners perceive to have gained from our work contributes to their desire to maintain the evaluation practices. This is manifest in the new program evaluation questions Cheryl has formulated, such as: “is it impact within the session? Within the year? Is it

five years after they've left the program?" (Cheryl, interview, January 7, 2012); and also her ideas for expanding the evaluation to develop a more complete portrait of the impact this YMCA has on the community it serves: "there are programs that we don't offer--we are meant to refer [the teens]--and I would like that to be measured and recognized" (Cheryl, interview, May 20, 2011), and

We have 27 kindergarten aged children in [the afterschool] program. Knowing that there is a certain drop off as children progress through the grades, it would be interesting to follow this cohort (30% of the current afterschool participation) and focus on retaining their participation and measuring levels of impact and success. And....maybe see how this might translate into increased participation in the Teen Programs... It would also be interesting to plan now for the older grades (3-6) in bridging the gap between elementary and high school and between our youth afterschool and teen programs. (Cheryl, email, February 9, 2012)

These questions and objectives are indicative of the potential sustainable effect of my research. Given the insight, practice changes, and general positive impact our partnership has had on the YMCA, partners have indicated their desire to continue to work with me: "so, I guess I'm imploring you to kind of keep involved even if the project and the research ends" (Rafael, interview, May 31 2011), and "Thank you so much for offering to still be around. You have helped us enormously"

(Cheryl, email, April 2, 2012). We will, thus, build upon the solid foundation we have laid, to develop physical activity promotion initiatives, and evaluate them to continually inform subsequent actions.

So, the wheels are in motion, but I see that there is a lot of work to do. And that would make us unique in our Ys (...) It's not just putting things on the schedule and having expertise in classes. That's a big part of it, but, how do we get people interested in community, and liking what they do, and working on themselves? It's not a luxury. Anybody can participate. There is something to do to track that and wouldn't that be wonderful. (Cheryl, discussion, July 5 2012)

Endnotes

ⁱ This refers to the program quality indicator as described in the following excerpt of our program evaluation framework. "Provide at least 5 leadership opportunities" (See Appendix K for the program evaluation framework)

ⁱⁱ The community sector includes the youth, teen, senior, and whole of community programs

EXHIBIT 3 Found Poetry

This found poem entitled *That's the way we need to talk* represents voices of several YMCA partners regarding their views of physical activity and health promotion. It illustrates an effect of the combination of our complementarities and the new shared vision upon which we intend to build through continued participatory research.

That's the way we need to talk

We want young people to be physically active.
Encouraging young people to try new forms of physical activity
is a large part of what we do at the YMCA.
Our goal is to increase participation
to instil active healthy lifestyle habits

We have a history of offering sports programs
Our hockey program is fantastic, Girls' Work-out Crew is great
Now, we need to develop a more structured sports program
We have incredible opportunities and facilities
A rock-climbing program would be a first
We need to offer some girls' sports, too
That's one thing we really want to lean towards

How can we encourage young people,
who might not be drawn to competitive sports,
to challenge themselves physically?
We could keep it very recreational.
We may never enter a tournament
that would be nice, but, it's not the goal

Physical activity is important in and of itself, but
it is also the means to a greater –

How can we accompany young people
to carry physical activity as a value into their adulthood,
to always make time for themselves to work-out,
because they have seen the benefits of it?

We might not have thought of
physical activity from the health promotion angle
quite as quickly if you weren't around
You put that bug in our ear

We would have continued to create fun activities
because it engages young people
we know it's important to them

But, if we can say we are working towards something
that is important to the community,
It helps us to reach a goal that is bigger than us
Bigger than basketball on Friday nights
'Health promotion' is a more valid term
It lends a certain weight to what we do at the YMCA
We don't just run a hockey program,
It's within a larger context

And that's the way we need to talk
Absolutely
That's the way we need to talk

CHAPTER 7

A WORD ON THE PARTNERSHIP

I think the word that comes to mind is 'collaborative'. And I hope that's shared. From my perspective, that's what [our partnership] is. It's open in that we might not know exactly what we need from each other, but we're open to asking and checking in and talking about it. And I think that in a certain way we were able to offer that complementarity. So, I think that 'collaborative' is--if I were to choose one word--is what our partnership is. (Cheryl, interview, January 7, 2012)

Some contextual aspects influenced the processes and outcomes described in chapters 4 – 6. At times, our collaboration was challenging, but overcoming challenges contributed to our successes. Also, the importance of the reciprocity between me and YMCA partners, as well as our patience to wait for our work to yield important benefits cannot go understated. Thus, I conclude the presentation of my findings by presenting details of these aspects.

7.1 Working through Challenges

Our experience was not always straightforward. Owing to the fact that I do not work at the YMCA, partners sometimes found it challenging to communicate with me, explaining: “we don’t always have those words because the things that are obvious to us we think are obvious to everyone. So, sometimes when you come and ask questions I find it challenging” (Cheryl, interview, Jan 18 2012). Ben further explicates below where he mimics one of our typical conversations.

To be able to give a concrete answer to the questions that you have, although the answer may be somewhat abstract, I think that’s somewhat challenging. Like [when you ask]: “What do you guys do that is so successful?”

“Well we just kind of do our thing. We just kind of hang out with the kids. The kids like us.”

“But what is it that you do that makes the kids like you?”

“Well, I don’t know. We’re nice?” So, I find it hard to objectify some of the things that we do that may lead to success. (Ben, interview, January 9, 2012)

Also, the development and implementation of the program evaluation methods was perceived as large and heavy undertaking in addition to partners’ usual work:

It is enormous and if you're going to jump in, you better be prepared to jump in with both feet and swim pretty fast. Because it's one of those things if you don't keep up, it's not going to serve you at all. (Cheryl, interview, February 13, 2012)

Overcoming challenges we faced through, for instance, our shared leadership process was perceived as very worthwhile, as these comments illustrate: “that’s why you are so valuable to us. (....) We need that push, we absolutely do. Because if you were of the same mind set as us we would never advance” (Cheryl, discussion, May 20, 2011), “we would not have been able to [keep our monthly statistics] without your help. It would have been one of those things down the list: ‘no, no, no, we’ve got to deal with this, we’ve got to deal with that’” (Cheryl, interview, January 7, 2012), “we do a lot of stuff very well at the Y. What you’ve done for us is stuff we don’t do very well” (Cheryl, interview, February 13, 2012), and “the truth is the data, the reflections and the chance to sit down with you and really riddle out what it all meant was a rare treat, so thank you for that” (Rafael, email, April 8, 2012). Our reciprocity further helped us to navigate challenging aspects of our partnered work.

7.2 Reciprocity

I think it’s somehow understood that you’re interested in seeing success in the program, and we’re interested in you helping us in the success of the program, and we’re interested in helping you with whatever information you might need and to be open with sharing what we do and how we do it. (Cheryl, interview, January 7, 2012)

YMCA partners and I would not have been able to work through challenges, recognise our complementarities, or succeed in combining them by sharing the leadership of our program evaluation study had we not developed and nurtured a relationship of reciprocal respect, support, and trust.

7.2.1 Respect

YMCA partners and I demonstrate mutual respect by giving each other credit for our respective contributions, being considerate of each other's schedules and time constraints, and accepting our respective competing priorities and the ensuing delays in our partnered work. Moreover, we always take the time to listen to each other, and we take into account our differing perspectives, goals, and needs. YMCA partners have appreciated this as indicated in Cheryl's comment below. I echo her sentiment.

We're able to have open and honest conversations, and I don't get a sense of judgement or berating; but, it is what it is, and we work through it. And I appreciate that very, very, very much. (Cheryl, interview, January 7, 2012)

7.2.2 Support

We have shown support for one another through our enthusiasm for each other's work and the work of our partnership. YMCA partners have appreciated my enthusiasm finding it motivating, as well as supportive, as evidenced by such comments as: "you've been a cheerleader for us." (Cheryl, discussion, March 12, 2012), "you're so enthusiastic about it. That was kind of sweet. It was good" (Rafael, interview, May 31, 2011), and

To see somebody else so excited about what goes on here really is a pleasure. It really, really, really, is because you know it's a hard go sometimes. We are motivated. We have a great, great staff team who really believes in what we do (....) Sometimes there is a feeling that we are the only ones. So it is really exciting to see somebody else gets us, understands us, appreciate us, wants to continue to boost and to help us. To me that is amazing. (Cheryl, interview, January 18, 2012)

YMCA partners' have been supportive by welcoming me into their organization, allowing me to carry out this research, and letting me know they value my contributions. They have expressed their support with such general comments as: "Ben was saying that you are so valuable to the program" (Tanya, discussion, November 10, 2011); with specific comments regarding our program evaluation work: "we're definitely going to keep [the attendance sheet]. You did too good of a job setting it up"

(Rafael, discussion, February 22, 2011), “I’m very comfortable and confident in the way you’ve been working. It’s been fantastic” (Cheryl, interview, July 7, 2011); by welcoming my input: “is that something I should do?” (Ben, meeting, August 12, 2011), “if I’m missing something, please tell me” (Cheryl, interview, February 13, 2012); and including me on the teen programs team: “you are as much a part of the team as anyone of us. Please make it a point to stop by [our team meetings] whenever you can” (Ben, email, Oct 20, 2011). Their support motivates me to continue guiding them forward.

7.2.3 Trust

We have successfully built and nurtured a trusting relationship, particularly by always following through. Cheryl expresses this when contemplating factors that contributed to the success of our partnership: “the follow-through has been, to me, really impressive. You say ‘I’m going to do this’, and it’s done. So, I think that builds a lot of trust. And trust is huge.” (Cheryl, interview, Jan 7, 2012). YMCA partners’ perception of my commitment to the teen program, the community and our partnered work, was also important, as evidenced by these comments: “it’s clear to me that you are here for the program and so that makes it easy and enjoyable working with you” (Ben, interview, January 9, 2012), and “I am really

grateful to you for all the work you put into not only the group at the Y, but the community in general” (Rafael, email, April 8, 2012). For my part, I have perceived YMCA partners’ follow-through, initiative, and willingness to invest time and energy in all aspects of our work, as indications of their commitment; this has served to build my trust in them.

7.3 Patience

Sharing the leadership and merging our complementarities required we develop and implement changes incrementally over time. This meant all parties had to be patient. For instance, it took Rafael and I eight months to develop and implement the quantitative data collection and entry system we now have in place. At times, I found the process slow, wishing we could have put the detailed recording system in place at the outset. However, Cheryl’s perception was quite different: “I don’t think it took any time at all. I don’t remember thinking it was long. I remember thinking: ‘great!’” (Cheryl, interview, February 13, 2012). Similarly, given my experience, I knew where our program evaluation implementation process was leading, whereas, YMCA partners needed to be patient to wait for the time and effort they were investing to yield meaningful results, as following comments illustrate.

Rafael realized the importance that we have to track [teens' participation]. Which is great (....) And of course we were excited to do it because we wanted to get to a point where we could see comparables which we are now finally getting to this year. So sometimes working '*dans le vide*' [in vacuo] a little bit was interesting: 'okay this is interesting, but is it good? Is it not good? Does it compare?' (Cheryl, interview, February 13, 2012)

Some of the older stuff, I find, didn't necessarily apply, or I didn't really take a look at it. But, I see that some of the older stats are included in some of your newer write-ups, now, so it's nice to compare. When I first started and I saw 2009 or 2010-- it's great but, I don't know how it really applies. But, now I can see the difference in terms of the increase in girls and this and that, this summer versus last summer. It all makes more sense now, contextually. (Ben, interview, January 9, 2012)

Overall, given our reciprocity and process of sharing the leadership, we recognised, valued, and successfully merged our complementary objectives, knowledge, skills, and viewpoints. This contributed to our partnership's achievements: the development of an integrated program perspective that helped the YMCA shift from acting largely on their intuitions to acting on insight. In turn, this contributed to sustainable organizational changes.

CHAPTER 8

Discussion

In partnership and through a process of shared leadership, YMCA partners and I combined our complementarities to generate a more comprehensive YMCA teen program perspective that provided YMCA partners with valuable insight. This, in turn, generated workforce and organizational capacity changes YMCA partners have maintained and built upon.

8.1 Capacity Building Processes and Outcomes

To respond to my research objective, I will first discuss the capacity building processes and outcomes present in this study in relation to the five domains of the NSW capacity building framework, namely, partnerships, leadership, resource allocations, and workforce and organizational development.

8.1.1 Partnerships

Our partnership provided the structure that enabled the YMCA capacity changes achieved. We successfully capitalised on our unique strengths to achieve more than we could have alone. This is the very reason the NSW capacity building framework suggests capacity builders assess the quality of partnerships available to support a program, or develop organizations' or sectors' capacities to partner among each other (NSW Health Department, 2001). Based on my findings, I qualify this by adding that capacity building may be achieved through a partnership between an organization and university research partner. My findings suggest that nurturing a reciprocal relationship of trust, respect, and support will facilitate the development of relationships which are a key element of partnerships (NSW Health Department, 2001). In the physical activity promotion realm, researchers have focussed on developing inter-organizational partnerships for successful program implementation and to increase program reach or sustainability (Fotu, et al., 2011b; Mathews, et al., 2010; McKenzie, et al., 2007; Sims, et al., 2004; Thomas, et al., 2009). To the best of my knowledge, none has used a university-organization partnership; my partnership with the YMCA is unique in the field.

Ours was a participatory research partnership in that YMCA partners' were actively engaged throughout all phases of our program evaluation study. They were instrumental in designing the focus of the program evaluation and developing the data collection, entry, and analysis tools. Consequently, the evaluation was tailored to their needs. Moreover, performing the data collection and entry, and discussing the meaning and potential uses of our findings increased YMCA partners' ability to act on results. My findings indicate that given partners know the results are obtained from a rigorous process, they trust their accuracy and are inclined to use them. This supports previous work indicating the value of partners' direct involvement in the planning and implementation of the agreed upon joint action to enhance the relevance and effectiveness of the work and the partnership (Germann & Wilson, 2004; Jagosh, et al., 2012; Nu'Man, et al., 2007; Yeatman & Nove, 2002).

Some have indicated shared interests and goals are ingredients of partnership success (NSW Health Department, 2001; Roussos & Fawcett, 2000). During the regular meetings and discussions between me and YMCA partners, we expressed our differing ideas, perspectives, and opinions, and recognised and merged our complementarities. As such, this study illustrates shared interests and goals may arise from the

integration of partner differences; they do not need to be present at the outset.

Holding regular meetings is a facilitator of capacity building as meetings are spaces where learning can take place (Germann & Wilson, 2004; Hawe, et al., 2000). While our meetings and discussions led to some learning among YMCA partners, for the most part, the insight they generated stemmed from the reminders and validation. This can be likened to the process of valuing pre-existing capacities which is called for in capacity building (NSW Health Department, 2001), and thus, empirically supported by this case study. Also, our meetings proved insightful for YMCA partners since my contributions were framed around knowledge, experience, and objectives that were different from theirs. This is intriguing because it suggests that rather than acting as a teacher, it may be more effective for the capacity builder to adopt the role of a 'valuable outsider' whose complementary contributions may help build upon existing capacity.

Although, this case study spans only 2.5 years, our partnership benefitted from the preceding eighteen months of relationship building between the centre director and me. Some of the Pacific Obesity Prevention in Communities (OPIC) projects indicated partnerships were

crucial to the health promotion capacity building endeavours, but the three year duration of these studies was not sufficient to allow for partnerships to mature, or for partners to take full ownership of projects and integrate changes into their regular practices (de Groot, et al., 2010; Fotu, et al., 2011b; Sanigorski, et al., 2008). This suggests a need for a long term partnership approach.

8.1.2 Leadership

The shared leadership process was central to our recognition and successful combination of our complementarities, and hence, a program evaluation process more comprehensive than we each could have achieved alone. This aligns with organizational capacity building models in which leadership figures as a contextual element needed to support capacity building projects (Hanusaik, et al., 2007; NSW Health Department, 2001; Nu'Man, et al., 2007; Smith, et al., 2001). Empirical research supports these models. For instance, some found lack of ongoing high level leadership impeded capacity building success (de Groot, et al., 2010), whereas, others concluded the presence of leadership was a facilitator (Hodge & Thomas, 2008; McKenzie, et al., 2007; Whitelaw, et al., 2006).

This study makes a contribution by providing an operationalisation of leadership as a process of responding and guiding. Others have suggested that capacity builders should be responsive to context and challenge the ways of thinking of those with whom they work (Hawe, et al., 1998). Based on my findings, I am asserting that these two strategies should be integrated and conceived of as shared leadership. To explain, on the one hand, developing and using our out-of-school-time program quality indicators to analyse qualitative data was a means to respond to the needs of YMCA partners. In particular, the framework uses partners' language and 'using the right language' is a capacity building strategy (Hawe, et al., 1998). On the other hand, the recommendations I included in my reports and discussed with partners were framed around health promotion and served to challenge YMCA partners' ways of thinking and guide them beyond their perceived needs. It is the integration of responding to YMCA partners needs and guiding them to see beyond those perceived needs that allowed us to achieve results over and above our respective initial intentions (Table 8-1).

Table 8-1: Achievements according to all partners' initial intentions

Achievements in line with my initial intentions	<ul style="list-style-type: none"> • The YMCA now has a framework to inform programming decisions to positively affect recruitment and retention of teens in the program. • Due to our program evaluation, the YMCA promotes the teen program by communicating details, derived from evaluation results, to community members and partners.
Achievements in line with the YMCA's initial intentions	<ul style="list-style-type: none"> • Quantitative and qualitative program evaluation methods were developed and implemented for the teen program. • YMCA partners use program evaluation results to inform some programming decisions.
Achievements extending beyond our initial intentions	<ul style="list-style-type: none"> • Program evaluation results provided YMCA partners with unexpected, yet valuable, insight about the program and their processes. • The YMCA partners derived a sense of validation from program evaluation results. • The YMCA partners valued that our work served to continually reminded them of their priorities and impacted their actions accordingly. • The YMCA now has program evaluation competence. They have: <ul style="list-style-type: none"> ○ modified aspects of our teen program evaluation. ○ transferred program evaluation methods to other sectors. ○ the capacity to lead other YMCAs in their desired effort to evaluate their own teen programs. • The YMCA's communication of program evaluation results to funders and the community appeared as an avenue to mobilize valuable financial and human resources.

8.1.3 Resource allocation

The YMCA partners reallocated their time to be able to design and implement the program evaluation. This is significant as the sustainability of innovations can be threatened if organizations are unable to secure the resources required to maintain them (Faulkner, et al., 2009). In physical activity promotion, one study found lack of human resources hindered the ability to provide physical activity interventions (Mathews, et al., 2010). Other initiatives have been sustained with either injection of additional research funds (Hodge & Thomas, 2008; McKenzie, et al., 2007; Thomas, et al., 2009; Wen, et al., 2002) or modification to a less resource demanding format (Sims, et al., 2004). These latter two strategies may, respectively, not be sustainable or have the same impact. Given the YMCA's desire to evaluate, and their recognition of its importance, partners were willing to allocate time to the work. This is an important contextual element to recognise and illustrates the importance of starting where the people are (Nyswander, 1942).

Likewise, the time I invested was crucial given I provided skills and support to develop and implement the program evaluation, and to help YMCA partners develop their health promotion and evaluation competence and capacity. This is similar to an organizational capacity

building study that found to develop effective organizational health promotion practices (including research and evaluation), developing competencies was necessary and this could be achieved by providing access to skilled health promotion support (Whitelaw, et al., 2006).

The extra time required for non-academic partners to be fully engaged is often a challenge and can be limiting to practitioner-university partnerships (Schulz et al., 2005; Waterman, et al., 2001). For instance, in one evaluation capacity building study, given the organization partner's lack of time and appropriate computer software, the university partners carried out the data entry and analysis, explained the analyses to the partner, and then modified some analyses to increase their relevance for the partner (García Iriarte, Suarez-Balcazar, Taylor-Ritzler, & Luna, 2011). In contrast, I worked with partners to develop tools that overcame the challenges of lack of time and software, and facilitated the data entry process initially, then gradually transferred this task to the coordinator. This process contributed to substantial workforce and organizational capacity changes which I address in the next section.

8.1.4 Workforce and organizational development

Some of the workforce and organization development outcomes observed in this case study are similar to those García Iriarte and colleagues (2011) observed in their evaluation capacity building study. For instance, YMCA partners gained evaluation knowledge and skills which they transferred to other staff, they found the evaluation responded to needs beyond that of reporting participation statistics to funders, and their participation in data analyses and interpretation of results ensured appropriate contextualisation, thus usefulness, of results. However, unlike García Iriarte and colleagues (2011) who worked with only one organization member using a catalyst approach, I partnered with more than one YMCA stakeholder at multiple organizational levels and acted as the catalyst myself, remaining with the YMCA to ensure stakeholders' sufficient skill and knowledge acquisition. This served to mitigate loss of skills and knowledge that may occur with staff turnover, a potential limitation of the catalyst approach (García Iriarte, et al., 2011). Moreover, YMCA partners' participation in the evaluation research contributed to their developing the program evaluation skills they now use to generate results to inform some decisions. This skill acquisition, and more importantly, YMCA partners' ability to apply these skills, adapting and

transferring the methods to other sectors, is a clear indication of increased capacity (Chaskin, 2001; Germann & Wilson, 2004; Goodman, et al., 1998; Hawe, et al., 2000; Jackson et al., 2003; Joffres, et al., 2004a; Raeburn, Akerman, Chuengsatiansup, Mejia, & Oladepo, 2006; Yeatman & Nove, 2002).

Our program evaluation work also increased YMCA partners' program planning capacity. For instance, given our discussions and our evaluation framework and results, YMCA partners developed a new lens through which to see their teen program. This generated an increased awareness about what was going on in the program, teens' participation, and the work youth workers do. It also provided YMCA partners with opportunities to reflect on the program and their practices contributing, at times, to altered perspectives which in turn influenced their work processes. They appreciated that the findings reminded them of certain actions they had taken, confirmed those actions were appropriate or led them to consider the effect of those actions, and encouraged them to take actions that may have been forgotten.

These outcomes are all indicators of 'process use', which refers to the outcomes derived from the evaluation process, as opposed to the results, and is thought to be an added value of evaluation that engages

stakeholders throughout (Amo & Cousins, 2007; Cousins, Goh, Clark, & Lee, 2004; Patton, 2007). My findings, thus, lend credence to the capacity building recommendation to engage partners (Hawe, et al., 1998; NSW Health Department, 2001). As Michael Q. Patton, a program evaluator and pragmatist, said:

actively involving people in the development process is an end in itself, not just a means to some more concrete end; the process *is* the point rather than simply the means of arriving at some other point. The journey, not the destination, is what matters. (Patton, 2002, p. 159)

8.2 Multiplied Gains

While the initial conditions at the YMCA were fertile for our program evaluation work, they were enhanced owing to the benefits partners perceived to derive from both our program evaluation processes and results. Specifically, the insight YMCA partners gained (through validation, reminders, and awareness) was a proximal capacity building outcome that altered the context and helped generate the more distal sustainable change outcomes, such as improved communications practices and evaluation competencies. In turn, these outcomes have modified the context and are paving the way for subsequent outcomes.

YMCA partners have adapted our program evaluation tools and transferred them to other sectors. This indicates a potential lasting effect of my study given the sustainability of an innovation is influenced by the extent to which it may be modified (Stirman, et al., 2012). Furthermore, the ability to communicate findings is necessary to maintain evaluation practice (Preskill & Boyle, 2008) and our work provided YMCA partners with information to communicate about the value of the work being done in the youth program and the increasing numbers of teens participating. In turn, this communication has had a positive effect on resource mobilisation. This is of particular significance because physical activity intervention studies indicate lack of resources as an impediment to program continuation (de Groot, et al., 2010; Sanigorski, et al., 2008). Indeed, some authors support building resource mobilisation skills as a capacity building process (Labonte & Laverack, 2001a; Liberato, et al., 2011). Additionally, organizational commitment is an indicator of capacity (Germann & Wilson, 2004; Whitelaw, et al., 2006), and while the YMCA is committed to maintaining their new evaluation practices, this may be difficult without resources (Faulkner, et al., 2009). Finally, ongoing evaluation of the teen program (and other programs) will allow the YMCA to continue to generate outcomes observed in this study. These

subsequent outcomes may help maintain YMCA partners' motivation to continue evaluating since the sustainability of an innovation is influenced by its benefits (Stirman, et al., 2012).

A similar progression of initial changes leading to capacity outcomes that contributed to subsequent capacity outcomes was noted in the 12-year evaluation of the Health Promoting Health Service Project in Scotland (Whitelaw, et al., 2012; Whitelaw, et al., 2006), but few other empirical health promotion studies illustrate the value of the long term partnership approach to build sustainable capacity (Jagosh, et al., 2012; Lasker & Weiss, 2003a).

8.3 Partnership Synergy

Regardless of the framework used, many agree capacity building should be carried out in an integrated fashion (Crisp, et al., 2000; NSW Health Department, 2001; Nu'Man, et al., 2007; Smith, et al., 2001; Whitelaw, et al., 2006). In this study, the partnership, resource allocation, and leadership domains of capacity building operated together in a way that can be understood through partnership synergy theory (Lasker, et al., 2001). Partnership synergy, the primary characteristic of a successful collaborative process, is created by combining partners' knowledge, skills, resources, strengths, values, and perspectives so as to enable the

partnership to find new and better ways to achieve shared goals (Jones & Barry, 2011a; Lasker & Weiss, 2003b; Lasker, et al., 2001).

Rather than working with the YMCA to build on their capacity to develop partnerships to achieve goals, I developed a partnership with YMCA stakeholders founded on a relationship of reciprocity regarding trust, respect, and support. Conceptual work has indicated trust and respect among partners are determinants of partnership synergy (Jones & Barry, 2011a; Lasker, et al., 2001). My findings indicate mutual support contributed to partners' motivation to allocate the time and resources necessary to pursue the work, and I therefore, submit that perceived mutual support can be an additional determinant of partnership synergy, a suggestion supported by the Jones Synergy Scale that includes the item 'feelings of energy, excitement and passion' (Jones & Barry, 2011a).

Lasker and colleagues (2001) indicate one of the greatest challenges to collaboration is that partner differences, with respect to for example, goals and perspectives, can create conflict and tension, thereby, impeding partners' ability to create synergy. Importantly, leadership has been identified as a significant predictor of partnership synergy, with indicators such as fostering trust and respect, combining partner assets, and helping the partnership look at things differently (Jones & Barry,

2011a, 2011b; Weiss, Anderson, & Lasker, 2002). My study suggests that while our relationship of mutual trust and respect supported our work, it is the shared leadership process that allowed YMCA partners and I to recognise our differing objectives, knowledge, skills, and experience as complementary and to combine them to accomplish something we could not manage alone (i.e., create synergy). This is similar to one partnership model indicating partner complementarity and fit is a crucial ingredient for a successful partnership (Parent & Harvey, 2009).

Others have illustrated partnership synergy as the mechanism contributing to multiple benefits of participatory research, including generating stakeholder capacity and competence, and increasing sustainability of partnership projects and activities (Jagosh, et al., 2012). This case study provides supporting empirical evidence by demonstrating how the participatory research process was associated with capacity gains beyond those that could have been generated had a traditional research approach been employed. Given our partnership synergy, we were able to co-construct knowledge the YMCA could readily use. Moreover, consistent with capacity building and process use literature (Germann & Wilson, 2004; Hawe, et al., 2000; Preskill & Boyle, 2008), our partnership, leadership process, and resources provided a supportive structure to

achieve workforce and organizational development outcomes. Therefore, as shown in Figure 8-1, this case study suggests the NSW capacity building framework can be conceived as three processes which contribute to two types of outcomes.

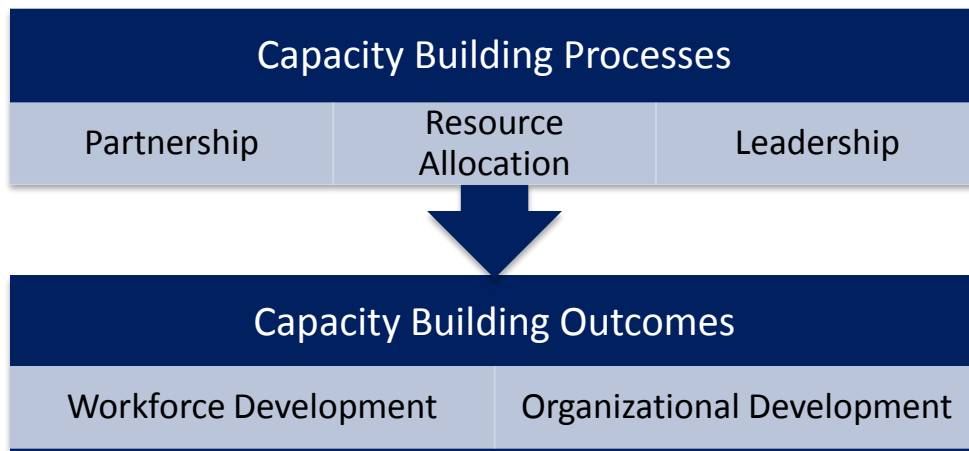


Figure 8-1: The New South Wales Capacity Building Framework Re-conceptualised

8.4 Knowledge Translation

Knowledge translation is about making users aware of knowledge and facilitating their use of it to improve health and healthcare systems. It is about closing the gap between what we know and what we do. It is about moving knowledge into action. (Tetroe, Graham, & Scott, 2011, p. 423)

One reason knowledge translation is important is the creation of new knowledge, on its own, does not always lead to widespread implementation or impacts on health (Straus, Tetroe, & Graham, 2009).

This dissertation research could be considered an integrated knowledge translation study given YMCA stakeholders and I worked together to shape our study, determine methods, develop tools, and interpret and implement findings. Such collaboration has been lauded as a means to produce knowledge that is relevant and useful to (and used by) end users (<http://www.cihr-irsc.gc.ca/e/39033.html>; Jagosh et al., 2012). Indeed, a common barrier to knowledge translation is lack of skill in critical appraisal of evidence and lack of awareness of evidence (Straus, et al., 2009). This study illustrates how we combined our complementarities to overcome this barrier, and moreover, produce tools and knowledge adapted to YMCA partners' context, knowledge, experience, skills, and needs. The relevance of the results of our work for YMCA partners is attested to by the impact these results had on them (the shift from acting on intuition to acting on insight, as discussed in Chapter 5), as well as their use of findings, both for their programming decisions; their communications to colleagues, partners, and funders; and their capacity and competence to act as a program evaluation leader with other YMCAs and community organizations with which they partner (as discussed in Chapter 6). Figure 8-2 presents the Knowledge-to-Action cycle (Graham & Tetroe, 2010) specificities of this study.

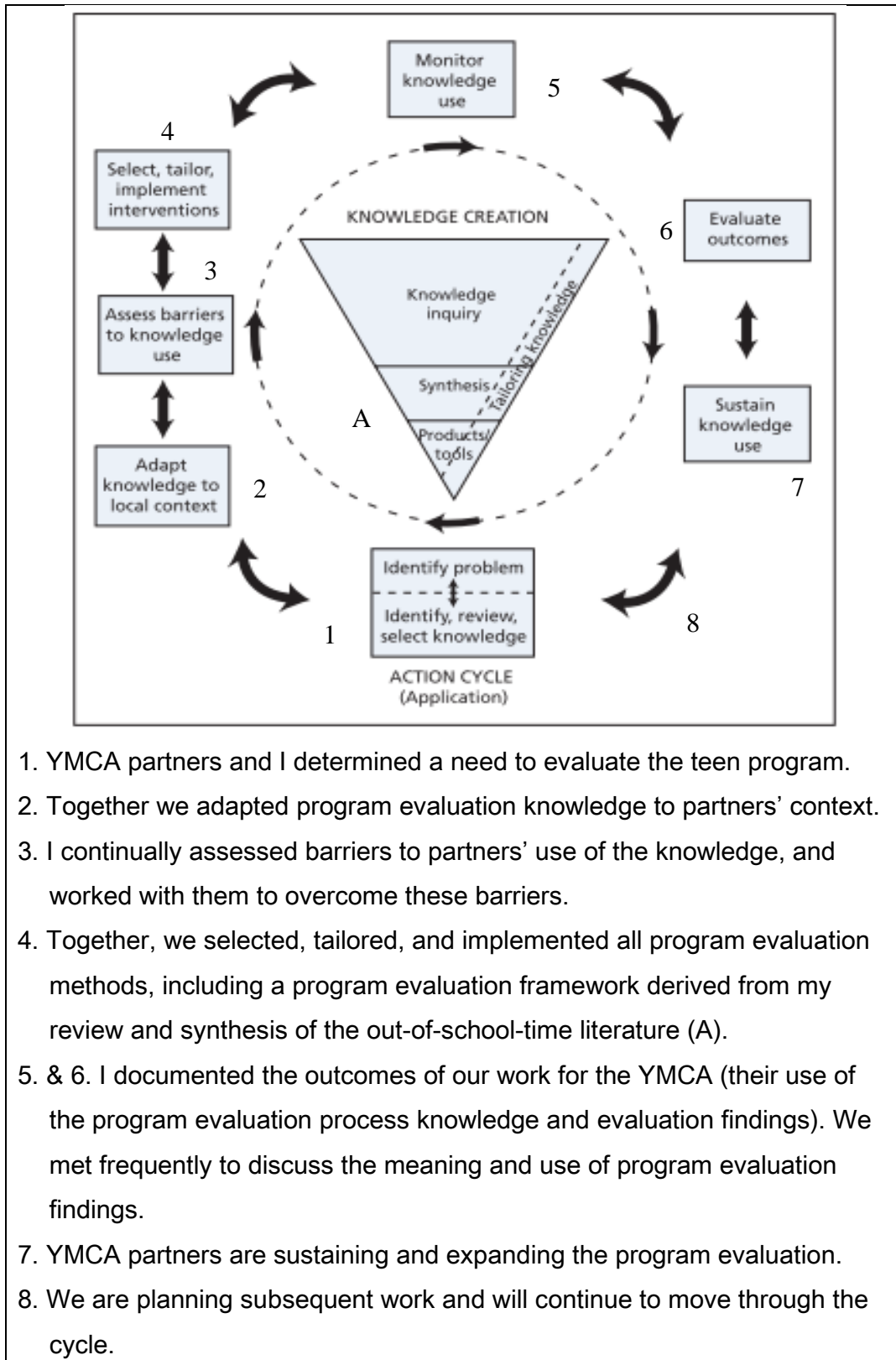


Figure 8-2: Our Knowledge-to-Action Cycle

(Adapted from Graham & Tetroe, 2010)

8.5 Implications for Practice

In health promotion, beginning with a formative evaluation or a needs assessment is important to develop pertinent programs (Green & Kreuter, 2005). This case study indicates valid and trustworthy program evaluation results can help organizations and their practitioners make informed decisions based on research evidence, rather than acting on their intuitions, which may in turn positively influence program participation and help mobilise resources.

While findings from this study indicate the potential importance for health promoting organizations to develop cultures of evaluation, one must recognise organizations often have scarce resources that are invested in priorities relating to achieving their missions, rather than evaluation (Flaman, Nykiforuk, Plotnikoff, & Raine, 2010). My findings indicate it can be beneficial for organizations to partner with researchers to overcome this. For instance, a researcher can contribute the extra time needed to accomplish the program evaluation, and moreover, provide the program evaluation and research expertise the organization may be lacking. Further, building local capacity to reduce organizations' dependence on external resources is important (Crisp, et al., 2000) and provision of staff training, mentoring, and/or technical assistance is recommended (NSW Health Department, 2001; Nu'Man, et al., 2007; Preskill & Boyle, 2008).

Given we conducted all of the work together, the YMCA was able to progressively implement changes throughout our process, learning what to evaluate, how and why, as well as recognising the myriad benefits of the process. My findings suggest, therefore, that should an organization hire an outside evaluator, organization members may not gain insight from the process nor be able to adequately integrate evaluation into their practices. Also, without the participation of the organization in the evaluation, the evaluator may not sufficiently respond to the organizational context nor suggest means to act on results, thus, reducing the relevance and use of results.

Developing a partnership to achieve the above may be time consuming and even challenging. This study suggests the capacity builder should strive to develop a relationship of reciprocity with his or her partners, nurturing mutual, trust, respect, and support. Additionally, responding to the organization's context may be important to ensure the relevance of initiatives, and guiding partners beyond their perceived needs may help them to see the benefit of the partnership, thus, generating buy-in. Using such a process of shared leadership may contribute to the organization valuing the partnership work sufficiently to allocate the necessary resources.

Taking the time to set up the partnership in this way could be vital to the success of the subsequent capacity building process. Furthermore, using a long term approach, implementing changes in small increments would appear to be a requirement for organizations to sustain capacity gains. Findings from this case study imply capacity builders should recognise that each achievement, however small, can modify the organizational context and improve its readiness for additional achievements. Ultimately, the capacity gains may be greater than those initially intended and the organization may not only sustain them, but build upon them. Our program evaluation methods and use of results are unlike our respective initial objectives, but all partners are invested as we experience their value. Therefore, similar to what others have indicated (McDonald, Rogers, & Kefford, 2003), I submit that to build sustainable organizational capacity, partnerships should think big, start small, and build incrementally.

8.6 Critical Reflection and Future Work

A number of things could have broadened the understanding of this case and will be important to consider in my ongoing work with the YMCA. First, conducting participant observation during management meetings with program coordinators and the centre director could have provided further insight into their perception and use of the program evaluation practices and use of results; this is a data collection avenue to consider for our continued partnered work. Second, understanding how YMCA practice changes (evaluation, programming, communications) are perceived by funders and community stakeholders could have deepened our partnership's understanding of the impact of our work. Indeed, interviews or focus groups with such actors will provide insight to inform our future actions. Third, while the YMCA is maintaining data collection practices, and using the results and also the framework of program quality indicators to inform practices, I do not know for how long these changes will persist, nor if they will, in fact, lead to additional changes. Will the YMCA build on the practices we implemented? What practices will the new health promotion framework influence? Will they continue to observe increases in program participation, and hence, teens' physical activity? It will be important to continue to assess YMCA partners' program evaluation practices, as well as how they act on results, to recognise facilitators and

capitalise on them, and to identify barriers and explore means to temper or counteract them. Finally, as with all capacity building initiatives, results from this study are contextual. Although, I have sought to provide sufficient description to enhance transferability of my findings, there is no guarantee the processes and outcomes described herein will be applicable elsewhere. What are the favourable and unfavourable contextual elements that need to be considered when partnering with a youth centre to strengthen their program evaluation and health promotion capacity? Working with other YMCAs to adapt and implement our evaluation system will provide valuable insight for both theory and practice. This would also lead to a greater number of YMCA actors with evaluation competence; helping, thus, to counteract loss of skills and knowledge that can occur with staff turnover, and reducing YMCA dependence on external evaluation expertise.

Notwithstanding these limitations, this study has two considerable strengths: the participatory research approach used to conduct the program evaluation research and the long term data collection that yielded rich process findings. These strengths are also original aspects of my study. The participatory research approach helped ensure our work was relevant to the YMCA and that results were implemented, two commonly

cited benefits of participatory research (Cargo & Mercer, 2008; Jagosh, et al., 2012; Parry, et al., 2009). Additionally, this study illustrates how the participatory research approach contributed to the YMCA partners benefiting from and using program evaluation results, and moreover, developing program evaluation competencies that will allow them to continue to reap benefits from ongoing evaluation. Thus, unlike typical participatory research in health that focuses on the health outcome, or what the partnership generates (Jagosh, et al., 2012), I explored the processes that influence outcomes. Finally, this approach allowed our partnership to achieve more than partners' respective initial objectives. The process and outcome program evaluation methods are applicable to several other YMCA programs and may help improve programming practices, health promoting and otherwise. The potential impact of this study would not have been as extensive had a traditional research approach been used to specifically build on the YMCA's physical activity promotion capacities, as I had originally intended.

The long term ongoing nature of the data collection from multiple sources provided several perspectives of the processes and outcomes, and helped illustrate the evolution of the partnership, our work, and YMCA capacity. While it is recognised that instituting organizational changes and

subsequently effecting improvements in health behaviours and health indicators can be a lengthy process (Hawe, et al., 2000), capacity building studies in the physical activity domain have not lasted long enough for changes and innovations to reach sustainability (de Groot, et al., 2010; Fotu, et al., 2011a; Kremer, et al., 2011; Mathews, et al., 2010; McKenzie, et al., 2007; Sims, et al., 2004; Thomas, et al., 2009; Wen, et al., 2002). I have been able to illustrate the development of partnership synergy and the accumulation of outcomes, such as insight, which in turn contributed to sustainable change outcomes. As such, my study underscores the need for capacity building researchers and practitioners to invest sufficient time to allow for partnerships to gather momentum and for changes to emerge and reach a point where they may be sustained. Additionally, I have been able to exemplify one way the five domains of capacity building outlined in the NSW framework can operate together. Specifically, whereas capacity building literature is frequently unclear regarding distinctions between processes and outcomes (Liberato, et al., 2011; Simmons, et al., 2011), I have been able to illustrate how the partnership, leadership, and resource allocation capacity building domains can work together as the processes which may lead to workforce and organizational development outcomes.

8.7 Concluding Remarks

Given that only a small proportion of Canadian adolescents engage in the recommended levels of physical activity, determining means to effectively promote this healthy lifestyle behaviour to this population is crucial. Extant physical activity intervention research targeting teens indicates a need for longer term interventions that extend beyond the school milieu to the community and/or the family. Few studies have taken this approach. Moreover, few have sought to build on the capacity present in a given environment or context to develop and deliver physical activity promotion programs to teenagers and to modify these programs over time, as needed. I took a novel approach, collaborating with a YMCA to increase their capacity to evaluate their teen program such that program evaluation processes and results could help them increase teens' participation. Findings indicate a synergistic partnership (where partners share leadership, allocate resources, and combine their complementarities to achieve what neither could achieve alone) can effect capacity changes in terms of workforce and organizational development.

With this study I hope to illustrate the feasibility and value of partnering with an organization to modify program development and evaluation practices and more effectively engage adolescents. Increasing such capacity of organizations that offer physical activity opportunities to

teenagers may be a way to offer long term physical activity programs and increase adolescents' physical activity outside of the school environment; thereby responding to current needs expressed in the adolescent physical activity intervention research literature.

LIST OF REFERENCES

- Active Healthy Kids Canada. (2012). Is Active Play Extinct? The Active Healthy Kids Canada 2012 Report Card on Physical Activity for Children and Youth. Retrieved from <http://www.activehealthykids.ca/ReportCard/ReportCardOverview.aspx>
- Allison, K. R., Dwyer, J. J. M., Goldenberg, E. R., Fein, A. J., Yoshida, K. K., & Boutilier, M. A. (2005). Male adolescents' reasons for participating in physical activity, barriers to participation, and suggestions for increasing participation. *Adolescence*, 40(157), 155-170.
- Amo, C., & Cousins, J. B. (2007). Going through the process: An examination of the operationalization of process use in empirical research on evaluation. *New Directions for Evaluation* 116, 5-26. doi: 10.1002/ev.240
- Bandura, A. (1986). *Social foundations of thought and action : a social cognitive theory*. Englewood Cliffs, N.J.: Prentice-Hall

- Barnett, T. A., Hamel, L., & Ferland, L. (2002). Activité physique *Enquête sociale et de santé auprès des enfants et des adolescents québécois* (pp. 231-245). Québec: Institut de la statistique du Québec. Retrieved from <http://www.stat.gouv.qc.ca/publications/sante/pdf/enf-ado-4.pdf>.
September 26, 2007
- Baxter, P., Jack, S. (2008). Qualitative case study methodology: study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-499.
- Beets, M. W., Beighle, A., Erwin, H. E., & Huberty, J. L. (2009). After-School Program Impact on Physical Activity and Fitness A Meta-Analysis. *American Journal of Preventive Medicine*, 36(6), 527-537.
doi: 10.1016/j.amepre.2009.01.033
- Belanger, M., Gray-Donald, K., O'Loughlin, J., Paradis, G., & Hanley, J. (2009). When Adolescents Drop the Ball Sustainability of Physical Activity in Youth. *American Journal of Preventive Medicine*, 37(1), 41-49. doi: 10.1016/j.amepre.2009.04.002
- Bramham, P. (2003). Boys, masculinities and physical education. *Sport, Education and Society*, 8(1), 57-71. doi: 10.1080/1357332032000050060

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi: 10.1191/1478088706qp063oa
- Brooks, F., & Magnusson, J. (2007). Physical Activity as Leisure: The Meaning of Physical Activity for the Health and Well-Being of Adolescent Women. *Health Care for Women International*, 28(1), 69-87. doi: 10.1080/07399330601003499
- Bryant, C. A., Courtney, A. H., McDermott, R. J., Alfonso, M. L., Baldwin, J. A., Nickelson, J., Brown, K. R. M., DeBate, R. D., Phillips, L. M., Thompson, Z., & Zhu, Y. (2010). Promoting physical activity among youth through community-based prevention marketing. *Journal of School Health*, 80(5), 214-224. doi: 10.1111/j.1746-1561.2010.00493.x
- Brydon-Miller, M., Greenwood, D., & Maguire, P. (2003). Why Action Research? *Action Research*, 1(1), 9-28. doi: 10.1177/14767503030011002
- Bush, P. L., Laberge, S., & Laforest, S. (2010). Physical Activity Promotion Among Underserved Adolescents: "Make It Fun, Easy, and Popular". *Health Promotion Practice*, 11(3 Suppl), 79S-87S. doi: 10.1177/1524839908329117

- Butler-Kisber, L. (2005). Inquiry through poetry:the genesis of self-study.
In M. S. Webber & K. O'Reilly-Scanlon (Eds.), *Just who do we think we are? Methodologies for autobiography and self-study in teaching* (pp. 95-109). New York, NY: Routledge Falmer.
- Camacho Miñano, M. J., LaVoi, N. M., & Barr-Anderson, D. J. (2011). Interventions to promote physical activity among young and adolescent girls: a systematic review. *Health Education Research*, 26(6), 1025-1049. doi: 10.1093/her/cyr040
- Cameron, C., Wolfe, R., & Craig, C. (2007). *Physical Activity and Sport: Encouraging Children to be Active*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute Retrieved from http://www.cflri.ca/eng/statistics/surveys/documents/PAM2005_000.pdf.
- Canadian Fitness and Lifestyle Research Institute. (2010). 2009 Capacity Study: Canadian Fitness and Lifestyle Research Institute. Retrieved from http://www.cflri.ca/pub_page/129 June 13, 2013
- Canadian Fitness and Lifestyle Research Institute. (2012). CANPLAY Bulletin 02: Physical Activity Levels of Canadian Children and Youth: Canadian Fitness and Lifestyle Research Institute. Retrieved from <http://www.cflri.ca/node/972> June 13, 2013

- Cargo, M., & Mercer, S. L. (2008). The value and challenges of participatory research: strengthening its practice. *Annual Review of Public Health, 29*(1), 325-350. doi: 10.1146/annurev.publhealth.29.091307.083824
- Casey, M. M., Payne, W. R., & Eime, R. M. (2009). Building the health promotion capacity of sport and recreation organisations: a case study of Regional Sports Assemblies. *Managing Leisure, 14*(2), 112-124. doi: 10.1080/13606710902752588
- Cashman, S. B., Flanagan, P., Silva, M. A., & Candib, L. M. (2012). Partnering for health: collaborative leadership between a community health center and the YWCA central Massachusetts. *Journal of public health management and practice : JPHMP, 18*(3), 279-287.
- Cass, Y., & Price, P. (2003). Moorefit—increasing physical activity in adolescent girls using the Health Promoting Schools framework. *Health Promotion Journal of Australia, 14*, 159-164.
- Chaskin, R. J. (2001). Building community capacity: a definitional framework and case studies from a comprehensive community initiative. *Urban Affairs Review, 36*(3), 291-323. doi: 10.1177/10780870122184876

- Chatzisarantis, N. L. D., & Hagger, M. S. (2009). Effects of an intervention based on self-determination theory on self-reported leisure-time physical activity participation. *Psychology & Health, 24*(1), 29-48. doi: 10.1080/08870440701809533
- Colley, R. C., Garriguet, D., Janssen, I., Craig, C. L., Clarke, J., & Tremblay, M. S. (2012). Physical activity of Canadian children and youth: Accelerometer results from the 2007 to 2009 Canadian Health Measures Survey. *Health Reports, 22*(2).
- Cousins, J. B., Goh, S. C., Clark, S., & Lee, L. E. (2004). Integrating evaluative inquiry into the organizational culture: a review and synthesis of the knowledge base. *The Canadian Journal of Program Evaluation, 19*(2), 99-141.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Los Angeles, CA: SAGE Publications
- Crisp, B. R., Swerissen, H., & Duckett, S. J. (2000). Four approaches to capacity building in health: consequences for measurement and accountability. *Health Promotion International, 15*(2), 99-107. doi: 10.1093/heapro/15.2.99

- Crutzen, R. (2010). Adding effect sizes to a systematic review on interventions for promoting physical activity among European teenagers. *International Journal of Behavioral Nutrition and Physical Activity*, 7(29). doi: 10.1186/1479-5868-7-29
- Dale, D., Corbin, C. B., & Cuddihy, T. F. (1998). Can conceptual physical education promote physically active lifestyles? *Pediatric Exercise Science*, 10(2), 97-109.
- de Bourdeaudhuij, I., Maes, L., de Henauw, S., de Vriendt, T., Moreno, L. A., Kersting, M., Sarri, K., Manios, Y., Widhalm, K., Sjostrom, M., Ruiz, J. R., Haerens, L., & Helena Study Group. (2010). Evaluation of a Computer-Tailored Physical Activity Intervention in Adolescents in Six European Countries: the Activ-O-Meter in the HELENA Intervention Study. *Journal of Adolescent Health*, 46(5), 458-466. doi: 10.1016/j.jadohealth.2009.10.006
- de Groot, F. P., Robertson, N. M., Swinburn, B. A., & de Silva-Sanigorski, A. M. (2010). Increasing community capacity to prevent childhood obesity: challenges, lessons learned and results from the Romp & Chomp intervention. *BMC Public Health*, 10(522). doi: 10.1186/1471-2458-10-522

- de Meester, F., van Lenthe, F. J., Spittaels, H., Lien, N., & de Bourdeaudhuij, I. (2009). Interventions for promoting physical activity among European teenagers: a systematic review. *International Journal of Behavioral Nutrition and Physical Activity*, 6(82). doi: 10.1186/1479-5868-6-82
- de Silva-Sanigorski, A. M., Bolton, K., Haby, M., Kremer, P., Gibbs, L., Waters, E., & Swinburn, B. (2010). Scaling up community-based obesity prevention in Australia: Background and evaluation design of the Health Promoting Communities: Being Active Eating Well initiative. *BMC Public Health*, 10(65). doi: 10.1186/1471-2458-10-65
- Department of Health. (2010). Well for Life Support and Evaluation (pp. i-55). Melbourne, Victoria: Wellbeing, Integrated Care and Ageing Division, Victorian Government Department of Health. Retrieved from www.health.vic.gov.au/agedcare September 15, 2012
- Dobbins, M., De Corby, K., Robeson, P., Husson, H., & Tirilis, D. (2009). School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6-18 *Cochrane Database of Systematic Reviews* (Issue 1. Art No.:CD007651). doi: 10.1002/14651858.CD007651

- Dudley, D. A., Okely, A. D., Pearson, P., & Peat, J. (2010). Engaging adolescent girls from linguistically diverse and low income backgrounds in school sport: a pilot randomised controlled trial. *Journal of Science and Medicine in Sport*, 13(2), 217-224. doi: 10.1016/j.jsams.2009.04.008
- Dwyer, J. J. M., Allison, K. R., Goldenberg, E. R., Fein, A. J., Yoshida, K. K., & Boutilier, M. A. (2006). Adolescent girls' perceived barriers to participation in physical activity. *Adolescence*, 41(161), 75-89.
- Dzewaltowski, D. A., Estabrooks, P. A., Welk, G., Hill, J., Milliken, G., Karteroliotis, K., & Johnston, J. A. (2009). Healthy Youth Places: a Randomized Controlled Trial to Determine the Effectiveness of Facilitating Adult and Youth Leaders to Promote Physical Activity and Fruit and Vegetable Consumption in Middle Schools. *Health Education & Behavior*, 36(3), 583-600. doi: 10.1177/1090198108314619
- Estabrooks, P. A., Bradshaw, M., Dzewaltowski, D. A., & Smith-Ray, R. L. (2008). Determining the impact of Walk Kansas: applying a team-building approach to community physical activity promotion. *Annals of Behavioral Medicine*, 36(1), 1-12. doi: 10.1007/s12160-008-9040-0

- Faulkner, G., McCloy, C., Plotnikoff, R. C., Bauman, A., Brawley, L. R., Chad, K., Gauvin, L., Spence, J. C., & Tremblay, M. S. (2009). ParticipACTION: Baseline assessment of the capacity available to the 'New ParticipACTION': a qualitative study of Canadian organizations. *International Journal of Behavioral Nutrition and Physical Activity*, 6(87). doi: 10.1186/1479-5868-6-87
- Fitzgerald, A., Fitzgerald, N., & Aherne, C. (2012). Do peers matter? A review of peer and/or friends' influence on physical activity among American adolescents. *Journal of Adolescence*, 35(4), 941-958. doi: <http://dx.doi.org/10.1016/j.adolescence.2012.01.002>
- Flaman, L. M., Nykiforuk, C. I. J., Plotnikoff, R. C., & Raine, K. (2010). Exploring facilitators and barriers to individual and organizational level capacity building: outcomes of participation in a community priority setting workshop. *Global Health Promotion*, 17(2), 34-43. doi: 10.1177/1757975910365225
- Flintoff, A., & Scraton, S. (2001). Stepping into Active Leisure? Young Women's Perceptions of Active Lifestyles and Their Experiences of School Physical Education. *Sport, Education and Society*, 6(1), 5-21.

- Fotu, K. F., Millar, L., Mavoa, H., Kremer, P., Moodie, M., Snowdon, W., Utter, J., Vivili, P., Schultz, J. T., Malakellis, M., McCabe, M. P., Roberts, G., & Swinburn, B. A. (2011a). Outcome results for the Ma'alahi Youth Project, a Tongan community-based obesity prevention programme for adolescents. *Obesity Reviews*, 12(Suppl. 2), 41-50. doi: 10.1111/j.1467-789X.2011.00923.x
- Fotu, K. F., Moodie, M. M., Mavoa, H. M., Pomana, S., Schultz, J. T., & Swinburn, B. A. (2011b). Process evaluation of a community-based adolescent obesity prevention project in Tonga. *BMC Public Health*, 11(284). doi: 10.1186/1471-2458-11-284
- Frenn, M., Malin, S., Brown, R. L., Greer, Y., Fox, J., Greer, J., & Smyczek, S. (2005). Changing the tide: an Internet/video exercise and low-fat diet intervention with middle-school students. *Applied Nursing Research*, 18(1), 13-21. doi: 10.1016/j.apnr.2004.04.003
- García Iriarte, E., Suarez-Balcazar, Y., Taylor-Ritzler, T., & Luna, M. (2011). A Catalyst-for-Change Approach to Evaluation Capacity Building. *American Journal of Evaluation*, 32(2), 168-182. doi: 10.1177/1098214010387114
- Germann, K., & Wilson, D. (2004). Organizational capacity for community development in regional health authorities: a conceptual model.

Health Promotion International, 19(3), 289-298. doi:

10.1093/heapro/dah303

Giles-Corti, B. (2006). People or places: what should be the target?

Journal of Science and Medicine in Sport, 9(5), 357-366. doi:

10.1016/j.jsams.2006.06.021

Gomes de Barros, M. V., Nahas, M. V., Hallal, P. C., de Farias Junior, J.

C., Florindo, A. A., & Honda de Barros, S. S. (2009). Effectiveness

of a School-Based Intervention on Physical Activity for High School

Students in Brazil: the Saude na Boa Project. *Journal of Physical*

Activity & Health, 6(2), 163-169.

Goodman, R. M., Speers, M. A., McLeroy, K., Fawcett, S., Kegler, M.,

Parker, E., Smith, S. R., Sterling, T. D., & Wallerstein, N. (1998).

Identifying and Defining the Dimensions of Community Capacity to

Provide a Basis for Measurement. *Health Education & Behavior*,

25(3), 258-278. doi: 10.1177/109019819802500303

Graham, I. D., & Tetroe, J. M. (2010). The Knowledge to Action

Framework. In J. Rycroft-Malone & T. Bucknall (Eds.), *Models and*

Frameworks for Implementing Evidence-Based Practice (pp. 207-

221): Wiley-Blackwell.

- Green, L. W. (2008). Making research relevant: if it is an evidence-based practice, where's the practice-based evidence? *Family Practice*, 25, i20-i24. doi: 10.1093/fampra/cmn055
- Green, L. W., George, M. A., Daniel, M., Frankish, C. J., Herbert, C. J., Bowie, W. R., & O'Neill, M. (1995). Study of Participatory Research in Health Promotion: Review and recommendations for the development of participatory research in health promotion in Canada. Ottawa: The Royal Society of Canada
- Green, L. W., & Kreuter, M. W. (2005). *Health Program Planning: An Educational and Ecological Approach* (4th ed.). St. Louis: McGraw-Hill
- Grier, S., & Bryant, C. A. (2005). Social marketing in public health. *Annual Review of Public Health*, 26, 319-339. doi: 10.1146/annurev.publhealth.26.021304.144610
- Haerens, L., Cerin, E., Maes, L., Cardon, G., Deforche, B., & de Bourdeaudhuij, I. (2008). Explaining the effect of a 1-year intervention promoting physical activity in middle schools: A mediation analysis. *Public Health Nutrition*, 11(5), 501-512. doi: 10.1017/s136898000700078x

- Haerens, L., de Bourdeaudhuij, I., Maes, L., Cardon, G., & Deforche, B. (2007). School-Based Randomized Controlled Trial of a Physical Activity Intervention among Adolescents. *The Journal of adolescent health : Official publication of the Society for Adolescent Medicine*, 40(3), 258-265. doi: 10.1016/j.jadohealth.2006.09.028
- Haerens, L., Deforche, B., Maes, L., Cardon, G., Stevens, V., & de Bourdeaudhuij, I. (2006a). Evaluation of a 2-year physical activity and healthy eating intervention in middle school children. *Health Education Research*, 21(6), 911-921. doi: 10.1093/her/cyl115
- Haerens, L., Deforche, B., Maes, L., Stevens, V., Cardon, G., & de Bourdeaudhuij, I. (2006b). Body Mass Effects of a Physical Activity and Healthy Food Intervention in Middle Schools. *Obesity*, 14(5), 847-854. doi: 10.1038/oby.2006.98
- Hanusaik, N., O'Loughlin, J. L., Kishchuk, N., Eyles, J., Robinson, K., & Cameron, R. (2007). Building the backbone for organisational research in public health systems: development of measures of organisational capacity for chronic disease prevention. *Journal of Epidemiology and Community Health*, 61(8), 742-749. doi: 10.1136/jech.2006.054049

- Hart, E., & Bond, M. (1996). Making sense of research through the use of a typology. *Journal of Advanced Aging*, 23(1), 152-159. doi: 0.1111/j.1365-2648.1996.tb03147.x
- Hart, E. O., & Bond, M. (1995). *Action research for health and social care: a guide to practice*. Buckingham: Open University Press
- Hawe, P., King, L., Noort, M., Gifford, S. M., & Lloyd, B. (1998). Working invisibly: health workers talk about capacity-building in health promotion. *Health Promotion International*, 13(4), 285-295. doi: 10.1093/heapro/13.4.285
- Hawe, P., King, L., Noort, M., Jordens, C., & Lloyd, B. (2000). Indicators to help with capacity building in health promotion. Retrieved from <http://www.health.nsw.gov.au/pubs/2000/pdf/capbuild.pdf>
- Hawe, P., Noort, M., King, L., & Jordens, C. (1997). Multiplying Health Gains: The critical role of capacity-building within health promotion programs. *Health Policy*, 39(1), 29-42. doi: 10.1016/S0168-8510(96)00847-0
- Heward, S., Hutchins, C., & Keleher, H. (2007). Organizational change - key to capacity building and effective health promotion. *Health Promotion International*, 22(2), 170-178. doi: 10.1093/heapro/dam011

- Hodge, W., & Thomas, M. (2008). VicHealth Metro ACTIVE evaluation: final report (pp. 1-39). Sydney, NSW: ARTD Consultants & VicHealth. Retrieved from <http://www.vichealth.vic.gov.au/Publications/Physical-Activity/Sport-and-recreation/Metro-ACTIVE-evaluation-report.aspx> August 8, 2012
- Hoelscher, D. M., Springer, A. E., Ranjit, N., Perry, C. L., Evans, A. E., Stigler, M., & Kelder, S. H. (2010). Reductions in child obesity among disadvantaged school children with community involvement: the Travis County CATCH Trial. *Obesity, 18*, S36-S44.
- Holter, I. M., & Schwartz-Barcott, D. (1993). Action research: What is it? How has it been used and how can it be used in nursing? *Journal of Advanced Aging, 18*, 298-304.
- Humbert, M. L., Chad, K. E., Spink, K. S., Muhajarine, N., Anderson, K. D., Bruner, M. W., Girolami, T. M., Odnokon, P., & Gryba, C. R. (2006). Factors that influence physical activity participation among high- and low-SES youth. *Qualitative Health Research, 16*(4), 467-483. doi: 10.1177/1049732305286051
- Israel, B. A., Lantz, P., McGranaghan, R. J., Kerr, D. K., & Guzman, J. R. (2005). Documentation and evaluation of CBPR partnerships : in-

- depth interviews and closed-ended questionnaires. In B. A. Israel, E. Eng, A. J. Schulz & E. A. Parker (Eds.), *Methods in community-based participatory research for health* (pp. 255-278). San Francisco, CA: Jossey-Bass.
- Jackson, S. F., Cleverly, S., Poland, B., Burman, D., Edwards, R., & Robertson, A. (2003). Working with Toronto neighbourhoods toward developing indicators of community capacity. *Health Promotion International*, 18(4), 339-350. doi: 10.1093/heapro/dag415
- Jackson, S. F., Perkins, F., Khandor, E., Cordwell, L., Hamann, S., & Buasai, S. (2006). Integrated health promotion strategies: a contribution to tackling current and future health challenges. *Health Promotion International*, 21, 75-83. doi: 10.1093/heapro/dal054|ISSN 0957-4824
- Jago, R., & Baranowski, T. (2004). Non-curricular approaches for increasing physical activity in youth: a review. *Preventive Medicine*, 39(1), 157-163. doi: 10.1016/j.ypmed.2004.01.014
- Jago, R., Baranowski, T., Baranowski, J. C., Thompson, D., Cullen, K. W., Watson, K., & Liu, Y. (2006). Fit for Life Boy Scout badge: outcome

evaluation of a troop and Internet intervention. *Preventive Medicine*, 42(3), 181-187. doi: 10.1016/j.ypmed.2005.12.010

Jagosh, J., Macaulay, A. C., Pluye, P., Salsberg, J., Bush, P. L., Henderson, J., Sirett, E., Wong, G., Cargo, M., Herbert, C. P., Seifer, S. D., Green, L. W., & Greenhalgh, T. (2012). Uncovering the Benefits of Participatory Research: Implications of a Realist Review for Health Research and Practice. *The Milbank Quarterly*, 90(2), 311-346. doi: 10.1111/j.1468-0009.2012.00665.x

Jagosh, J., Pluye, P., Macaulay, A. C., Salsberg, J., Henderson, J., Sirett, E., Bush, P. L., Seller, R., Wong, G., Greenhalgh, T., Cargo, M., Herbert, C. P., Seifer, S., & Green, L. W. (2011). Assessing the outcomes of participatory research: protocol for identifying, selecting, appraising and synthesizing the literature for realist review. *Implementation Science*, 6(1), 24. doi: 10.1186/1748-5908-6-24

Jamner, M. S., Spruijt-Metz, D., Bassin, S., & Cooper, D. M. (2004). A controlled evaluation of a school-based intervention to promote physical activity among sedentary adolescent females: Project FAB. *Journal of Adolescent Health*, 34(4), 279-289. doi: 10.1016/j.jadohealth.2003.06.003

- Jepson, R., Harris, F., Platt, S., & Tannahill, C. (2010). The effectiveness of interventions to change six health behaviours: a review of reviews. *BMC Public Health*, *10*(538).
- Joffres, C., Heath, S., Farquharson, J., Barkhouse, K., Hood, R., Latter, C., & MacLean, D. R. (2004a). Defining and operationalizing capacity for heart health promotion in Nova Scotia, Canada. *Health Promotion International*, *19*(1), 39-49. doi: 10.1093/heapro/dah106
- Joffres, C., Heath, S., Farquharson, J., Barkhouse, K., Latter, C., & MacLean, D. R. (2004b). Facilitators and challenges to organizational capacity building in heart health promotion. *Qualitative Health Research*, *14*(1), 39-60. doi: 10.1177/1049732303259802
- Jones, J., & Barry, M. M. (2011a). Developing a scale to measure synergy in health promotion partnerships. *Global Health Promotion*, *18*(2), 36-44. doi: 10.1177/1757975911404762
- Jones, J., & Barry, M. M. (2011b). 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

- Kegler, M. C., Alcantara, I., Veluswamy, J. K., Haardorfer, R., Hotz, J. A., & Glanz, K. (2012). Results from an intervention to improve rural home food and physical activity environments. *Progress in community health partnerships : research, education, and action*, 6(3), 265-277. doi: 10.1353/cpr.2012.0042
- Kotler, P., & Zaltman, G. (1971). Social marketing: An approach to planned social change. *Journal of Marketing*, 35(3), 3-12.
- Kremer, P., Waqa, G., Vanualailai, N., Schultz, J. T., Roberts, G., Moodie, M., Mavoa, H., Malakellis, M., McCabe, M. P., & Swinburn, B. A. (2011). Reducing unhealthy weight gain in Fijian adolescents: results of the Healthy Youth Healthy Communities study. *Obesity Reviews*, 12, 29-40. doi: 10.1111/j.1467-789X.2011.00912.x
- Kriemler, S., Meyer, U., Martin, E., van Sluijs, E. M. F., Andersen, L. B., & Martin, B. W. (2011). Effect of school-based interventions on physical activity and fitness in children and adolescents: a review of reviews and systematic update. *British Journal of Sports Medicine*, 45(11), 923-930. doi: 10.1136/bjsports-2011-090186
- Labonte, R., & Laverack, G. (2001a). Capacity building in health promotion, Part 1: for whom? and for what purpose? *Critical Public Health*, 11(1), 111-127. doi: 10.1080/09581590110039838

- Labonte, R., & Laverack, G. (2001b). Capacity building in health promotion, Part 2: whose use? and with what measurement? *Critical Public Health*, 11(2), 129-138. doi: 10.1080/09581590110039847
- Lasker, R. D., & Weiss, E. S. (2003a). Broadening participation in community problem solving: a multidisciplinary model to support collaborative practice and research. *Journal of Urban Health-Bulletin of the New York Academy of Medicine*, 80(1), 14-47. doi: 10.1093/jurban/jtg014
- Lasker, R. D., & Weiss, E. S. (2003b). Creating partnership synergy: the critical role of community stakeholders. *Journal of Health and Human Services Administration*, 26(1), 119-139.
- 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), 179-204. doi: 10.1111/1468-0009.00203
- Lee, L.-L., Kuo, Y.-C., Fanaw, D., Perng, S.-J., & Juang, I.-F. (2012). The effect of an intervention combining self-efficacy theory and pedometers on promoting physical activity among adolescents.

Journal of Clinical Nursing, 21(7-8), 914-922. doi: 10.1111/j.1365-2702.2011.03881.x

Lewin, K. (1946). Action research and minority problems. *Journal of Social Issues*, 2, 34-46.

Liberato, S. C., Brimblecombe, J., Ritchie, J., Ferguson, M., & Coveney, J. (2011). Measuring capacity building in communities: a review of the literature. *BMC Public Health*, 11(1), 850. doi: 10.1186/1471-2458-11-850

Lubans, D., & Morgan, P. (2008). Evaluation of an extra-curricular school sport programme promoting lifestyle and lifetime activity for adolescents. *Journal of Sports Sciences*, 26(5), 519-529. doi: 10.1080/02640410701624549

Lubans, D. R., Morgan, P. J., Callister, R., Collins, C. E., & Plotnikoff, R. C. (2010). Exploring the Mechanisms of Physical Activity and Dietary Behavior Change in the Program X Intervention for Adolescents. *Journal of Adolescent Health*, 47(1), 83-91. doi: 10.1016/j.jadohealth.2009.12.015

Lubans, D. R., Morgan, P. J., & Tudor-Locke, C. (2009). A systematic review of studies using pedometers to promote physical activity

among youth. *Preventive Medicine*, 48(4), 307-315. doi:

10.1016/j.ypmed.2009.02.014

Lubans, D. R., & Sylva, K. (2006). Controlled evaluation of a physical activity intervention for senior school students: effects of the lifetime activity program. *Journal of Sport & Exercise Psychology*, 28, 252-268.

Macaulay, A. C., Commanda, L. E., Freeman, W. L., Gibson, N., McCabe, M. L., Robbins, C. M., & Twohig, P. L. (1999). Participatory research maximises community and lay involvement. *British Medical Journal*, 319(7212), 774-778.

Macaulay, A. C., Jagosh, J., Pluye, P., Bush, P. L., & Salsberg, J. (2013). Quantitative Methods in Participatory Research: being sensitive to issues of scientific validity, community safety, and the academic-community relationship *Nouvelles Pratiques Sociales*, 25(2).

Maibach, E. W., Abrams, L. C., & Marosits, M. (2007). Communication and marketing as tools to cultivate the public's health: a proposed "people and places" framework. *BMC Public Health*, 7(88). doi: 10.1186/1471-2458-7-88

Maibach, E. W., Rothschild, M. L., & Novelli, W. D. (2002). Social Marketing. In K. Glanz, B. K. Rimer & F. Marcus-Lewis (Eds.),

- Health Behavior and Health Education: Theory, Research, and Practice* (pp. 437-461). San Francisco, CA.: Jossey-Bass.
- Mathews, L. B., Moodie, M. M., Simmons, A. M., & Swinburn, B. A. (2010). The process evaluation of *It's Your Move!*, an Australian adolescent community-based obesity prevention project. *BMC Public Health*, 10, 1-13. doi: 10.1186/1471-2458-10-448
- McAlister, A. L., Perry, C. L., & Parcel, G. S. (2008). How individuals, environments, and health behaviors interact: Social Cognitive Theory K. Glanz, B. K. Rimer & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (pp. 169-188). Retrieved from <http://www.netLibrary.com/urlapi.asp?action=summary&v=1&bookid=238450>
- McDonald, B., Rogers, P., & Kefford, B. (2003). Teaching People to Fish? Building the Evaluation Capability of Public Sector Organizations. *Evaluation*, 9(1), 9-29. doi: 10.1177/1356389003009001002
- McKenzie, R., Naccarella, L., & Thompson, C. (2007). Well for Life: Evaluation and policy implications of a health promotion initiative for frail older people in aged care settings. *Australian Journal on Ageing*, 26(3), 135-140. doi: 10.1111/j.1741-6612.2007.00238.x

- McKenzie, T. L. (2001). Promoting physical activity in youth: focus on middle school environments. *Quest*, 53(3), 326-334.
- McKenzie, T. L., Sallis, J. F., Prochaska, J. J., Conway, T. L., Marshall, S. J., & Rosengard, P. (2004). Evaluation of a two-year middle-school physical education intervention: M-SPAN. *Medicine and Science in Sports and Exercise*, 36(8), 1382-1388. doi: 10.1249/01.MSS.0000135792.20358.4D
- McLeroy, K. R., Bibeau, D., Stickler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15(4), 351-377. doi: 10.1177/109019818801500401
- Merriam, S. B. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass
- Mertens, D. M. (2010). *Research and evaluation in education and psychology : integrating diversity with quantitative, qualitative, and mixed methods* (3rd ed.). Los Angeles, CA: SAGE publications
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: an expanded sourcebook* (2nd ed.). Thousand Oaks, CA: SAGE Publications
- Millar, L., Kremer, P., de Silva-Sanigorski, A., McCabe, M. P., Mavoa, H., Moodie, M., Utter, J., Bell, C., Malakellis, M., Mathews, L., Roberts,

- G., Robertson, N., & Swinburn, B. A. (2011). Reduction in overweight and obesity from a 3-year community-based intervention in Australia: the 'It's Your Move!' project. *Obesity Reviews*, 12(Suppl. 2), 20-28. doi: 10.1111/j.1467-789X.2011.00904.x
- Munn-Giddings, C., McVicar, A., & Smith, L. (2008). Systematic review of the uptake and design of action research in published nursing research, 2000-2005. *Journal of Research in Nursing*, 13(6), 465-477. doi: 10.1177/1744987108090297
- Murillo Pardo, B., García Bengoechea, E., Generelo Lanaspá, E., Bush, P. L., Zaragoza Casterad, J., Julián Clemente, J. A., & García González, L. (2013). Promising school-based strategies and intervention guidelines to increase physical activity of adolescents. *Health Education Research*. doi: 10.1093/her/cyt040
- Neumark-Sztainer, D., Story, M., Hannan, P. J., & Rex, J. (2003). New moves: a school-based obesity prevention program for adolescent girls. *Preventive Medicine*, 37(1), 41-51. doi: 10.1016/S0091-7435(03)00057-4
- NSW Health Department. (2001). A framework for building capacity to improve health. In N. H. Department (Ed.). Sydney, Australia: NSW

Health Department. Retrieved from

[http://www.health.nsw.gov.au/pubs/2001/pdf/framework_improve.p](http://www.health.nsw.gov.au/pubs/2001/pdf/framework_improve.pdf)

df March 16, 2013

Nu'Man, J., King, W., Bhalakia, A., & Criss, S. (2007). A framework for building organizational capacity integrating planning, monitoring, and evaluation. *Journal of Public Health Management and Practice*, 13(Suppl), S24-S32.

Nyswander, D. (1942). *Solving School Health Problems*. New York, NY: Oxford University Press

O'Connor, T. M., Jago, R., & Baranowski, T. (2009). Engaging Parents to Increase Youth Physical Activity: a Systematic Review. *American Journal of Preventive Medicine*, 37(2), 141-149. doi: 10.1016/j.amepre.2009.04.020

Okely, A. D., Cotton, W. G., Lubans, D. R., Morgan, P. J., Puglisi, L., Miller, J., Wright, J., Batterham, M. J., Peralta, L. R., & Perry, J. (2011). A school-based intervention to promote physical activity among adolescent girls: rationale, design, and baseline data from the Girls in Sport group randomised controlled trial. *BMC Public Health*, 11(658). doi: 10.1186/1471-2458-11-658

- Paradis, G., Levesque, L., Macaulay, A. C., Cargo, M., McComber, A., Kirby, R., Receveur, O., Kishchuk, N., & Potvin, L. (2005). Impact of a Diabetes Prevention Program on Body Size, Physical Activity, and Diet Among Kanien'keha:ka (Mohawk) Children 6 to 11 Years Old: 8-Year Results From the Kahnawake Schools Diabetes Prevention Project. *Pediatrics*, 115(2), 333-339. doi: 10.1542/peds.2004-0745
- Parcel, G. S., Kelder, S., & Basen-Engquist, K. (2000). The school as a setting for Health promotion. In B. D. Poland, L. W. Green & I. Rootman (Eds.), *Settings for Health Promotion* (pp. 86-137). Thousand Oaks, CA: SAGE Publications.
- Parent, M. M., & Harvey, J. (2009). Towards a Management Model for Sport and Physical Activity Community-based Partnerships. *European Sport Management Quarterly*, 9(1), 23-45. doi: 10.1080/16184740802461694
- Parry, D., Salsberg, J., & Macaulay, A. C. (2009). Guide to Researcher and Knowledge-User Collaboration in Health Research (pp. 1-83). Ottawa, ON: Canadian Institutes of Health Research (CIHR). Retrieved from <http://www.cihr-irsc.gc.ca/e/44954.html> May 16, 2013

- Pate, R. R., & O'Neill, J. R. (2009). After-school interventions to increase physical activity among youth. *British Journal of Sports Medicine*, 43(1), 14-18. doi: 10.1136/bjsm.2008.055517
- Pate, R. R., Ward, D. S., Saunders, R. P., Felton, G., Dishman, R. K., & Dowda, M. (2005). Promotion of physical activity among high-school girls: a randomized controlled trial. *American Journal of Public Health*, 95(9), 1582-1587. doi: 10.2105/AJPH.2004.045807
- Patrick, K., Calfas, K. J., Norman, G. J., Zabinski, M. F., Sallis, J. F., Rupp, J., Covin, J., & Cella, J. (2006). Randomized controlled trial of a primary care and home-based intervention for physical activity and nutrition behaviors: PACE+ for adolescents. *Archives of Pediatrics & Adolescent Medicine*, 160(2), 128-136. doi: 10.1001/archpedi.160.2.128
- Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods* (3rd ed.). Thousand Oaks, CA: SAGE Publications
- Patton, M. Q. (2007). Process Use as a Usefulness. *New Directions for Evaluation*, 116, 99-112. doi: 10.1002/ev
- Pawson, R., & Tilley, N. (1998). *Realistic Evaluation*. London: SAGE Publications

- Pazoki, R., Nabipour, I., Seyednezami, N., & Imami, S. R. (2007). Effects of a community-based healthy heart program on increasing healthy women's physical activity: a randomized controlled trial guided by Community-based Participatory Research (CBPR). *BMC Public Health*, 7(216), 216. doi: 10.1186/1471-2458-7-216
- Peralta, L. R., Jones, R. A., & Okely, A. D. (2009). Promoting healthy lifestyles among adolescent boys: the Fitness Improvement and Lifestyle Awareness program RCT. *Preventive Medicine*, 48(6), 537-542. doi: 10.1016/j.ypmed.2009.04.007
- Perry, C. K., Garside, H., Morones, S., & Hayman, L. L. (2012). Physical Activity Interventions for Adolescents: An Ecological Perspective. *Journal of Primary Prevention*, 33(2-3), 111-135. doi: 10.1007/s10935-012-0270-3
- Preskill, H., & Boyle, S. (2008). A Multidisciplinary Model of Evaluation Capacity Building. *American Journal of Evaluation*, 29(4), 443-459. doi: 10.1177/1098214008324182
- Prins, R., van Empelen, P., Beenackers, M., Brug, J., & Oenema, A. (2010). Systematic Development of the YouRAction program, a computer-tailored Physical Activity promotion intervention for Dutch adolescents, targeting personal motivations and environmental

- opportunities. *BMC Public Health*, 10(1), 474. doi: 10.1186/1471-2458-10-474
- Prins, R. G., Brug, J., van Empelen, P., & Oenema, A. (2012). Effectiveness of YouRAction, an Intervention to Promote Adolescent Physical Activity Using Personal and Environmental Feedback: a Cluster RCT. *PLoS ONE*, 7(3), e32682. doi: 10.1371/journal.pone.0032682
- Raeburn, J., Akerman, M., Chuengsatiansup, K., Mejia, F., & Oladepo, O. (2006). Community capacity building and health promotion in a globalized world. *Health Promotion International*, 21(S1), 84-90. doi: 10.1093/heapro/dal055
- Ransdell, L. B., Dratt, J., Kennedy, C., O'Neill, S., & DeVoe, D. (2001). Daughters and Mothers Exercising Together (DAMET): a 12-week pilot project designed to improve physical self-perception and increase recreational physical activity. *Women & Health*, 33(3-4), 113 - 129. doi: 10.1300/J013v33n03_07
- Robbins, L. B., Gretebeck, K. A., Kazanis, A. S., & Pender, N. J. (2006). Girls on the Move program to increase physical activity participation. *Nursing Research*, 55(3), 206-216.

- Romero, A. J. (2012). A Pilot Test of the Latin Active Hip Hop Intervention to Increase Physical Activity Among Low-Income Mexican-American Adolescents. *American Journal of Health Promotion*, 26(4), 208-211. doi: 10.4278/ajhp.090123-ARB-24
- Rossman, G. B., & Rallis, S. F. (2003). *Learning in the Field: An Introduction to Qualitative Research* (2nd ed.). Thousand Oaks, CA: SAGE Publications
- Roussos, S. T., & Fawcett, S. B. (2000). A Review of Collaborative Partnerships as a Strategy for Improving Community Health. *Annual Review of Public Health*, 21(1), 369-402. doi: 10.1146/annurev.publhealth.21.1.369
- Sallis, J. F., McKenzie, T. L., Conway, T. L., Elder, J. P., Prochaska, J. J., Brown, M., Zive, M. M., Marshall, S. J., & Alcaraz, J. E. (2003). Environmental interventions for eating and physical activity: a randomized controlled trial in middle schools. *American Journal of Preventive Medicine*, 24(3), 209-217. doi: 10.1016/S0749-3797(02)00646-3
- Sallis, J. F., Owen, N., & Fisher, E. B. (2008). Ecological models of health behavior. In K. Glanz, B. K. Rimer & K. Viswanath (Eds.), *Health*

Behavior and Health Education: Theory, Research, and Practice

(4th ed., pp. 465-485). San Francisco, CA: Jossey-Bass.

Salmon, J., Booth, M. L., Phongsavan, P., Murphy, N., & Timperio, A.

(2007). Promoting physical activity participation among children and adolescents. *Epidemiologic Reviews*, 29(1), 144-159. doi:

10.1093/epirev/mxm010

Sanigorski, A. M., Bell, A. C., Kremer, P. J., Cuttler, R., & Swinburn, B. A.

(2008). Reducing unhealthy weight gain in children through community capacity-building: results of a quasi-experimental intervention program, Be Active Eat Well. *International Journal of Obesity*, 32(7), 1060-1067. doi: 10.1038/ijo.2008.79

Saunders, R. P., Pate, R. R., Dowda, M., Ward, D. S., Epping, J. N., &

Dishman, R. K. (2012). Assessing sustainability of Lifestyle Education for Activity Program (LEAP). *Health Education Research*, 27(2), 319-330. doi: 10.1093/her/cyr111

Scheirer, M. A. (2005). Is sustainability possible? A review and

commentary on empirical studies of program sustainability.

American Journal of Evaluation, 26(3), 320-347. doi:

10.1177/1098214005278752

- Schetzina, K. E., Dalton, W. T., Lowe, E. F., Azzazy, N., VonWerssowetz, K. M., Givens, C., Pfortmiller, D. T., & Stern, H. P. (2009). A Coordinated School Health Approach to Obesity Prevention Among Appalachian Youth The Winning With Wellness Pilot Project. *Family & Community Health, 32*(3), 271-285.
- Schneider, M., Dunton, G. F., & Cooper, D. M. (2008). Physical activity and physical self-concept among sedentary adolescent females: An intervention study. *Psychology of Sport and Exercise, 9*(1), 1-14.
doi: 10.1016/j.psychsport.2007.01.003
- Schultz, J., Utter, J., Mathews, L., Cama, T., Mavoa, H., & Swinburn, B. (2007). The Pacific OPIC project (Obesity Prevention in Communities): action plans and interventions. *Pacific Health Dialogue, 14*(2), 147-154.
- Schulz, A. J., Zenk, S. N., Kannan, S., Israel, B. A., Koch, M. A., & Stokes, C. A. (2005). CBPR Approach to Survey Design and Implementation: The Healthy Environments Partnership Study. In B. A. Israel, E. Eng, A. J. Schulz & E. A. Parker (Eds.), *Methods in Community-Based Participatory Research for Health* (pp. 107-127). San Francisco: Jossey-Bass.

- Sharpe, P. A., Burroughs, E. L., Granner, M. L., Wilcox, S., Hutto, B. E., Bryant, C. A., Peck, L., & Pekuri, L. (2010). Impact of a Community-Based Prevention Marketing Intervention to Promote Physical Activity Among Middle-Aged Women. *Health Education & Behavior*, 37(3), 403-423. doi: 10.1177/1090198109341929
- Shediac-Rizkallah, M. C., & Bone, L. R. (1998). Planning for the sustainability of community-based health programs: conceptual frameworks and future directions for research, practice and policy. *Health Education Research*, 13(1), 87-108. doi: 10.1093/her/13.1.87
- Simmons, A. (2009). *Community Capacity Building for Obesity Prevention: Two Case Studies*. Doctor of Health Sciences, Deakin University, Melbourne, Australia.
- Simmons, A., Reynolds, R. C., & Swinburn, B. (2011). Defining community capacity building: is it possible? *Preventive Medicine*, 52(3–4), 193-199. doi: 10.1016/j.ypmed.2011.02.003
- Simmons, A., Sanigorski, A., Cuttler, R., Brennan, M., Kremer, P., Mathews, L., & Swinburn, B. (2008). Nutrition and Physical Activity in Children and Adolescents. Barwon-South Western Region. Sentinel Site Series. Report 6: Lessons learned from Colac's Be

- Active Eat Well project (2002-6) (pp. 1-123): Department of Human Services (Victoria). Retrieved from <http://www.betterhealth.vic.gov.au/> May 16, 2013
- Simon, C., Schweitzer, B., Oujaa, M., Wagner, A., Arveiler, D., Tribby, E., Copin, N., Blanc, S., & Platat, C. (2008). Successful overweight prevention in adolescents by increasing physical activity: a 4-year randomized controlled intervention. *International Journal of Obesity*, 32(10), 1489-1498. doi: 10.1038/ijo.2008.99
- Simon, C., Wagner, A., DiVita, C., Rauscher, E., Klein-Platat, C., Arveiler, D., Schweitzer, B., & Tribby, E. (2004). Intervention centred on adolescents' physical activity and sedentary behaviour (ICAPS): concept and 6-month results. *International Journal of Obesity*, 28, s96-s103. doi: 10.1038/sj.ijo.0802812
- Sims, J., Huang, N., Pietsch, J., & Naccarella, L. (2004). The Victorian Active Script Programme: promising signs for general practitioners, population health, and the promotion of physical activity. *British Journal of Sports Medicine*, 38(1), 19-25. doi: 10.1136/bjism.2002.001297
- Slootmaker, S. M., Chinapaw, M. J. M., Seidell, J. C., van Mechelen, W., & Schuit, A. J. (2010). Accelerometers and Internet for physical

- activity promotion in youth? Feasibility and effectiveness of a minimal intervention. *Preventive Medicine*, 51(1), 31-36. doi: 10.1016/j.ypmed.2010.03.015
- Smith, A., & Parr, M. (2007). Young people's views on the nature and purposes of physical education: a sociological analysis. *Sport, Education and Society*, 12(1), 37-58. doi: 10.1080/13573320601081526
- Smith, C., Raine, K., Anderson, D., Dyck, R. J., Plotnikoff, R. C., Ness, K., & McLaughlin, K. K. (2001). A preliminary examination of organizational capacity for Heart health Promotion in Alberta's Regional Health Authorities. *Promotion & Education, Suppl. 1*, 40-43.
- Stake, R. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE Handbook of Qualitative Research* (3rd ed., pp. 443-466). Thousand Oaks, CA: SAGE Publications.
- Stake, R. E. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: SAGE Publications
- Stake, R. E. (2003). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of Qualitative Inquiry* (2nd ed., pp. 134-164). Thousand Oaks, CA: SAGE Publications.

- Stevens, J., Murray, D. M., Catellier, D. J., Hannan, P. J., Lytle, L. A., Elder, J. P., Young, D. R., Simons-Morton, D. G., & Webber, L. S. (2005). Design of the trial of activity in adolescent girls (TAAG). *Contemporary Clinical Trials*, 26(2), 223-233. doi: 10.1016/j.cct.2004.12.011
- Stirman, S. W., Kimberly, J., Cook, N., Calloway, A., Castro, F., & Charns, M. (2012). The sustainability of new programs and innovations: a review of the empirical literature and recommendations for future research. *Implementation Science*, 7(17). doi: 10.1186/1748-5908-7-17
- Stokols, D. (1992). Establishing and maintaining healthy Environments: toward a social ecology of health promotion. *American Psychologist*, 47(1), 6-22.
- Stokols, D. (1996). Translating social ecological theory into guidelines for community health promotion. *American Journal of Health Promotion*, 10(4), 282-298.
- Storey, J. D., Saffitz, G. B., & Rimón, J. G. (2008). Social Marketing. In K. Glanz, B. K. Rimer & K. Viswanath (Eds.), *Health behavior and health education: Theory, research, and practice* (pp. 435-464). San Francisco, CA: Jossey-Bass.

- Straus, S. E., Tetroe, J., & Graham, I. (2009). Defining knowledge translation. *Canadian Medical Association Journal*, 181(3-4), 165-168. doi: 10.1503/cmaj.081229
- Suminski, R. R., Petosa, R. L., Jones, L., Hall, L., & Poston, C. W. (2009). Neighborhoods on the move: a community-based participatory research approach to promoting physical activity. *Progress in Community Health Partnerships*, 3(1), 19-29. doi: 10.1353/cpr.0.0051
- Swinburn, B. A., Millar, L., Utter, J., Kremer, P., Moodie, M., Mavoa, H., Snowdon, W., McCabe, M. P., Malakellis, M., De Courten, M., Waqa, G., Fotu, K. F., Roberts, G., & Scragg, R. (2011). The Pacific Obesity Prevention in Communities project: project overview and methods. *Obesity Reviews*, 12(Suppl. 2), 3-11. doi: 10.1111/j.1467-789X.2011.00921.x
- Tashakkori, A., & Teddlie, C. (2010). *SAGE handbook of mixed methods in social & behavioral research* (2nd ed.). Los Angeles, CA: SAGE Publications
- Taymoori, P., Niknami, S., Berry, T., Lubans, D., Ghofranipour, F., & Kazemnejad, A. (2008). A school-based randomized controlled trial to improve physical activity among Iranian high school girls.

International Journal of Behavioral Nutrition and Physical Activity,
5(18). doi: 10.1186/1479-5868-5-18

Tetroe, J. M., Graham, I. D., & Scott, V. (2011). What does it mean to
transform knowledge into action in falls prevention research?
Perspectives from the Canadian Institutes of Health Research.

Journal of Safety Research, 42(6), 423-426. doi:
10.1016/j.jsr.2011.08.005

The Canadian Association for Health Physical Education Recreation and
Dance. (2006). The Need for Quality Physical Education Programs
in Canadian Schools: A Policy Brief prepared for the Middle
Childhood Initiative of the National Children's Alliance Natinoal
Children's Alliance. Retrieved from
<http://www.nationalchildrensalliance.com/nca/pubs/2006/Quality%20Physical%20Education%20Programs%20Policy%20Brief.pdf> June
13, 2013

Thomas, M. M., Hodge, W., & Smith, B. J. (2009). Building capacity in
local government for integrated planning to increase physical
activity: evaluation of the VicHealth MetroACTIVE program. *Health
Promotion International*, 24(4), 353-362. doi:
10.1093/heapro/dap035

- Timperio, A., Salmon, J., & Ball, K. (2004). Evidence-based strategies to promote physical activity among children, adolescents and young adults: review and update. *Journal of Science & Medicine in Sport*, 7(1), 20s-29s. doi: 10.1016/S1440-2440(04)80274-3
- Trost, S. G., & Loprinzi, P. D. (2008). Exercise-Promoting healthy lifestyles in children and adolescents. *Journal of Clinical Lipidology*, 2(3), 162-168. doi: 10.1016/j.jacl.2008.03.001
- van Lippevelde, W., Verloigne, M., de Bourdeaudhuij, I., Brug, J., Bjelland, M., Lien, N., & Maes, L. (2012). Does parental involvement make a difference in school-based nutrition and physical activity interventions? A systematic review of randomized controlled trials. *International Journal of Public Health*, 57(4), 673-678. doi: 10.1007/s00038-012-0335-3
- van Sluijs, E. M. F., Kriemler, S., & McMinn, A. M. (2011). The effect of community and family interventions on young people's physical activity levels: a review of reviews and updated systematic review. *British Journal of Sports Medicine*, 45(11), 914-922. doi: 10.1136/bjsports-2011-090187
- van Sluijs, E. M. F., McMinn, A. M., & Griffin, S. J. (2008). Effectiveness of interventions to promote physical activity in children and

adolescents: systematic review of controlled trials. *British Journal of Sports Medicine*, 42(8), 653-657. doi:

10.1136/bmj.39320.843947.BE

Walker, Z., Townsend, J., Oakley, L., Donovan, C., Smith, H., Hurst, Z., Bell, J., & Marshall, S. (2002). Health promotion for adolescents in primary care: randomised controlled trial. *British Medical Journal*, 325(7363). doi: 10.1136/bmj.325.7363.524

Waterman, H., Tillen, D., Dickson, R., & de Koning, K. (2001). Action research: a systematic review and guidance for assessment. *Health Technology Assessment*, 5(23).

Webber, L. S., Catellier, D. J., Lytle, L. A., Murray, D. M., Pratt, C. A., Young, D. R., Elder, J. P., Lohman, T. G., Stevens, J., Jobe, J. B., & Pate, R. R. (2008). Promoting physical activity in middle school girls: trial of activity for adolescent girls. *American Journal of Preventive Medicine*, 34(3), 173-184. doi: 10.1016/j.amepre.2007.11.018

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 & Behavior*, 29(6), 683-698. doi: 10.1177/109019802237938

- Wen, L. M., Thomas, M., Jones, H., Orr, N., Moreton, R., King, L., Hawe, P., Bindon, J., Humphries, J., Schicht, K., Corne, S., & Bauman, A. (2002). Promoting physical activity in women: evaluation of a 2-year community-based intervention in Sydney, Australia. *Health Promotion International*, 17(2), 127-137. doi: 10.1093/heapro/dah602
- Wetta-Hall, R., Ablah, E., Berry, M., Oler-Manske, J., & Molgaard, C. (2004). Strategies for community-based capacity building: Planning on a shoestring budget. *The Health Care Manager*, 23(4), 302-309.
- Whitelaw, S., Graham, N., Black, D., Coburn, J., & Renwick, L. (2012). Developing capacity and achieving sustainable implementation in healthy 'settings': insights from NHS Health Scotland's Health Promoting Health Service project. *Health Promotion International*, 27(1), 127-137. doi: 10.1093/heapro/dar038
- Whitelaw, S., Martin, C., Kerr, A., & Wimbush, E. (2006). An evaluation of the health promoting health service framework: the implementation of a settings based approach within the NHS in Scotland. *Health Promotion International*, 21(2), 136-144. doi: 10.1093/heapro/dal009

- Wilcox, S., Laken, M., Parrott, A. W., Condrasky, M., Saunders, R., Addy, C. L., Evans, R., Baruth, M., & Samuel, M. (2010). The faith, activity, and nutrition (FAN) program: design of a participatory research intervention to increase physical activity and improve dietary habits in African American churches. *Contemporary Clinical Trials*, 31(4), 323-335. doi: 10.1016/j.cct.2010.03.011
- Wilson, D. K., Friend, R., Teasley, N., Green, S., Reaves, I. L., & Sica, D. A. (2002). Motivational versus social cognitive interventions for promoting fruit and vegetable intake and physical activity in African American adolescents. *Annals of Behavioral Medicine*, 24(4), 310-319.
- World Health Organization. (1986). Ottawa Charter for Health Promotion: First International Conference on Health Promotion. Ottawa, Canada: World Health Organization (WHO)
- World Health Organization. (1998). Fourth International Conference on Health Promotion: New players for a new era - leading health promotion into the 21st century. Jakarta, Indonesia: World Health Organization (WHO). Retrieved from [http://whqlibdoc.who.int/hq/1998/WHO_HPR_HEP_41_CHP_98.1_\(part1\).pdf](http://whqlibdoc.who.int/hq/1998/WHO_HPR_HEP_41_CHP_98.1_(part1).pdf) September 29, 2010

- World Health Organization. (2000). Fifth Global Conference on Health Promotion. Health Promotion: Bridging the Equity Gap. Mexico City, Mexico: World Health Organization (WHO). Retrieved from http://www.who.int/healthpromotion/conferences/previous/mexico/en/hpr_mexico_report_en.pdf September 29, 2010
- World Health Organization. (2004). Global strategy on diet, physical activity and health. Geneva, Switzerland: World Health Organization (WHO). Retrieved from http://www.who.int/dietphysicalactivity/strategy/eb11344/strategy_english_web.pdf December 18, 2009
- World Health Organization. (2006). The Bangkok Charter for Health Promotion in a Globalized World. *Health Promotion International*, 21(suppl 1), 10-14. doi: 10.1093/heapro/dal046
- World Health Organization. (2009). 7th Global Conference on Health Promotion. Nairobi, Kenya: World Health Organization (WHO). Retrieved from <http://www.who.int/healthpromotion/conferences/7gchp/en/> September 29, 2010
- Yeatman, H. R., & Nove, T. (2002). Reorienting health services with capacity building: a case study of the Core Skills in Health

Promotion Project. *Health Promotion International*, 17(4), 341-350.

doi: 10.1093/heapro/17.4.341

Young, D. R., Johnson, C. C., Steckler, A., Gittelsohn, J., Saunders, R. P.,

Saksvig, B. I., Ribisl, K. M., Lytle, L. A., & McKenzie, T. L. (2006).

Data to action: using formative research to develop intervention

programs to increase physical activity in adolescent girls. *Health*

Education and Behavior, 33(1), 97-111. doi:

10.1177/1090198105282444

Zizzi, S., Vitullo, E., Rye, J., O'Hara-Tompkins, N., Abildso, C., Fisher, B.,

& Bartlett, M. (2006). Impact of a Three-week Pedometer

Intervention on High School Students' Daily Step Counts and

Perceptions of Physical Activity. *American Journal of Health*

Education, 37(1), 35-40.

Zoellner, J., Connell, C. L., Santell, R., Fungwe, T., Strickland, E., Avis-

Williams, A., Yadrick, K., Lofton, K., Rowser, M., Powers, A., Lucas,

G., & Bogle, M. L. (2007). Fit for life steps: results of a community

walking intervention in the rural Mississippi delta. *Progress in*

Community Health Partnerships, 1(1), 49-60. doi:

10.1353/cpr.0.0009

Appendix A

Description and Outcomes of Adolescent Physical Activity Intervention Studies

Author, year	Ransdell, Dratt, Kennedy, O'Neill, & DeVoe, 2001	Patrick et al., 2001;	McKenzie, 2001	Dale, Corbin, & Cuddihy, 1998	Goldfine & Nahas, 1993
Theoretical Framework	SCT	TTM	Ecological, social marketing	--	--
Intervention Components	Parental	Primary care	PE & school environment	PE & curriculum	Curriculum
Program Intensity/Duration	12 weeks	1 year	2 years	1 year	1X/week; 12 weeks
Physical Activity Measurement	Fitnessgram Physical Activity Questionnaire	Self-report‡	SOFIT-- System for Observing Fitness Instruction Time	1995 Youth Risk Behavior Survey	Voluntary Physical Activity log
Follow up measures	--	--	--	--	--
Results	No significant difference in PA	Mixed results	Mixed results	Mixed results	No change in voluntary PA behaviour

SCT: Social Cognitive Theory; HPM: Health Promotion Model (SCT inspired); TPB: Theory of Planned Behaviour; TTM: Transtheoretical Model; SDT: Self Determination Theory; PA: Physical activity; P-2-3-7DPAR: Previous-2-3-7 Day Physical Activity Recall; LTEQ: Leisure-Time Exercise Questionnaire (Godin & Shephard, 1985); Mixed results: relative success of the intervention differed for different population segments (e.g., boys vs. girls, younger vs. older adolescents); School^{CURR}: Curricular intervention in the school (e.g., modified PE); School^{ENV}: Environmental intervention in the school; School^{ECP} : Extra-curricular program offered in school; ‡ No further detail provided/original questionnaire

Author, year	Ortega-Sanchez et al., 2004	Jamner, Spruijt-Metz, Bassin, & Cooper, 2004	Hsu & Wang, 2004	Neumark-Sztainer, Story, Hannan, & Rex, 2003	Frenn & Malin, 2003	Cass & Price, 2003; (Moorefit)	Wilson et al., 2002	Walker et al., 2002	Everhart, Harshaw, Everhart, Kernodle, & Stubblefield, 2002
Theoretical Framework	--	Self efficacy & other constructs	--	SCT	TTM & HPM	Health Promoting Schools framework	SCT	Self efficacy, behaviour change models	--
Intervention Components	Primary care	School ^{CURR}	School ^{ENV}	School ^{CURR} & community	School ^{CURR}	School & community & family	School ^{ENV}	Primary care	School ^{CURR}
Program Intensity/Duration	6 months	4 months	--	4X/week; 16 weeks	6 sessions; 1 month	3 years	12 weeks	1 year	1 year
Physical Activity Measurement	Self-report#	Self-report (2DPAR)	--	Self-report (LTEQ)	Accelerometer	Self-report	Accelerometer	Self-report#	Survey for Physical activity engagement
Follow up measures	--	--	--	8 months	--	--	--	--	--
Results	↑ % active adolescents	No significant difference in PA	No significant difference in PA	No significant difference in PA	No significant difference in PA	↑ % adequately active girls; inadequately active girls	No significant difference in PA	No significant difference in PA	No significant difference in PA

Author, year	Jago et al., 2006	Young, Phillips, Yu, & Haythornthwaite, 2006	Lubans & Sylva, 2006	Robbins, Gretebeck, Kazanis, & Pender, 2006	Schofield, Mummery, & Schofield, 2005;	Frenn et al., 2005	Pate et al., 2005	Ransdell, Robertson, Ornes, & Moyer-Mileur, 2004	Prochaska & Sallis, 2004;
Theoretical Framework	Self efficacy & goal setting	Social Action Theory	SCT	--	--	TTM	SCT, ecological, Coordinated School Health	--	TTM & SCT
Intervention Components	Community	School ^{CURR} & family	School ^{ECP}	School ^{ENV}	School ^{ENV}	School ^{CURR}	School ^{CURR} & ENV	Family	School ^{ENV}
Program Intensity/Duration	9 weeks	5 X/wk; 1 school year	10 weeks	12 weeks	12 weeks	8 sessions	1 school year	6 months	3 months
Physical Activity Measurement	Accelerometer	Self-report (7DPAR)	Self report (Oxford PAQ)	Self-report†	Pedometer	Accelerometer	Self-report (3DPAR)	Fitnessgram Physical Activity Questionnaire	Accelerometer
Follow up measures	--	--	3 month	--	--	--	--	--	--
Results	No significant difference in PA	↓ weekday sedentary activity		No significant difference in PA	Mixed results	No significant difference in PA	↑ in VPA	↑ frequency PA	Mixed results

Author, year	Webber et al., 2008	Simon et al., 2008	Tsiros et al., 2008	Lubans & Morgan, 2008; (LEAF)	Taymoori et al., 2008	Schneider, Duntun, & Cooper, 2008	Haerens, De Bourdeaudhuij, Maes, Cardon, & Deforche, 2007	Zizzi et al., 2006	Haerens et al., 2006
Theoretical Framework	Ecological, Social marketing	Ecological	Cognitive Behavioural Therapy	SCT	HPM & TTM	--	--	SCT	TPB (for computer intervention; otherwise none)
Intervention Components	School ^{CURR} & ENV & community	School ^{ENV} & community & family	School ^{ECP} & family	School ^{ECP}	School ^{CURR}	School ^{CURR}	School ^{ENV} & family	School ^{ENV}	School ^{ENV} & family
Program Intensity/Duration	3 school years	4 school years	2 X/week; 10 weeks	8 weeks	45-60mins; 4X/wk; 24 wks	9 months; 4X/wk	9 months	3 weeks	2 school years
Physical Activity Measurement	Accelerometer	Modifiable Activity Questionnaire for Adolescents	Pedometer	Pedometer	Self report†	Self –report (3DPAR)	Self-report & Accelerometer	Pedometer	Self report (Flemish PAQ) & accelerometer
Follow up measures	--	--	--	--	6 months	--	--	--	--
Results	Modest ↑ in MVPA after 3rd year	↑ % students active 30min/week	No significant difference in PA	Mixed results	↑ in PA	↑ in vigorous PA	Mixed results	Mixed results	Mixed results

Author, year	Romero, 2012	Bush, Laberge, & Laforest, 2010;	Dudley, Okely, Pearson, & Peat, 2010	Slootmaker, Chinapaw, Seidell, & van Mechelen, & Schuit, 2010	Lubans, Morgan, Callister, & Collins, 2009;	Peralta, Jones, & Okely, 2009; (FILA)	Chatzisarantis & Hagger, 2009	Dzewaltowski et al., 2009	Gomes de Barros et al., 2009
Theoretical Framework	SCT & critical pedagogy	Social marketing	SCT	--	SCT	SCT	SDT	SCT	CDC and WHO Health Promoting Schools Frameworks
Intervention Components	School ^{ECP}	School ^{ECP} & ENV	School ^{ENV}	School ^{ECP}	School ^{ECP} & family	School ^{CURR & ECP} & family	School ^{CURR}	School ^{ENV}	School ^{ENV} & CURR
Program Intensity/Duration	50 mins 2X/week.; 5 weeks	16 wks	1 X 90 min. every 2 nd week; 11 weeks	3 months	10weeks	3X/wk; 16 wks	5 weeks	2 school years	9 months
Physical Activity Measurement	Self report#	Self-report (7DPAR)	accelerometer	Self report (Activity Questionnaire for Adolescents & Adults)	Pedometer	Accelerometer	Self report (LTEQ)	Self report (PDPAR)	Self report#
Follow up measures	--	--	--	5 months	--	--	--	--	--
Results	Mixed results	No significant difference in PA	No significant difference in PA	↑ in PA	Mixed results	↑ PA; ↓ in sedentariness	↑ in PA	↑ VPA after 2 nd year (trend to ↑ VPA after 1 st year)	↓ in sedentariness; ↓ in reduction of PA

References

- Bush, P. L., Laberge, S., & Laforest, S. (2010). Physical Activity Promotion Among Underserved Adolescents: "Make It Fun, Easy, and Popular". *Health Promotion Practice, 11*(3 Suppl), 79S-87S. doi: 10.1177/1524839908329117
- Cass, Y., & Price, P. (2003). Moorefit—increasing physical activity in adolescent girls using the Health Promoting Schools framework. *Health Promotion Journal of Australia, 14*, 159-164.
- Chatzisarantis, N. L. D., & Hagger, M. S. (2009). Effects of an intervention based on self-determination theory on self-reported leisure-time physical activity participation. *Psychology & Health, 24*(1), 29-48. doi: 10.1080/08870440701809533
- Dale, D., Corbin, C. B., & Cuddihy, T. F. (1998). Can conceptual physical education promote physically active lifestyles? *Pediatric Exercise Science, 10*(2), 97-109.
- Dudley, D. A., Okely, A. D., Pearson, P., & Peat, J. (2010). Engaging adolescent girls from linguistically diverse and low income backgrounds in school sport: a pilot randomised controlled trial. *Journal of Science and Medicine in Sport, 13*(2), 217-224. doi: 10.1016/j.jsams.2009.04.008
- Dzewaltowski, D. A., Estabrooks, P. A., Welk, G., Hill, J., Milliken, G., Karteroliotis, K., & Johnston, J. A. (2009). Healthy Youth Places: a Randomized Controlled Trial to Determine the Effectiveness of Facilitating Adult and Youth Leaders to Promote Physical Activity and Fruit and Vegetable Consumption in Middle Schools. *Health Education & Behavior, 36*(3), 583-600. doi: 10.1177/1090198108314619

- Everhart, B. W., Harshaw, C., Everhart, B. A., Kernodle, M., & Stubblefield, E. (2002). Multimedia software's effects on high school physical education students' fitness patterns. *Physical Educator*, 59(3), 151-158.
- Frenn, M., & Malin, S. (2003). Diet and exercise in low-income culturally diverse middle school students. *Public Health Nursing*, 20(5), 361-368.
- Frenn, M., Malin, S., Brown, R. L., Greer, Y., Fox, J., Greer, J., & Smyczek, S. (2005). Changing the tide: an Internet/video exercise and low-fat diet intervention with middle-school students. *Applied Nursing Research*, 18(1), 13-21. doi: 10.1016/j.apnr.2004.04.003
- Goldfine, B. D., & Nahas, M. V. (1993). Incorporating Health-Fitness Concepts in Secondary Physical Education Curricula. *Journal of School Health*, 63(3), 142-146. doi: 10.1111/j.1746-1561.1993.tb06103.x
- Gomes de Barros, M. V., Nahas, M. V., Hallal, P. C., de Farias Junior, J. C., Florindo, A. A., & Honda de Barros, S. S. (2009). Effectiveness of a School-Based Intervention on Physical Activity for High School Students in Brazil: the Saude na Boa Project. *Journal of Physical Activity & Health*, 6(2), 163-169.
- Haerens, L., de Bourdeaudhuij, I., Maes, L., Cardon, G., & Deforche, B. (2007). School-Based Randomized Controlled Trial of a Physical Activity Intervention among Adolescents. *The Journal of adolescent health : Official publication of the Society for Adolescent Medicine*, 40(3), 258-265. doi: 10.1016/j.jadohealth.2006.09.028
- Haerens, L., Deforche, B., Maes, L., Cardon, G., Stevens, V., & de Bourdeaudhuij, I. (2006). Evaluation of a 2-year physical activity and

- healthy eating intervention in middle school children. *Health Education Research*, 21(6), 911-921. doi: 10.1093/her/cyl115
- Hsu, L., & Wang, R. (2004). The effectiveness of an intervention program to promote physical activity among female adolescents in a vocational nursing school. *Hu li za zhi*, 51(5), 27-36.
- Jago, R., Baranowski, T., Baranowski, J. C., Thompson, D., Cullen, K. W., Watson, K., & Liu, Y. (2006). Fit for Life Boy Scout badge: outcome evaluation of a troop and Internet intervention. *Preventive Medicine*, 42(3), 181-187. doi: 10.1016/j.ypmed.2005.12.010
- Jamner, M. S., Spruijt-Metz, D., Bassin, S., & Cooper, D. M. (2004). A controlled evaluation of a school-based intervention to promote physical activity among sedentary adolescent females: Project FAB. *Journal of Adolescent Health*, 34(4), 279-289.
- Lubans, D. & Morgan, P. (2008). Evaluation of an extra-curricular school sport programme promoting lifestyle and lifetime activity for adolescents. *Journal of Sports Sciences*, 26(5), 519-529. doi: 10.1080/02640410701624549.
- Lubans, D. R., Morgan, P. J., Callister, R., & Collins, C. E. (2009). Effects of Integrating Pedometers, Parental Materials, and E-mail Support Within an Extracurricular School Sport Intervention. *Journal of Adolescent Health*, 44(2), 176-183. doi: 10.1016/j.jadohealth.2008.06.020
- Lubans, D. R., & Silva, K. (2006). Controlled evaluation of a physical activity intervention for senior school students: effects of the lifetime activity program. *Journal of Sport & Exercise Psychology*, 28, 252-268.

- McKenzie, T. L. (2001). Promoting physical activity in youth: focus on middle school environments. *Quest, 53*(3), 326-334.
- Neumark-Sztainer, D., Story, M., Hannan, P. J., & Rex, J. (2003). New moves: a school-based obesity prevention program for adolescent girls. *Preventive Medicine, 37*(1), 41-51. doi: 10.1016/S0091-7435(03)00057-4
- Ortega-Sanchez, R., Jimenez-Mena, C., Cordoba-Garcia, R., Munoz-Lopez, J., Garcia-Machado, M. L., & Vilaseca-Canals, J. (2004). The effect of office-based physician's advice on adolescent exercise behavior. *Preventive Medicine, 38*(2), 219-226.
- Pate, R. R., Ward, D. S., Saunders, R. P., Felton, G., Dishman, R. K., & Dowda, M. (2005). Promotion of physical activity among high-school girls: a randomized controlled trial. *American Journal of Public Health, 95*(9), 1582-1587. doi: 10.2105/AJPH.2004.045807
- Patrick, K., Sallis, J. F., Prochaska, J. J., Lydston, D. D., Calfas, K. J., Zabinski, M. F., Wilfley, D. E., Saelens, B. E., & Brown, D. R. (2001). A multicomponent program for nutrition and physical activity change in primary care: PACE+ for adolescents. *Archives of Pediatrics & Adolescent Medicine, 155*(8), 940-946. doi: 10.1001/archpedi.155.8.940
- Peralta, L. R., Jones, R. A., & Okely, A. D. (2009). Promoting healthy lifestyles among adolescent boys: the Fitness Improvement and Lifestyle Awareness program RCT. *Preventive Medicine, 48*(6), 537-542. doi: 10.1016/j.ypmed.2009.04.007
- Prochaska, J. J., & Sallis, J. F. (2004). A randomized controlled trial of single versus multiple health behavior change: Promoting physical activity and nutrition among adolescents. *Health Psychology, 23*(3), 314-318.

- Ransdell, L. B., Dratt, J., Kennedy, C., O'Neill, S., & DeVoe, D. (2001). Daughters and Mothers Exercising Together (DAMET): a 12-week pilot project designed to improve physical self-perception and increase recreational physical activity. *Women & Health, 33*(3-4), 113 - 129. doi: 10.1300/J013v33n03_07
- Ransdell, L. B., Robertson, L., Ornes, L., & Moyer-Mileur, L. (2004). Generations Exercising Together to Improve Fitness (GET FIT): A pilot study designed to increase physical activity and improve health-related fitness in three generations of women. *Women Health, 40*(3), 77-94.
- Robbins, LB, Gretebeck, KA, Kazanis, AS, *et al.* (2006). Girls on the Move program to increase physical activity participation. *Nursing Research, 55*(3), 206-216.
- Romero, A. J. (2012). A Pilot Test of the Latin Active Hip Hop Intervention to Increase Physical Activity Among Low-Income Mexican-American Adolescents. *American Journal of Health Promotion, 26*(4), 208-211. doi: 10.4278/ajhp.090123-ARB-24
- Schneider, M., Dunton, G. F., & Cooper, D. M. (2008). Physical activity and physical self-concept among sedentary adolescent females: An intervention study. *Psychology of Sport and Exercise, 9*(1), 1-14. doi: 10.1016/j.psychsport.2007.01.003
- Schofield, L., Mummery, W. K., & Schofield, G. (2005). Effects of a controlled pedometer-intervention trial for low-active adolescent girls. *Medicine & Science in Sports & Exercise 37*(8), 1414-1420.
- Simon, C., Schweitzer, B., Oujaa, M., Wagner, A., Arveiler, D., Triby, E., Copin, N., Blanc, S., & Platat, C. (2008). Successful overweight prevention in

adolescents by increasing physical activity: a 4-year randomized controlled intervention. *International Journal of Obesity*, 32(10), 1489-1498. doi: 10.1038/ijo.2008.99

Slootmaker, S. M., Chinapaw, M. J. M., Seidell, J. C., van Mechelen, W., & Schuit, A. J. (2010). Accelerometers and Internet for physical activity promotion in youth? Feasibility and effectiveness of a minimal intervention. *Preventive Medicine*, 51(1), 31-36. doi: 10.1016/j.ypmed.2010.03.015

Taymoori, P., Niknami, S., Berry, T., Lubans, D., Ghofranipour, F., & Kazemnejad, A. (2008). A school-based randomized controlled trial to improve physical activity among Iranian high school girls. *International Journal of Behavioral Nutrition and Physical Activity*, 5(18). doi: 10.1186/1479-5868-5-18

Tsiros, M. D., Sinn, N., Brennan, L., Coates, A. M., Walkley, J. W., Petkov, J., Howe, P. R., & Buckley, J. D. (2008). Cognitive behavioral therapy improves diet and body composition in overweight and obese adolescents. *American Journal of Clinical Nutrition*, 87(5), 1134-1140.

Walker, Z., Townsend, J., Oakley, L., Donovan, C., Smith, H., Hurst, Z., Bell, J., & Marshall, S. (2002). Health promotion for adolescents in primary care: randomised controlled trial. *BMJ*, 325(7363). doi: 10.1136/bmj.325.7363.524

Webber, L. S., Catellier, D. J., Lytle, L. A., Murray, D. M., Pratt, C. A., Young, D. R., Elder, J. P., Lohman, T. G., Stevens, J., Jobe, J. B., & Pate, R. R. (2008). Promoting physical activity in middle school girls: trial of activity

for adolescent girls. *American Journal of Preventive Medicine*, 34(3), 173-184. doi: 10.1016/j.amepre.2007.11.018

Wilson, D. K., Friend, R., Teasley, N., Green, S., Reaves, I. L., & Sica, D. A. (2002). Motivational versus social cognitive interventions for promoting fruit and vegetable intake and physical activity in African American adolescents. *Annals of Behavioral Medicine*, 24(4), 310-319.

Young, D. R., Phillips, J. A., Yu, T., & Haythornthwaite, J. A. (2006). Effects of a Life Skills Intervention for Increasing Physical Activity in Adolescent Girls. *Archives of Pediatrics & Adolescent Medicine*, 160(12), 1255-1261. doi: 10.1001/archpedi.160.12.1255

Zizzi, S., Vitullo, E., Rye, J., O'Hara-Tompkins, N., Abildso, C., Fisher, B., & Bartlett, M. (2006). Impact of a Three-week Pedometer Intervention on High School Students' Daily Step Counts and Perceptions of Physical Activity. *American Journal of Health Education*, 37(1), 35-40.

Appendix B

Capacity Building Framework

This Appendix presents the capacity building evaluation framework I developed at the outset of this research (June 2008). Given the participatory nature of my work with the YMCA, the details of this framework lost relevance as the project evolved. Yet, the concepts presented herein framed my work with the YMCA throughout.

Introduction

Physical activity (PA) is an important health determinant, yet, Canadian adolescents are not getting sufficient physical activity to reap health benefits (Cameron et al., 2005). There is a need to promote physical activity among this age group but the literature in this area is not extensive and is mostly concerned with short term interventions/programs (Bush, et al., 2010). Recently, health promotion has embraced capacity building as means to achieve program sustainability, or continuation.

According to Hawe, King, Noort, Jordens & Lloyd (2000) capacity building is defined and conceptualised in at least 3 ways:

1. Health infrastructure or service development: Capacity to deliver particular program responses to particular health problems. Usually refers to the establishment of minimum requirements in structures, organisation, skills and resources in the health sector.
2. Program maintenance and sustainability: Capacity to continue to deliver a particular program through a network of agencies, in addition to or instead of, the agency which initiated the program.

3. Problem-solving capability of organisations and communities:

Capacity of a more generic kind to identify health issues and develop appropriate mechanisms to address them, either building on the experience of a particular program, or as an activity in its own right.

Developing and implementing health promotion programs using a capacity building framework is a means to increase the possibility that physical activity programs will be sustained over time. Sustainability is one goal of capacity building (Hawe, P., Noort, King, & Jordens, 1997; Labonte, R., Woodard, Chad, & Laverack, 2002). There is, however, a lack of consensus concerning the definition of sustainability. Some authors emphasize sustaining the benefits of programs, some argue that it is the persistence of a specific program which characterizes sustainability, still others observe that change is essential to program survival (Shediac-Rizkallah & Bone, 1998). For this research, I define sustainability as a dynamic process which relies on the ability of a program to adapt to its environment over time. In this way, individuals continue to benefit from programs. This is consistent with the fact that health promotion programs should be adapted to the populations they target and their contexts, and should therefore evolve over time with the population and contextual changes.

Purpose of the Framework

My general research objective is to work collaboratively with the Pointe-Saint-Charles YMCA to enhance their capacity to engage adolescents in PA. For sustainability to occur, YMCA employees must learn and implement new strategies to promote PA so adolescents voluntarily participate in the YMCA's PA programming. In the PA promotion literature, two aspects of capacity building are being used and producing fairly positive outcomes. The first is the development of partnerships, be they with the community or networks among professionals, and the second is building local capacity through professional development (Joffres et al., 2004; McKenzie, Naccarella, & Thompson, 2007; Miller, Trost, & Brown, 2002; Sims, Huang, Pietsch, & Naccarella, 2004; Ward et al., 2006; Wen et al., 2002). My intervention with the YMCA will target these two aspects of capacity building. Therefore, this evaluation framework is designed to assess in

what ways, as a result of my intervention, capacity building takes place at the Pointe-Saint-Charles YMCA.

Process

To complete this evaluation framework, I read journal articles dealing with organizational and community capacity building and extracted all potential indicators. I grouped like indicators and then considered their relevance to my objectives, as well as their pertinence in the specific context of this study. As a result, I discarded many of the indicators I had gathered. (For example, I have chosen not to assess employees' leadership style nor group processes, as these are not aspects on which I hope my intervention has an impact.) I, then, organised the selected indicators around the RE-AIM framework. This is an evaluation framework designed to evaluate health behaviour interventions at both the individual and institutional, or setting, levels. It is this multilevel of assessment which is relevant to my study, since I will assess changes in teen participation in YMCA PA programs as well as changes in YMCA practices in order to evaluate the impact of my intervention. Moreover, the RE-AIM framework involves evaluating program maintenance. At the setting level, this refers to the extent to which a program becomes institutionalized, or part of the routine organizational practices. As explained above, organizational development is one aim of my study, which also makes RE-AIM an appropriate framework.

What follows is the evaluation framework of select capacity building indicators organised according to the five elements of the RE-AIM framework. It is worth noting that while RE-AIM is primarily used in quantitative studies, framework developers explain each of the five elements with a "How" question¹. Therefore, I have adapted and defined the elements of the Re-AIM framework to suit the specific context of this study and I have attempted to select indicators to qualitatively assess each element where quantitative indicators are not relevant.

Evaluation framework

Reach—How do I reach the targeted population?

This element of the framework is particularly concerned with whether the programme reaches those most in need and at highest risk. To identify and reach

¹ <http://www.re-aim.org/>

these population segments, I will encourage the use of social marketing strategies (assessed in the “Maintenance: *knowledge*” section). Overall recruitment and daily attendance objectives will be set jointly with the YMCA and we will assess whether or not we meet these objectives and why.

- Participation
 1. Daily attendance
 - Daily attendance will be taken to track the absolute number of adolescent participating daily
 - Daily attendance will be taken to track adolescents’ pattern of participation. That is to say, that by taking attendance, we can assess if certain teens participate more than others, or drop out. Also, we will be able to take note of who exactly participates in particular activities and consider exploring why some teens are attracted to certain activities, while others are not.
 - “Reach” also refers to the representativeness of participants. Attendance taking will allow us to assess to what degree those who take part in program activities are representative of the teenage population in the neighbourhood. This data will allow us to refocus our strategies to ensure we are reaching our intended audience (age, language, ethnicity, sex).
 - “Reach” includes examining potential adverse effects (e.g., Did we lose the current regular participants as a result of the program/strategy modifications?)
 - “Reach” data will also be compared to initial attendance in programs (assessment of change (Hunter 2006)).

Efficacy/Effectiveness—How do I know my intervention is effective?

This framework element generally refers to program outcomes in terms of health indicators. For example in the case of a behaviour change intervention targeting physical activity, one might assess cardio-respiratory indicators of physical fitness. However, Rudd, Goldberg, & Dietz (1999) assert that outcome evaluations incorporate measure relating to the achievement of primary goals. In this study, my primary goal is to increase the capacity of the YMCA to promote physical activity to teenagers. Thus, my intended outcomes are about the capacity of the YMCA and not the health of the teenagers. The measure of efficacy, or effectiveness, in this study, is, therefore, the number of physical

activity opportunities the YMCA offers following my intervention as compared to before the intervention.

Adoption—How do I develop organizational support to deliver my intervention?

‘Adoption’ is similar to Reach, but is assessed at the setting level. It is the participation rate among potential settings and the representativeness of these settings. In this study, ‘Adoption’ refers to employees’² *initial* decision to apply the various health promotion strategies I hope to transfer, and to use the tools we develop.³ Thus, I will take note of at what point employees adopt certain aspects, and why (eg., trust, facilitating factors). I will also explore why adoption does not take place (eg., barriers, challenges) so I can modify my intervention accordingly.

Implementation—How do I ensure the intervention is delivered properly?

Whereas, ‘adoption’ refers to employees’ initial decision to apply the various strategies and tools, implementation (or intervention fidelity) refers to the ongoing delivery. For this study, implementation refers to the consistency and skill with which various strategies and tools are applied and used to improve their teen PA promotion programs.

- How was the teen PA promotion program implemented? Describe the activities implemented and compare this to the expected/planned activities.
- What barriers/challenges to implementation did I/the YMCA encounter? How were they reduced?
- What facilitators to implementation did I/the YMCA encounter? How were they maximised?

² For the most part, it is the practices of the teen programs coordinator which I will be assess as he is the full time employee. I will assess practices of the animators to a lesser extent as they are part time and temporary employees. Together with the director and coordinator, I will develop and encourage means to ensure all future animators will be able to implement programs successfully, but it is the responsibility of the coordinator to ensure new animators are able do this. PI will also assess the practices of the YMCA director, as it is she who must support and facilitate the coordinator’s work.

³ These strategies and tools are outlined in an intervention plan proposal I have already discussed with the YMCA director and teen programs coordinator. This is a working document. That is to say, that I modify my intervention with the YMCA according to the realities they face.

- Use of strategies and tools over time. Are some things abandoned? Why?
Do some things become habitual/second nature? Why?

Maintenance—How do I incorporate the intervention so it is delivered over the long term?

“Maintenance” is the extent to which a program becomes institutionalized or part of the routine organizational practices and policies. This element applies to both the individual participant and the setting levels. This is not a longitudinal study; therefore, while adolescents’ participation levels and patterns will be assessed over the course of my intervention, they will not be assessed over the long term. This is also true for changes occurring at the setting level. As such, I will not assess the actual maintenance, but rather the YMCA’s *potential* to maintain practices and behaviours which will allow them to successfully and routinely promote meaningful PA opportunities to the teenagers of the neighbourhood⁴. This assessment of potential is, in fact, an assessment of their capacity to promote PA to the adolescents of the neighbourhood. A systematic, and continual, evaluation of the following capacity building indicators will allow me to assess in what ways the YMCA’s capacity to promote meaningful PA opportunities to the adolescents of the community develops and evolves. As discussed in the introduction, these indicators have been divided into indicators of organisational development and indicators of partnerships or networks.

Organizational development

- 1 Commitment:
 - a) Supportive structures and processes are put in place and *maintained*
 - Extent to which the director and youth coordinator advocate the use of the tools and other strategies we develop or I attempt to transmit (e.g., Are planning guides used and kept up to date?, are SM strategies used and

⁴ Note that different settings can be said to exist within the YMCA (youth program, teen program, seniors program, etc). As such, although these other “settings” are not the focus of my intervention, it could be interesting to take note of whether employees of these settings implement the strategies developed for the teen program. Given that I am working directly with the director, this is a possibility.

- encouraged?) (Hawe, et al., 2000; Whitelaw, Martin, Kerr, & Wimbush, 2006)
- Director's and youth coordinator's willingness to initiate formal planning (i.e., regular meeting structure) (Hawe, et al., 2000)
 - Extent to which regular meetings become institutionalised (Hawe, et al., 2000) (describe process, reasons)
- b) Necessary resources are allocated / available (Germann & Wilson, 2004).
- Eg., Is the task of making e-versions of guides etc we develop delegated to an employee?
- c) Coordinator is committed to offering meaningful teen PA opportunities (Whitelaw, et al., 2006)
- Coordinator participates in planning, decision making, and action (i.e., stakeholder participation in development of ideas and ensuring implementation (Chaskin, 2001; Germann & Wilson, 2004; Goodman et al., 1998; Jackson et al., 2003; Laverack, 2005; Nu'Man, King, Bhalakia, & Criss, 2007a; Yeatman & Nove, 2002)
 - Eg., Extent to which coordinator participates in the development of planning guides, activities booklet, etc. why/why not? What barriers are faced? How are they addressed?
 - Coordinator uses tools we develop (Chaskin, 2001; Goodman, et al., 1998; Jackson, et al., 2003; Raeburn, Akerman, Chuengsatiansup, Mejia, & Oladepo, 2006; Yeatman & Nove, 2002)
e.g., To what extent? Why/why not? How else is this manifested? What changes take place? (Hunter, 2006)
2. Structures/processes that support organizational capacity (Germann & Wilson, 2004; Laverack, 2005)
- a. Meetings during which incidental learning can take place (i.e., learning opportunities as described by Hawe et al. (2000) and staff training as discussed by Nu'Man *et al.* (2007b) are considered to be facilitators of CB. Meetings also serve as decision making forums, a space for communication /dialogue (i.e., ways of acquiring new information and to construct new work processes (eg. planning and review structures) (Germann & Wilson, 2004; Hawe, et al., 2000) which are important to capacity building.)

e.g., are regular meetings between coordinator and animators institutionalised. Is a steering committee (or teen planning committee) developed? Do they convene regularly? At what frequency? Are meetings effective (does work get done)? Why/why not?

3. Knowledge/Skill acquisition (Chaskin, 2001; Germann & Wilson, 2004; Goodman, et al., 1998; Hawe, et al., 2000; Jackson, et al., 2003; Raeburn, et al., 2006; Yeatman & Nove, 2002); ability to use/apply knowledge (Goodman, et al., 1998; Joffres, et al., 2004); competence in execution of skills (Hawe, et al., 2000)
 - a. Effective planning practices are used (competencies as discussed by Whitelaw *et al.* (2006) (i.e., Needs assessment and problem assessment capacities (Laverack, 2005)

e.g., In what ways are they conducting needs assessment differently based on what I hope to teach them? Systematic? According to population subgroups? Are they assessing barriers and seeking ways to reduce them? Why/why not? Are they assessing facilitators and seeking ways to maximise them? Why/why not? do they develop initiatives for targeting specific groups of teens? Do they plan PA opportunities according to a wider conception of PA (not just sports, integration of PA into other activities)?
 - b. Implementation practices (competencies as discussed by Whitelaw et al. (2006)

e.g., Do they recognise that needs assessment should be constant/ongoing, and do they adapt their programs accordingly? Why/why not? (Whitelaw, et al., 2006)

What has changed (Hunter, 2006). e.g., “Packaging” of program activities? Are social marketing strategies used effectively (Joffres, et al., 2004)? Have they changed their process for recruiting participants into the program?
 - c. Evaluation practices (competencies as discussed by Whitelaw et al. (2006)
 - ability to pursue chosen purposes and course of action (Chaskin, 2001; Goodman, et al., 1998; Jackson, et al., 2003; Raeburn, et al., 2006; Yeatman & Nove, 2002)

- Success indicators or performance targets are set each session—i.e., employees know what is to be achieved and by when (Hawe, et al., 2000)
 - Regular process evaluation is conducted and necessary adaptations/adjustments are made (e.g., were goals achieved? Why/why not? What can be done differently? What should be maintained?) (Rudd, et al., 1999)
4. critical reflection (Germann & Wilson, 2004)
 - a. stakeholder ability to ‘ask why’ (Laverack, 2005)
 - b. extent to which meetings provide (and are used as) opportunities to reflect on how things are done and how they could be improved (Hawe, et al., 2000)
 - c. problem solving capabilities (Hawe, et al., 2000; Laverack, 2005) (e.g., Can they adapt? Do they abandon things in the implementation phase because they are unable to adjust to changing realities?)

Partnerships and/or networks

1. Fostering partnerships and promoting organizational visibility (Whitelaw, et al., 2006) (note that according to Hawe *et al.* (2000), inter-organisational networking is an indication of increased capacity to problem-solve (see 4c above))
 - a. Processes and skills are in place to facilitate collaboration (Germann & Wilson, 2004)
e.g., Document of contact information of potential partners is kept up to date and made readily available;
 - b. Collaboration within the organization and with outside partners (Germann & Wilson, 2004)
e.g., employees share ideas, contacts, support each other in partnership development; certain activities are habitually done with other organisations; What organisations with a stake in teen PA promotion have been identified (Hawe, et al., 2000)? What efforts are made to develop new initiatives in collaboration with other organisations?
 - c. Social mobilization (Chaskin, 2001; Goodman, et al., 1998; Jackson, et al., 2003; Raeburn, et al., 2006; Whitelaw, et al., 2006; Yeatman & Nove, 2002)

e.g., how many new partnerships has the YMCA developed? What type of partnerships are they? Are partners merely resources? To what extent is the Y able to develop working relationships with other organisations jointly to promote meaningful teen PA opportunities? What are the challenges, facilitating factors?

- d. Does the YMCA intend to continue to develop new partnerships and nurture old ones? How? Why/why not?

- 2. The YMCA is influential in the community with respect to PA promotion (Whitelaw, et al., 2006)

e.g., Is there evidence other organisations look to the Y as a leader in teen PA promotion? (e.g., Is the Clinic/schools referring teens?—there is provision on the teen registration form to indicate how they heard about the program). Do other organisations try to initiate partnerships with the YMCA?

To assess my partnership with YMCA, the framework for understanding and assessing the CBPR participatory process (Israel, Lantz, McGranaghan, Kerr, & Guzman, 2005) will be used and may include such indicators as

- a. We share goals / vision (Joffres, et al., 2004)
- b. Procedures are mutually agreed upon/established (Joffres, et al., 2004; Nu'Man, et al., 2007a)
- c. The partnership demonstrates the benefits of collaborative practice (Joffres, et al., 2004)?
- d. We feel that the benefit of being involved in the collaboration outweighs any associated costs (e.g., Time involved) (Hawe, et al., 2000)
- e. Members have confidence in the organisation which takes the lead in convening meetings (i.e., employees have confidence in me) (Hawe, et al., 2000)
- f. Amount of time spent collaborating with the YMCA (Israel, et al., 2005)
- g. Types of implication (Israel, et al., 2005)
- h. Reciprocal service (Israel, et al., 2005)

References

Bush, P. L., Laberge, S., & Laforest, S. (2010). Physical Activity Promotion Among Underserved Adolescents: "Make It Fun, Easy, and Popular".

- Health Promotion Practice*, 11(3 Suppl), 79S-87S. doi: 10.1177/1524839908329117
- Chaskin, R. J. (2001). Building community capacity: a definitional framework and case studies from a comprehensive community initiative. *Urban Affairs Review*, 36(3), 291-323. doi: 10.1177/10780870122184876
- Germann, K., & Wilson, D. (2004). Organizational capacity for community development in regional health authorities: a conceptual model. *Health Promotion International*, 19(3), 289-298. doi: 10.1093/heapro/dah303
- Goodman, R. M., Speers, M. A., McLeroy, K., Fawcett, S., Kegler, M., Parker, E., Smith, S. R., Sterling, T. D., & Wallerstein, N. (1998). Identifying and Defining the Dimensions of Community Capacity to Provide a Basis for Measurement. *Health Education & Behavior*, 25(3), 258-278. doi: 10.1177/109019819802500303
- Hawe, P., King, L., Noort, M., Jordens, C., & Lloyd, B. (2000). Indicators to help with capacity building in health promotion. Retrieved from <http://www.health.nsw.gov.au/pubs/2000/pdf/capbuild.pdf>
- Hunter, D. E. K. (2006). Using a theory of change approach to build organizational strength, capacity and sustainability with not-for-profit organizations in the human services sector. *Evaluation and Program Planning*, 29(2), 193-200.
- Israel, B. A., Lantz, P., McGranaghan, R. J., Kerr, D. K., & Guzman, J. R. (2005). Documentation and evaluation of CBPR partnerships : in-depth interviews and closed-ended questionnaires. In B. A. Israel, E. Eng, A. J. Schulz & E. A. Parker (Eds.), *Methods in community-based participatory research for health* (pp. 255-278). San Francisco, CA: Jossey-Bass.
- Jackson, S. F., Cleverly, S., Poland, B., Burman, D., Edwards, R., & Robertson, A. (2003). Working with Toronto neighbourhoods toward developing indicators of community capacity. *Health Promotion International*, 18(4), 339-350. doi: 10.1093/heapro/dag415
- Joffres, C., Heath, S., Farquharson, J., Barkhouse, K., Hood, R., Latter, C., & MacLean, D. R. (2004). Defining and operationalizing capacity for heart health promotion in Nova Scotia, Canada. *Health Promotion International*, 19(1), 39-49. doi: 10.1093/heapro/dah106

- Laverack, G. (2005). *Public Health: Power, Empowerment and Professional Practice*. Hampshire: Palgrave Macmillan
- Miller, Y. D., Trost, S. G., & Brown, W. J. (2002). Mediators of physical activity behavior change among women with young children. *American Journal of Preventive Medicine*, 23(2), 98-103.
- Nu'Man, J., King, W., Bhalakia, A., & Criss, S. (2007a). A framework for building organizational capacity integrating planning, monitoring, and evaluation. *Journal of Public Health Management and Practice*, 13(Suppl), S24-S32.
- Nu'Man, J., King, W., Bhalakia, A., & Criss, S. (2007b). A framework for building organizational capacity integrating planning, monitoring, and evaluation. *Journal of Public Health Management and Practice*, S24-S32.
- Raeburn, J., Akerman, M., Chuengsatiansup, K., Mejia, F., & Oladepo, O. (2006). Community capacity building and health promotion in a globalized world. *Health Promotion International*, 21(S1), 84-90. doi: 10.1093/heapro/dal055
- Rudd, R. E., Goldberg, J., & Dietz, W. (1999). A five-stage model for sustaining a community campaign. *Journal of Health Communication*, 4(1), 37-48.
- Sims, J., Huang, N., Pietsch, J., & Naccarella, L. (2004). The Victorian Active Script Programme: promising signs for general practitioners, population health, and the promotion of physical activity. *British Journal of Sports Medicine*, 38(1), 19-25. doi: 10.1136/bjsm.2002.001297
- Walker, Z., Townsend, J., Oakley, L., Donovan, C., Smith, H., Hurst, Z., Bell, J., & Marshall, S. (2002). Health promotion for adolescents in primary care: randomised controlled trial. *BMJ*, 325(7363). doi: 10.1136/bmj.325.7363.524
- Whitelaw, S., Martin, C., Kerr, A., & Wimbush, E. (2006). An evaluation of the health promoting health service framework: the implementation of a settings based approach within the NHS in Scotland. *Health Promotion International*, 21(2), 136-144. doi: 10.1093/heapro/dal009
- Yeatman, H. R., & Nove, T. (2002). Reorienting health services with capacity building: a case study of the Core Skills in Health Promotion Project. *Health Promotion International*, 17(4), 341-350. doi: 10.1093/heapro/17.4.341

Appendix C

Social Marketing Framework

This appendix consists of excerpts from the 34 page social marketing plan I wrote for YMCA partners in October 2010. While never adopted by the YMCA, it informed my work with them. Indeed, I explained much of it over the course of our collaboration and referred to aspects of it often during our meetings and discussions. All deletions from the original document are denoted by ***

Part 1: Analysis of the Target Population and its Environment

1.3 Portrait of One Target Population: Pointe-Saint-Charles Adolescents

1.3.1 Demographic information

According to the 2006 Canadian census, 830 children aged 10 to 14 reside in the neighbourhood compared to 845 teenagers aged 15 to 19. Assuming an equivalent number of youth each age and an equivalent number per sex, I estimate there are 1005 teens aged 12-17 years (167 of each age, 83 of each sex). Given that 25% of the population is Anglophone, I estimate there are 250 teens whose mother tongue is English, thus approximately 42 teens (21 girls, 21 boys) of each age (Table 5).

This information will help to target future recruitment efforts and to set goals

For example, if one goal is to increase the number of adolescent girls who participate, one strategy would be to start by recruiting Anglophones, because history would suggest efforts may be more successful among Anglophones.

Thus, a recruitment target of 15% of 12-14 year old Anglophone girls (i.e., 9) could be set for the autumn 2011 session, and recruitment strategies could be planned and carried out accordingly.

Alternatively, should recruiting Francophones be a priority, *then strategies could be planned in order to recruit a percentage of the 187 Francophone 12-14 year old girls (Table 5).*

1.3.2 Teens' Actual and Perceived Benefits to Participation

- Their friends participate
- They meet other teens
- They like the activities offered
- They get along with the youth workers
- The programme is not expensive and participants may be able to benefit from the YMCA's equitable access policy
- To have fun
- To 'let off steam'
- To gain prestige among their peers (e.g., being good at a sport)
- To improve their sports skills (Some current and past professional athletes are former PSC residents)

What do teens find fun?

What else can be added to this list?

What can be done to maximise these benefits.

Note: The product you are offering is the above
package of benefits,
not just a ball hockey league, for example.

1.3.3 Teens' Actual and Perceived Barriers to Participation

- Lack of time
- Participate in other activities taking place at the same time
- Work part-time afterschool
- Familial obligations (e.g., babysitting younger siblings)
- The activities offered do not interest the teens
- Cannot afford to register or to purchase required sports equipment
- Have yet to try a physical activity they like.
- Prefer to spend time elsewhere with their friends
- ***

What other barriers do teens perceive?

Do they need to feel activities offer a challenge?

What types of activities do they prefer (team, individual, recreational, etc.)?

What can be done to minimise these barriers?

1.3.4 Which Teens Participate?

- Mostly 15-17 year old Anglophone boys. Note that the current core group is the same as in 2007 when most participants were 13-14 year old boys.
- ***
- According to the Winter/Spring 2010 participation data, girls are more likely to visit the centre on girls' night

1.3.5 Which Teens do not Participate?

- 12-14 yr olds
- ***
- Girls are present in far fewer numbers than boys (approximately 1/3 of all participants according to Winter/Spring 2010 and Summer 2010 participation data)
- In general, Francophones from families who have been in the Point for several generations are not represented at the YMCA.

1.3.6 People with a Favourable (+), Neutral (o) or Negative (-) Influence on Teens

- YMCA employees and volunteers (+)
- Parents who are YMCA members (+): **Can these parents be identified? Can their influence be used?**
- Teachers (+/-/o): **Can we identify school actors with positive influence to partner with the Y?**
- Clinic employees (+/o)
- Employees of other youth centres (?)
- Employees of other community organizations (+/o): **Who specifically?**
- ***
- Various residents (past and present) who are perceived as leaders in the community (+): **Can they be identified and their influence used?**
- Peers (+/-/o): **Can we identify teens who are leaders (positive and negative) among their peers? How can the YMCA use these leaders to the teen programme's advantage?**

*Who else is influential? How so ?
Can specific individuals be identified and involved in the teen programme?*

1.3.7 Teens' Media Habits and Participation in Events

FaceBook can be an effective means to reach teens. Not all families have computers but most teens use the internet either at school or at the PSC library. Teens also **communicate** via text messaging.

With regards to **events**, some teens attend « Festipointe » in May, while others participate in the Jeux du Sud-Ouest, the YMCA youth festival, and football games in Le Ber park.

What other communications means do teens use? What other events do teens attend?

Can any events be created to attract teens?

1.3.8 Teens' Membership to Groups and Places they can be Reached

- Other teen centres
- Charlevoix metro after school
- Fast food restaurants (Charon pizzeria, Paul Patate, etc.)
- In the streets and parks (Le Ber park and beside the library)
- At work (IGA, Maxi, Canadian Tire, Costco, etc.)
- At school (St Henri, James Lyng, Msgr Richard, Beurling)
- ***

Where else do the teens hang out?

1.4 Population Segmentation

1.4.1 Age group

The 12 - 14 olds are distinct from the 15-17 olds. For example, the 15-17 year olds are more likely to have part time jobs and to no longer be in school.

How do these two groups of teens differ regarding their physical activity preferences and other lifestyle habits (e.g., smoking, drinking, drugs, school performance, small screen recreation, etc.)?

1.4.2 Sex

Girls and boys may not participate in the same types of physical activities and their reasons for participating can differ.

How do boys and girls differ regarding their physical activity preferences and other lifestyle habits?

1.4.3 Mother tongue

25% of the PSC population is Anglophone. Most Anglophones and Francophones have been living in the neighbourhood for several generations. Thus, they lived in the area when the French-English tensions were strong, and when Francophones were not welcomed at the YMCA. Today, some still refer to the YMCA as « The English Club » and the Centre Saint-Charles as “The French Club”.

Who still promotes the YMCA as an Anglophone centres?

Which YMCA members are Francophones whose families have been in PSC for several generations (positive leaders)?

What can be done to undo the English image of the Y?

1.4.4 Number of Generations in the Neighbourhood

1.4.5 High School

PSC teens attend various high schools in the South-West borough. It is reasonable to assume that different schools have somewhat different cultures.

How do these different cultures impact participation in the teen programme?

Would certain activities attract teens from specific schools?

I recommend that initial recruitment efforts focus on segments that will be the ‘easiest’ to recruit. That is, Anglophones and first generation Francophones.

*Focused, tailored recruitment activities could take place in **English high schools** and specific residences like **HLMs** and the **Alexandra Project housing**.*

*Targets could be, for example, **25% of the 13-14 year old boys and girls from each language group** (10 Anglophone boys, 10 Anglophone girls, 7 first generation boys, 7 first generation girls).*

1.5 Assessment of the Internal Milieu

1.5.1 Human and Material Resources

The gym

The gym is a strength not to be underestimated. Although Centre Saint-Charles has a gym, it is often rented out (AdoZone sometimes reserves it for activities). Use of a double gym would be ideal. École Charles Lemoyne has a double gym; use of this gym could potentially be coordinated through the borough (contact redacted).

The weight room and teen membership

These are other strengths. As we are currently observing, often older adolescent boys begin weight training and girls begin taking fitness classes. The YMCA requires that teens complete a theoretical and practical test to qualify them to use the weight room. The YMCA Teen Policy coincides with several health promotion principles, including education and also reduction of barriers by intervening and the intrapersonal level and increasing teens feeling of competence with the various weight and cardio equipment. A connected strength is the YMCA FIT programme, a recognised fitness instructor qualification.

Teen room equipment

The air hockey, pool, and ping-pong tables are additional resources to be promoted. Although we do not want the teens to attend the centre just to play X-Box, it (along with the wide screen TV) can be a selling point of which to take advantage.

Bilingual youth workers

The **PROMOTION** strategy for the YMCA teen programme should **focus on all of the above STRENGTHS.**

1.5.2 Organisational Culture

The current YMCA teen programme team has a high level of competence and experience. All team members are enthusiastic, open minded, full of initiative, and dedicated to the betterment of the programme for the good of the participants. Team members have identified population segments which, currently, are not well represented in the teen programme (e.g., girls and Francophones) and are brainstorming ways to recruit. New volunteers have begun to work with teens and volunteer recruitment efforts are ongoing. Management is present and supportive; new ideas are welcomed. Efforts are made to increase and improve partnerships with key actors in the area.

Can anything be done to improve this culture?

What do team members appreciate?

What do they feel they need?

1.5.3 Current Partners

Potential partners are listed in section 1.2 (p. 5-6). Increasingly, partnerships are being developed. George McRae has been asked to publicise events on his website, Philippe (the street worker) is consulted, Hall of Recognition members have offered in-kind donations (Fall 2010 promotional post card), contacts with the Community Clinic have been made. Continuing to develop and nurture partnerships is an excellent way to, among other things, expand the reach of the teen programme.

In what ways are other actors partners?

What do they currently offer to the YMCA teen programme?

What else could they offer?

1.5.4 Accessing teens through networks and communications channels

High schools in the South-West borough

In the past, recruitment efforts through schools have not been regular or systematic. Presently, efforts are being made to develop relationships with key school actors to improve communications through this channel and increase recruitment strategies.

Direct access via email, phone, Facebook, etc.

Maintaining a data bank of teens' contact information and sending teens' all information regarding programming could be effective. Moreover, maintaining records of the contact info for all children in the 9-12yr old programme is important so when they 'graduate' they can be contacted to register for the teen programs. (Note: Children who may not have continued in the 9-12 yr old programme can be contacted when they are old enough for the teen programme.) Increasingly, measures are being taken to implement these communications strategies

How can this process be facilitated?

What can be done so this process becomes habitual?

What other networks can be used to reach/access teens? Can the youth health clinic become a partner? Is reaching teens through this Clinic viable? Is it feasible? How can this be done?

1.5.4 Programme name

What other organisational strengths are there? Do current **objectives** reflect the YMCA mission and values? Is there a clear **long term plan** for the teen programme which includes **objectives for change**? Are **consultations** with the target population habitual?

How can we CAPITALISE on STRENGTHS?

What other limitations/challenges are there?

How can their IMPACT on the teen programme be MINIMISED?

1.6 Analysis of the External Milieu

1.6.1 Potential threats/challenges

The competition

Other youth centres:

What other competition does the YMCA teen programme face (e.g., teen centres in neighbouring communities)?

What can be done to reduce competition (e.g., alter teen programme hours of operation; partner with “competitors”)?

Schools: Some teens may participate in extracurricular activities after school. Learning what activities are offered in which schools and on which days could be important in order to offer a complementary schedule of activities.

Social aspects

Demographic aspects

Language is perhaps the most important demographic factor. Some participants are unilingual, complicating thus, Anglophone/Francophone relations. Bilingual youth workers are a necessity. Likewise, given the growing immigrant population, the YMCA could benefit from offering activities adapted to specific cultures (e.g., African dance, soccer).

What other demographic aspects impact the teen programme?

1.6.2 Favourable external conditions

Community organizations

Parents

How does the low socio-economic status neighbourhood affect teen programme participation?

Is cost an issue?

Are there families who feel there are higher priority things on which to spend their money?

Is purchasing sports equipment and materials a spending priority?

Is more sponsorship required?

Do teens require more information about programme fees?

Are more volunteers required?

To what extent can sponsors and volunteers affect programme participation?

Do the neighbourhoods where teens live and go to school in relation to the Y affect their desire/ability to participate?

What other social aspects can affect teen programme participation?

1.7 Specific, Measurable Objectives

Below is an example of possible objectives. Objectives could be made for the overall programme, specific activities, or any programme goal. It is often recommended that objectives be **SMART—Specific, Measurable, Attainable, Relevant/Realistic, and Time bound**. The objectives below are Specific in that they include precise percentages of increases in participation of specific population segments; Measurable because our attendance taking methods now permit us to accurately assess attendance; Attainable and Relevant given they are based on the data we have for the winter/spring 2010 session; and Time bound, in that they refer to specific programme sessions.

Sample Objectives

The fall 2011 session, attendance will be **10% higher** than fall 2010 (i.e., 140 teens will participate at least once).

At least 15% of the fall 2011 session participants will be francophone.

At least 25% of the fall 2011 session participants will be girls (compared to 20% for 2010).

During the fall 2011 session, **10% of participants will attend once per week.**

In winter/spring 2012, **60% of the fall 2011 participants will return**

Part 2: Example of Social Marketing Strategy

This strategy is based on the analysis presented in the first half of this document.

2.1 Positioning

YMCA mission

The YMCAs of Québec is a charitable organization that contributes to the development of spirit, mind, and body, and to the well-being of individuals, families, and communities.

YMCA values

- Participation and access
- Education and prevention
- Respect for others
- Volunteer work and philanthropy
- Self-empowerment

Given this mission and these values, the YMCA teen programme should position itself in such a way that **ALL** teens feel welcome. Specifically, Francophones should find their place at the Y to the same extent as Anglophones. A programme name, slogan, and/or activities' names which are easily translated

would help in this regard. This same principle applies to girls and younger teens. Continuing to develop girl specific activities is necessary, as is creating a space where 12-14 year olds are as comfortable as 15-17 year olds. Understanding the precise interests of the teens will help to determine other important aspects for programme positioning. For example, if it is important for the teens to have a place to chill together after school, then the teen programme should represent (to the teens) a place where this is possible in order for the Y to attain its teen programme participation objectives. Also, in accordance with values and objectives, and given the demographic of the target population, the financial accessibility of the programme should be emphasized. Finally, the positioning strategy should focus on what the programme has to offer that is **UNIQUE** in comparison to other places where the teens spend time.

2.2 Programme Modifications

Any modifications should be based on the analysis of the target population (presented in the first part of this document). Such an analysis should be ongoing to keep up with changing needs, trends, etc. Currently, offering both structured and unstructured activities that appeal to boys and girls seems to be required. The fall 2010 programme includes some changes along these lines, and such programming decisions should be continued. Further modifications could include girl specific activities (other than girls' night) that offer the same things to girls as ball hockey offers to boys, for example. Offering volleyball or dance in the gym for girls could be an option. Likewise, a fitness class specifically for adolescent girls could be a viable choice. Moreover, when considering differences between younger and older adolescents, formally offering preparation for the tests required to obtain a teen membership (see YMCA Teen Policy document) to older adolescents could be considered. Likewise, offering FIT to older teens could provide them with a physically active means of earning some money (given that we know that many older teens work part-time afterschool and are, thus, not available to participate in teen programme activities).

2.2.1 In the Gym

- Offer co-ed activities, as well as activities for girls and boys separately. When scheduling permits, and to take advantage of teens desire to socialise, an

interesting option could be to offer an activity just for boys followed by an activity for girls or a co-ed one. In this way, more teens may be present as spectators.

- Offer individual activities (e.g., jogging) to attract those who don't enjoy team sports.
- Use the stage as 'bleachers' during games.

2.2.2 In the teen room

2.3 Communications Channels

2.3.1 Events

- *FestiPointe (May)*: teens can present some of what they do in the teen programme. This was well done in 2010, with the 3-on-3 basketball tournament. Information kiosks can also be used (as was the case during the 2010 public assembly). The opportunity can be taken to show teens around the teen centre and the Y, as a whole.
- Youth festival (spring), Black history month (February), Fête de la solidarité (Fall, at Centre-Saint-Charles) Jeux du Sud-Ouest (February) Hockey banquet (April), Hall of Recognition banquet (September), Public assembly (Spring): these events can be exploited in the same manner as FestiPointe.
- YMCA events can be developed and used in the same way (e.g., family nights and roller boogies, hockey and basketball tournaments.)

2.3.2 Media

- *In schools*: **Kiosks** can be held in all borough high schools in September, January and June. **Flyers/postcards** can be distributed. **Posters** can be left with phys. Ed. teachers and administration and hung in strategic locations in the schools. If schools have internal “**newspapers**” or use the **PA system** for daily announcements, specific teen zone events could be announced via these forums.

- Advertisements in the **Borough's annual brochure of activities** in the South-West borough.

2.3.3 Interpersonal

- *Talking to teens at Charlevoix metro:* Teens tend to congregate at the metro station after school. In September, January, and June, youth workers could go to the metro to promote the programme.

2.4 Designing and pre-testing messages

- Ideally, messages should be pretested to ensure the style of language used is appropriate, and that the desired message is understood.
- Bilingual communications are essential
- ***

2.5 Partnerships

- *Adolescents:* Teens can help to recruit their friends and help disseminate information about the programme.
- *Community organisations:* In line with their mandates, community organisations will disseminate programme information.

Overall, **social marketing** is about using **Win-Win** strategies and creating **Win-Win** situations so the target population perceives the programme of activities as
FUN, EASY to participate in, and **POPULAR**

Appendix D

Comparison of Typologies of Collaboration in Partnered Research

Bush et al (CIHR grant # KRS262474)	Waterman et al. 2001	Munn- Giddings et al. 2008	Holter & Schwartz- Barcott 1993	Cornwall & Jewkes 1995	Hart & Bond 1995
<p>Passive participation: Consultation and/or Design & implement intervention</p>	<p>Consultation: local opinions asked; researchers analyse & decide course of action</p>	<p>Passive participation: Providing information/ data for the study.</p>	<p>Technical collaboration: researcher identifies problem & intervention; goal is to gain practitioner's interest in the research and agreement to facilitate & help with its implementation.</p>	<p>Shallow participation researchers control the entire process.</p>	<p>Experimental: researcher is the expert, participants are respondents</p>
<p>Active participation: Shared decision making in determining: Research questions; methodology or collecting analyzing, or interpreting data; Uptake or dissemination of research findings</p>	<p>Cooperation: locals with outsiders to determine priorities; outsiders direct the process. Co-learning: locals & researchers share their knowledge, create new understanding, & jointly form action plans Collective action: locals set own agenda & mobilise to carry it out without outside initiators/ facilitators.</p>	<p>Active participation: making a contribution to the research process</p>	<p>Mutual collaboration: the researcher & practitioners come together to identify potential problems, their underlying causes & possible interventions. Enhancement: Researcher as facilitator; assists practitioners to raise their collective consciousness.</p>	<p>Increasingly deep participation: a movement towards the researchers relinquishing control & devolving ownership of the process to those whom it concerns</p>	<p>Organizational: locals determine research focus and consult researcher to conduct research Professionalising: outside researcher and locals collaborate; roles are merged Empowering outside researcher and locals are co-researchers/co-change agents; Roles are shared.</p>

Appendix E

ICPAPH Poster

This appendix consists of a poster I presented at the International Conference of Physical activity and Public Health (ICPAPH) in June 2010. It illustrates the initial phase of my PhD research not presented in this dissertation.

The full reference for this poster is:

Bush, PL., García Bengoechea, E., & Parry, S. (2010, April). *Processes and outcomes of a capacity building intervention to promote physical activity among underserved youth*. Poster presentation at the Third International Congress on Physical Activity and Public Health (ICPAPH). Toronto, On.

Processes and Outcomes of a Capacity Building Intervention to Promote Physical Activity in Underserved Adolescents

Paula L. Bush¹, Enrique García Bengoechea¹ & Sharon Parry²

¹McGill University, ²Pointe-Saint-Charles YMCA

Adolescents from underserved milieus are not sufficiently physically active.

Universities can collaborate with organizations to help build on their capacity to design, implement and assess physical activity programs.

In this action-research, YMCA employees and researchers collaborate to promote physical activity to adolescents.



New goals & means to achieve them are jointly defined;
Evaluation means meeting all parties needs are determined;
Evaluation results will inform subsequent actions

Coordinator hired
April 2010

Clarification of the issues the director wishes to address;
Desire to evaluate program impact;
Discussions regarding participation and demographic variables to assess

Coordinator leaves
Dec. 2009
Coordinator leaves
Sept. 2009

Regular planning between researcher and coordinator;
Regular discussions between researcher and director

References
Labonte, R., & Laverack, G. (2001). Capacity building in health promotion, Part 2: whose use? And with what measurement? *Critical Public Health*, 11(2), 129-138.
Hawe, P., King, L., Noort, M., Jordens, C., & Lloyd, B. (2000). Indicators to help with capacity building in health promotion.
Israel, B., Schulz, A., Parker, E., & Becker, A. (1998). Review of Community-Based Research: Assessing Partnership Approaches to Improve Public Health. *Annual Review of Public Health*, 19, 173-202.

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enrique.garcia@mcgill.ca
sharon.parry@ymcaquebec.org

Capacity Building Outcomes
(Hawe et al., 2000)

Commitment
More frequent meetings between coordinator/director & researcher

Critical reflection
Coordinator & director ask "why?" (Labonte & Laverack, 2001)

Reach
Summer 2008: 7 wks (35d); 21 teens; av. participation rate=4.6 ± 3.0
Summer 2009: 8 wks (40d); 29 teens; av. participation rate=6.7 ± 8.5

Efficacy
Summer 2009: 1 new event planned & implemented twice
Fall 2009: 4 new activities physical offered

Adoption
Decision to implement a teen council;
Initial use of some social marketing strategies

Bi-directional learning
(Israel et al., 1998)

YMCA → Researcher:

YMCA mission, values, goals, & range of intervention activities;
YMCA-community partnerships;
YMCA history

Researcher → YMCA:

Health promotion & social marketing strategies;
Resources;
Evaluation means;
community organizations and leaders;
Community history

Intervention plan proposed to director;
Common goals determined;
Potential means to achieve goals discussed

2 animators leave
1 animator hired
Coordinator leaves
Sept. 2008

Summer program planning with animator;
No follow-through with promotional ideas due to lack of time

Director hired
April 2008
2 teen animators hired

No teen animator;
Director leaves
Jan. 2008

Meeting with YMCA director & teen programs coordinator;
Common goals determined;
No teen animator, thus, no summer program;
Potential ideas for future activities discussed;
1 Promotional event held for a new activity
May 2007



Gaining entry to the organization;
Building trust;
Maintaining contact during slow periods (email, volunteering, dropping by);
Frequent informal discussions;
Ongoing observation;
Ongoing needs assessment

Conclusions

This ongoing action-research has presented challenges, namely: Staff and management turnover; Researcher not working in the organization; Slow pace. The following elements have helped to deal with these challenges: Commitment of all partners to achieving common goals; Communication; Researcher being a resource for the organization; Sharing ideas/knowledge/perspectives; Researcher being present; Mutual support of ideas; Mutual respect; Organization's willingness to collaborate

Appendix F

Interview Guides

These interview guides helped me to orient discussions with YMCA partners so as to uncover how they were experience and benefiting from our work, as well as to help me understand their context and determine how to continue to push our work forward. Interviews were mostly informal and conversational and sometimes partners' responses took our discussions in directions I did not anticipate. This often led to my not asking certain questions as planned, but rather coming back to these questions during subsequent conversations/interviews. Moreover, such unforeseen responses revealed new questions to pose, which I did.

Cheryl Thursday July 7, 2011-- 11:00

1. The other day, you shared some of your thoughts about the report but it was brief, so could you elaborate?
 - a. What did you appreciate? Why?
 - b. What questions are left unanswered?
 - c. What questions does the report raise?
 - d. How does it compare with the perspective of the program you already had?
2. What, if anything, did you learn from the report?
3. How do you see yourself using this report?
4. How do you see it benefiting the teen program?

5. Does the report help in any other way?
6. I mention suggestions for improvement in only a few places. Did the report give you ideas of actions that need to be taken?
7. What other data would you like to capture via check-ins?

Moving on to the Association Evaluation report

8. What are your thoughts about the association report?
9. How do you see it fitting in with the discussions we've had about evaluation?
10. How do you see the data from both fitting together?
 - a. Unified Logic model vs. The one I made for them
 - b. The recommendations?

With regards to the quantitative evaluation

11. What, if anything have you learned from the quantitative reports?
12. How have you been using these reports?
 - a. In her reports?
 - b. When speaking to others?
 - c. In her thoughts about the teen program and actions to take?
 - d. In her Y association meetings?
13. Do the reports help in any other way?

Overall

14. How are you thinking about impact these days? (considering our discussions and both reports)
 - a. How has your thinking changed?
 - b. And what about evaluating quality?
15. Where would she like to see the process go now?
 - a. Explain I see 2 things: improve data collection, get them to a point of autonomous analysis of at least some things; use the data to decide some things for the summer and Friday nights

16. What have you learned so far through this process of evaluation (quantitative & qualitative)
17. How have you benefited?
 - a. Why? What led to this?
18. How has the program benefited? Or how do you see it benefiting in the future?
 - a. Why? What led to this?
19. How do you see this process benefiting other Y programs?
 - a. Why? What led to this?

Rafael May 31, 2011-- 12:00

1. Tell me a bit about what you think about our partnership
 - a. What did you appreciate?
 - b. How did you benefit?
 - i. Has your perspective changed in any way?
 - ii. Is there anything you've changed in how you do your work?
 - c. How has the teen program benefited from our partnership?
2. You are typically in the "day to day" putting out fires and dealing with situations and issues as they arise. What was it like for you to have me discussing higher order issues?
3. What was challenging?
 - a. How would you have preferred we work? (meetings, etc)
4. How do you think the partnership between the Y and I may benefit the Y in the long term?
5. What kind of support did you get from Cheryl for working with me?
6. Would you partner with a researcher in the future? What for?
7. What do you recommend or suggest to me for working with Ben?
8. In general, for the program, what do you suggest I do?

12:20 Let's talk specifically about the stats

9. What are your thoughts about the stats reports I've sent you?

- b. What has it done for you to see these numbers?
- 10. If we had a less time consuming and easier way to take care of the stats, would you continue to do it by teen and by activity? Why/why not?
- 11. What ideas do you have to make the stats easier for Ben?
- 12. Do you have any other thoughts about our work with the stats?

12:25 Let's talk specifically about the check ins

- 1. What are the meetings at the end of the night like? (length, type of discussions)
- 2. What do you think they do for the staff?
- 3. The other day when we met with Cheryl and Carole to discuss evaluation, you mentioned that now you are writing more specific things down like who got an interview, who got a job etc. What other kind of changes have you made to the type of info recorded in the check ins?
- 4. What led to you making these changes?
- 5. How have our discussions affected the check ins?
- 6. During our meeting with Quan you mentioned that you'd scrolled through a bit of the excel sheet of the preliminary qualitative analyses. What did you look at? What were your thoughts?
- 7. Do you have any other thoughts about our work with the check-ins
 - a. If you were to stay would you implement any further changes?

12:45 Overall, experience at the Y this past year

Tell me how you feel about your experience at the Y this past year

- a. If you compare yourself today to who you were, what you knew, how you worked 1 year ago, what do you see?
- b. How did your plans about how to work and what to do change over the course of the year?
- c. If you were not leaving, what would be your plans for the coming year (programs, partnerships, promotion)?

8. What needs do you currently perceive for the program?
9. What did you learn this past year that you will be taking with you to your new job?

Cheryl: January 6, 2012. 10:30

- How would you describe our partnership
- Thoughts on our struggle to settle on what we would actually do together, my role
- What are your thoughts about what we've done together (benefits/costs of working together)
- What contributes to success or lack thereof of working together
- Talk to me about what you have learned as a result of our work together
 - How have our talks influenced your work?
- Where do you see my role in the future? (what would she like from me? Teach them qualitative analysis?)
- How has my presence impacted the work done at the Y
 - Teen zone
 - Other sectors
- What are your current thoughts about impact evaluation and how to do it?
 - Assessing quality of programs: numbers only tell part of the story
 - How might you have attacked evaluation had I not been there
 - What would she like to assess (use indicators doc)
- How do the stats colour your perception of the program and its needs
 - How do you see the team using the quantitative results? (program planning and promotion)
 - What changes have been made based on the numbers?
 - Have the numbers impacted her thoughts about how to communicate about the program? (email, facebook)

- What has changed about the way you communicate about the program?

Ben: January 9, 2012 12:30

1. Tell me about what you think about our partnership (your experience so far)
 - a. What do you appreciate?
 - b. How do you benefit? (practice changes? In terms of promotion, recording of info?)
 - i. Has your perspective of the program changed in any way as a result of our partnership? (e.g., based on stats or based on qualitative)
 - ii. Is there anything you've changed in how you do your work as a result of our partnership?
 - iii. What have you learned?
 - c. How has the teen program benefited from our partnership?
 - d. What has been challenging? (how do I fit in to your day)
 - e. How can I facilitate? Hold meetings to go over things I email?)
2. What have you read from what I have sent?—reports. How did past reports help to orient you when you arrived? Did you give qualitative report to Tamara? Is such a report a good tool to help orient new staff? how? Why? How would you see using it?
3. What of our discussions do you pass on to staff?
4. How does my presence impact staff? teens? The program?
5. What kind of support did you get from Cheryl in terms of working with me? During meetings, does anything come up? Cheryl said she may sometimes mention: “Paula was...”
6. What communication means are you using? FB? Email (who?) community tables, HLM meetings, metro, etc? is this a change from

Rafael? Why is he using these? Will he continue to use these? Add more? What does he think is working?

7. How would you like me to be involved in the future?

12:50 Let's talk specifically about the stats

8. What are your thoughts about the stats? Time to record? Plans for computerising? Value?
9. What are your thoughts about the stats reports I've sent you?
 - a. What has it done for you to see these numbers?
10. How do the stats colour your perception of the program and its needs
 - a. How do you see the team using the quantitative results? (program planning and promotion)
 - b. What changes have been made based on the numbers?
 - c. Have the numbers impacted her thoughts about how to communicate about the program? (email, facebook)
 - i. What has changed about the way you communicate about the program?
11. Does he tell the team the numbers results as he enters them? Impact of that?
12. Thoughts on difference between # of girls this summer vs. this fall
13. Do you have any other thoughts about our work with the stats?

13:20 Let's talk specifically about the check ins

14. Comparison
15. How are things in terms of objective reporting in the check-ins
16. What do you think they do for the staff?
17. How have our discussions affected the check ins?
18. Thoughts about new check-in form. Useful? Helpful? How? Why?
19. How does the qualitative evaluation report colour your perception of the program and its needs (have you noticed any changes in relation to framework of indicators I used?)

20. If I were to leave, what evaluation practices would you like to maintain

13:30 Overall, experience at the Y this past year

- 21. What are your plans for the coming year (programs, partnerships, promotion)?
- 22. What are your thoughts concerning the resources you had to work with this past year (staff, volunteers, money, equipment, support)?
- 23. Talk to be about partnerships have you developed or improved?
- 24. What needs do you currently perceive for the program?
- 25. How do you think the partnership between the Y and I may benefit the Y in the long term?

More questions following Interview with Cheryl Jan 6, 2011. 10:30

- How has my presence impacted the work done at the Y
 - Teen zone; Other sectors
- How do you see the team using the quantitative results? (program planning and promotion)
 - Have the numbers impacted her thoughts about how to communicate about the program? (email, facebook)
 - What has changed about the way you communicate about the program?
- You have said you feel armed with numbers, what types of things do you report to people? To whom? What impact have you perceived?
- How does the qualitative evaluation colour your perception of the program and its needs (have you noticed any changes in relation to framework of indicators I used?)
- If I were to leave, what evaluation practices would you like to maintain
- Thoughts on evolution of teen program since you started:
 - The way it's run
 - Employees

- Ability to ask why; to problem solve; fostering collaborations
- Relationships with teens
- Teens apparent satisfaction
- You often say it's a matter of having the right people in place. What is 'right'?
- Thoughts on changes in program/organizational visibility
- Thoughts on Y as perceived as leader in community for teens
- This summer: why more teens? Why more girls?
- You have said there was a seamless transition from spring to summer this year. Why?
- You've talked about the need to develop the teens' commitment to the Y. What is being done in this regard?
- What do you think the program needs now? Why?
- Tracking has carried over to other sectors. Tell me more. What else has carried over?
- You often talk about need to vamp up all fitness. Where does this priority come from?

Appendix G

Ethics Certificates



Research Ethics Board Office
McGill University
1555 Peel Street, 11th floor
Montreal, QC H3A 3L8

Tel: (514) 398-6831
Fax: (514) 398-4644
Ethics website: www.mcgill.ca/researchoffice/compliance/human/

Research Ethics Board III
Certificate of Ethical Acceptability of Research Involving Humans

REB File #: 243-0208

Project Title: Promoting physical activity among the adolescents of an underserved community: can capacity building help?

Principal Investigator: Paula Louise Bush

Department: Kinesiology & Physical Education

Status: Ph.D. student

Supervisor: Prof. Enrique Garcia Bengoechea

Funding Agency and Title (if applicable): FQRSC doctoral scholarship

This project was reviewed on February 19, 2008 by

Expedited Review ☐
Full Review ☒



Shaheen Shariff, Ph.D.
Acting Chair, REB III

Approval Period: March 19, 2008 to March 18, 2009

This project was reviewed and approved in accordance with the requirements of the McGill University Policy on the Ethical Conduct of Research Involving Human Subjects and with the Tri-Council Policy Statement: Ethical Conduct For Research Involving Humans.

* All research involving human subjects requires review on an annual basis. A Request for Renewal form should be submitted at least one month before the above expiry date.

* When a project has been completed or terminated a Final Report form must be submitted.

* Should any modification or other unanticipated development occur before the next required review, the REB must be informed and any modification can't be initiated until approval is received.

Appendix G Ethics Certificates

McGill University

ETHICS REVIEW RENEWAL REQUEST/FINAL REPORT

Continuing review of human subject research requires, at a minimum, the submission of an annual status report to the REB. This form must be completed to request renewal of ethics approval. If a renewal is not received before the expiry date, the project is considered no longer approved and no further research activity may be conducted. When a project has been completed, this form can also be used as a Final Report, which is required to properly close a file. To avoid expired approvals and, in the case of funded projects, the freezing of funds, this form should be returned 3-4 weeks before the current approval expires.

REB File #: 243-0208

Project Title: Promoting Physical Activity among the Adolescents of an Underserved Community: Can Capacity Building Help?

Principal Investigator: Paula Louise Bush

Department/Phone/Email: Kinesiology and Physical Education / 398-4184 ext. 00920 / paula.bush@mail.mcgill.ca

Faculty Supervisor (for student PI): Dr. Enrique Garcia Bengoechea

1. Were there any significant changes made to this research project that have any ethical implications? ☒ Yes ☐ No
If yes, describe these changes and append any relevant documents that have been revised.

Two main changes have occurred:

- 1) In my initial ethics application I wrote: "The PSC YMCA currently offers many of its teen programmes free of charge and this will not change. However, some new activities will require a fee so the YMCA may pay instructors which come from outside of the YMCA." However, in the spring of 2008 a new director was hired at the PSC YMCA and the fee structure was revised, somewhat. Beginning in January 2009, the fee for the adolescent program is \$30 per year. However, in accordance with the YMCA "access for all" policy, participants may benefit from a 10%-50% reduction in cost depending on their family's annual income. Should the cost prove to be a deterrent for participants, payments may be scheduled over a period of time. No adolescent will be turned away. Moreover, the teen programs are among the community, or 'not-autonomous', programs the YMCA offers. Thus, the program does not rely on program fees but rather is supported by various funding organisations and donors. Furthermore, fees are directed to the teen programs budget code. As such, I do not believe that the program fee poses any ethical concern.
- 2) In my initial application, I indicated that data would be collected during the spring and summer and fall 2008 youth program sessions. However, there has been a lot of staff turnover in the past year, and given that this is a collaborative study which relies heavily on the participation of the employees of the YMCA, I have had to extend the time frame of the study. Therefore I will be continuing to collect data in the form of field notes, meeting minutes and digital recordings of meetings/focus groups until the fall of 2009.

2. Are there any ethical concerns that arose during the course of this research? ☐ Yes ☒ No. If yes, please describe.

3. Have any subjects experienced any adverse events in connection with this research project? ☐ Yes ☒ No
If yes, please describe.

4. ☒ This is a request for renewal of ethics approval.

5. ☐ This project is no longer active and ethics approval is no longer required.

6. List all current funding sources for this project and the corresponding project titles if not exactly the same as the project title above. Indicate the Principal Investigator of the award if not yourself.

FORSC doctoral scholarship

Principal Investigator Signature: Paula Bush

Date: Feb 5 2009

Faculty Supervisor Signature: E. Garcia B

Date: Feb 5, 2009

(for student PI)

For Administrative Use

REB: ☐ REB-I ☐ REB-II ☒ REB-III

☐ The closing report of this terminated project has been reviewed and accepted

☒ The continuing review for this project has been reviewed and approved

☐ Expedited Review

☒ Full Review

Signature of REB Chair or designate: J. McIntyre

Date: March 5, 2009

Approval Period: March 19, 2009 to March 18, 2010

****NOTE NEW MAILING ADDRESS****

Submit to Lynda McNeil, Research Ethics Officer, 1555 Peel Street, 11th floor, fax: 398-4644 tel:398-6831

(version 12/07)

McGill University

ETHICS REVIEW
RENEWAL REQUEST/FINAL REPORT

Continuing review of human subject research requires, at a minimum, the submission of an annual status report to the REB. This form must be completed to request renewal of ethics approval. If a renewal is not received before the expiry date, the project is considered no longer approved and no further research activity may be conducted. When a project has been completed, this form can also be used as a Final Report, which is required to properly close a file. To avoid expired approvals and, in the case of funded projects, the freezing of funds, this form should be returned 2-3 weeks before the current approval expires.

REB File #: 243-0208

Project Title: Promoting Physical Activity among the Adolescents of an Underserved Community: Can Capacity Building Help

Principal Investigator: Paula Louise Bush

Department/Phone/Email: Kinesiology & Physical Education, 514-398-4184 ext. 00920, paula.bush@mail.mcgill.ca

Faculty Supervisor (for student PI): Dr. Enrique Garcia Bengoechea (enrique.garcia@mcgill.ca)

1. Were there any significant changes made to this research project that have any ethical implications? ___ Yes ___ ☒ No
If yes, describe these changes and append any relevant documents that have been revised.
2. Are there any ethical concerns that arose during the course of this research? ___ Yes ___ ☒ No. If yes, please describe.
3. Have any subjects experienced any adverse events in connection with this research project? ___ Yes ___ ☒ No
If yes, please describe.
4. ___ ☒ This is a request for renewal of ethics approval.
5. ___ This project is no longer active and ethics approval is no longer required.
6. List all current funding sources for this project and the corresponding project titles if not exactly the same as the project title above. Indicate the Principal Investigator of the award if not yourself.

N/A

Principal Investigator Signature: [Signature] **Date:** February 12, 2010

Faculty Supervisor Signature: E. Garcia B. **Date:** Feb 17, 2010
(for student PI)

For Administrative Use		REB: ___ REB-I ___ REB-II ___ <u>REB-III</u>	
___ The closing report of this terminated project has been reviewed and accepted			
<u>___</u> The continuing review for this project has been reviewed and approved			
<u>___</u> Expedited Review		<u>___</u> Full Review	
Signature of REB Chair or designate: <u>[Signature]</u>		Date: <u>March 1, 2010</u>	
Approval Period: <u>March 1, 2010</u> to <u>Feb. 28, 2011</u>			

****NOTE NEW MAILING ADDRESS****

Submit to Lynda McNeil, Research Ethics Officer, 1555 Peel Street, 11th floor, fax: 398-4644 tel: 398-6831

(version 12/07)

McGill University

ETHICS REVIEW - AMENDMENT REQUEST FORM

This form can be used to submit any changes/updates to be made to your currently approved research project. Explain what these changes are, and attach any relevant documentation that has been revised. Significant changes that have ethical implications must be reviewed and approved by the REB before they can be implemented. This form is also to be used for indicating changes to funding and personnel.

REB File #: 243-0208

Project Title: Promoting Physical Activity among the Adolescents of an Underserved Community:
Can Capacity Building Help

Principal Investigator: Paula Louise Bush

Department/Phone/Email: Kinesiology & Physical Education, 514-398-4184 ext. 00920, paula.bush@mail.mcgill.ca

Faculty Supervisor (for student PI): Dr. Enrique Garcia Bengoechea (enrique.garcia@mcgill.ca)

In the initial consent form for YMCA employees (attached) there was no provision to provide consent for use of data from email exchanges between YMCA employees and the PI. Such email exchanges have emerged as a crucial data source. The revised consent form (attached) includes provision for employees to provide consent regarding this data source.

Principal Investigator Signature: Paula Bush

Date: June 2, 2010

Faculty Supervisor Signature: E. Garcia B.
(for student PI)

Date: June 2, 2010

For Administrative Use		REB: <input type="checkbox"/> REB-I <input type="checkbox"/> REB-II <input checked="" type="checkbox"/> REB-III
<input checked="" type="checkbox"/> Expedited Review	<input type="checkbox"/> Full Review	
<input checked="" type="checkbox"/> This amendment request has been approved.		
Signature of REB Chair/ designate: <u>L. McNeil</u> <u>B. Ditts</u>		Date: <u>June 4, 2010</u>

Submit to Lynda McNeil, Research Ethics Officer, McGill University, 1555 Peel Street, 11th floor, Montreal, QC H3A 3L8
tel: 514-398-6831 fax: 514-398-4644 email: Lynda.mcgill@mcgill.ca

(version 02/08)

Appendix G Ethics Certificates

P - 02/28/2011 10:59 1-514-398-4186

DEPT. KIN. & PHYED

PAGE 01/02

McGill University

ETHICS REVIEW RENEWAL REQUEST/STUDY CLOSURE FORM

Continuing review of research involving humans requires, at a minimum, the submission of an annual status report to the REB. This form must be completed to request renewal of ethics approval. If a renewal is not received before the expiry date, the project is considered no longer approved and no further research activity may be conducted. When a project has been completed, this form can also be used to officially close the study. To avoid expired approvals and, in the case of funded projects, the freezing of funds, this form should be returned 2-3 weeks before the current approval expires.

REB File #: 243-0208

Project Title: Promoting Physical Activity among the Adolescents of an Underserved Community:

Can Capacity Building Help?

Principal Investigator: Paula Louise Bush

Department / Email: Kinesiology & Physical Education, 514-398-4184 ext. 00920, paula.bush@mail.mcgill.ca

Faculty Supervisor (if student PI): Dr. Enrique Garcia Bengoechea (enrique.garcia@mcgill.ca)

1. Were there any significant changes made to this research project that have any ethical implications? ☐ Yes ☒ No
If yes, describe these changes and append any relevant documents that have been revised.

Section 3 'other approvals' of the REBIII application was initially not applicable. Given the collaborative nature of the research, recently the YMCA and I decided to analyze their internal documents, "nightly check-ins". The signed form regarding confidentiality is appended to this renewal request. Please note that findings from the analysis of these documents will not be published. The analysis is will serve only to help us make programming decisions for the youth centre.

2. Are there any ethical concerns that arose during the course of this research? ☐ Yes ☒ No. If yes, please describe.
3. Have any subjects experienced any adverse events in connection with this research project? ☐ Yes ☒ No
If yes, please describe.

4. Is this a funded study? ☐ Yes ☒ No. If yes, list the agency name and project title and the Principal Investigator of the award if not yourself. This information is necessary to ensure compliance with agency requirements and that there is no interruption in funds.

☒ Check here if this is a request for renewal of ethics approval.

☐ Check here if the study is to be closed and continuing ethics approval is no longer required. A study can be closed when all data collection has been completed and there will be no further contact with participants.

Principal Investigator Signature: Paula Bush **Date:** Feb 25, 2011
Faculty Supervisor Signature: E. Garcia B. **Date:** Feb 28, 2011
(if PI is a student)

For Administrative Use	REB: <input type="checkbox"/> REB-I <input type="checkbox"/> REB-II <input checked="" type="checkbox"/> REB-III
<input type="checkbox"/> The closing report of this terminated project has been reviewed	
<input checked="" type="checkbox"/> The continuing review for this project has been reviewed and approved	
<input checked="" type="checkbox"/> Expedited Review <input type="checkbox"/> Full Review	
Signature of REB Chair or designate: <u>Diana L. Taylor</u> Date: <u>March 1, 2011</u>	
Approval Period: <u>March 1, 2011</u> to <u>Feb 28, 2012</u>	

Submit to Lynda McNeil (lynda.mcnell@mcgill.ca), Research Ethics Officer, James Administration Building, 845 Sherbrooke Street West suite 429, fax: 398-4644 tel: 398-6831. Electronic submissions with scanned signatures are accepted but must come from the PI's McGill email.

(Version 10/10)

McGill University

ETHICS REVIEW
RENEWAL REQUEST/STUDY CLOSURE FORM

Continuing review of research involving humans requires, at a minimum, the submission of an annual status report to the REB. This form must be completed to request renewal of ethics approval. If a renewal is not received before the expiry date, the project is considered no longer approved and no further research activity may be conducted. When a project has been completed, this form can also be used to officially close the study. To avoid expired approvals and, in the case of funded projects, the freezing of funds, this form should be returned 2-3 weeks before the current approval expires.

REB File #: 243-0208

Project Title: Promoting Physical Activity among the Adolescents of an Underserved Community: Can Capacity Building Help?

Principal Investigator: Paula Louise Bush

Email: paula.bush@mail.mcgill.ca

Faculty Supervisor (if student PI): Dr. Enrique García Bengoechea (enrique.garcia@mcgill.ca)

1. Were there any significant changes made to this research project that have any ethical implications? ___ Yes ☒ No
If yes, describe these changes and append any relevant documents that have been revised.
2. Are there any ethical concerns that arose during the course of this research? ___ Yes ☒ No. If yes, please describe.
3. Have any subjects experienced any adverse events in connection with this research project? ___ Yes ☒ No
If yes, please describe.
4. Is this a funded study? ___ Yes ☒ No. If yes, list the agency name and project title and the Principal Investigator of the award if not yourself. This information is necessary to ensure compliance with agency requirements and that there is no interruption in funds.

☒ Check here if this is a request for renewal of ethics approval.

___ Check here if the study is to be closed and continuing ethics approval is no longer required. A study can be closed when all data collection has been completed and there will be no further contact with participants.

Principal Investigator Signature: [Signature] Date: January 25, 2012

Faculty Supervisor Signature: E Garcia B Date: Feb 2, 2012
(if PI is a student)

For Administrative Use		REB: ___ REB-I ___ REB-II <input checked="" type="checkbox"/> REB-III	
___ The closing report of this terminated project has been reviewed			
<input checked="" type="checkbox"/> The continuing review for this project has been reviewed and approved			
___ Expedited Review		___ Full Review	
Signature of REB Chair or designate: <u>[Signature]</u>		Date: <u>Feb 15, 2012</u>	
Approval Period: <u>Feb 15, 2012</u> to <u>Feb 14, 2013</u>			

Submit to Lynda McNeil (lynda.mcneil@mcgill.ca), Research Ethics Officer, James Administration Building, 845 Sherbrooke Street West suite 429, fax: 398-4644 tel: 398-6831. Electronic submissions with scanned signatures are accepted but must come from the PI's McGill email.

(version 10/10)

McGill University

ETHICS REVIEW
RENEWAL REQUEST/STUDY CLOSURE FORM

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REB File #: 243-0208

Project Title: Promoting physical activity among the adolescents of an underserved community: Can capacity building help?

Principal Investigator/Department: Paula Bush/Department of Kinesiology & Physical Education

Email: paula.bush@mcgill.ca

Faculty Supervisor (if student is the PI): Enrique Garcia Bengoechea

1. Were there any significant changes made to this research project that have any ethical implications? ___ Yes ☒ No
If yes, and these have not already been reported to the REB, describe these changes and append any relevant documents that have been revised.
2. Are there any ethical concerns that arose during the course of this research? ___ Yes ☒ No. If yes, please describe.
3. Have any participants experienced any unanticipated issues or adverse events in connection with this research project?
___ Yes ☒ No
If yes, please describe.
4. Is this a funded study? ___ Yes ☒ No.
List the agency name and project title and the Principal Investigator of the award if not yourself. This information is necessary to ensure compliance with agency requirements and that there is no interruption in funds.

☒ Check here if this is a request for renewal of ethics approval.

___ Check here if the study is to be closed and continuing ethics approval is no longer required. A study can be closed when all data collection has been completed and there will be no further contact with participants.

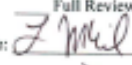
Principal Investigator Signature: 

Date: Feb 5, 2013

Faculty Supervisor Signature: E. Garcia B.
(if PI is a student)

Date: Feb 5, 2013

Submit to Lynda McNeil (lynda.mcnell@mcgill.ca), Research Ethics Officer, James Administration Building, 845 Sherbrooke

For Administrative Use	REB: ___ REB-I ___ REB-II <u><input checked="" type="checkbox"/></u> REB-III
___ The closing report of this terminated project has been reviewed	
<u><input checked="" type="checkbox"/></u> The continuing review for this project has been reviewed and approved	
<u><input checked="" type="checkbox"/></u> Delegated Review Full Review	
Signature of REB Chair or designate: <u></u>	Date: <u>Feb. 15, 2013</u>
Approval Period: <u>Feb. 15, 2013</u> to <u>Feb. 14, 2014</u>	

Appendix H

YMCA Employee Consent Form



McGill

Project: Physical activity promotion

YMCA Employee Consent form

Hello,

My name is Paula Bush and I am a resident of Point St. Charles and a student in the Kinesiology and Physical Education Department at McGill University. I am conducting a study in partnership with the Pointe-Saint-Charles YMCA. The goal of the study is to collaborate with you, other YMCA employees, and volunteers in order to develop ways to engage teenagers in the sports and physical activities offered during the after-school programme.

This collaboration will entail meetings, conversations, and email with you, other YMCA employees, volunteers and myself, in order to assess the needs of your organisation and the youth regarding the teen program. I would like your permission to use our emails, the minutes of our meetings and also the information we discuss during our conversations as data for my research. I would also like your permission to observe you during the after school programme. This will help me to assess the evolution of the programme throughout our collaboration. Also, these data will be used to help your organisation develop activities which will entice the youth of the community to join the after-school program. It will also be used to develop promotional means which will enhance the popularity of the program. Finally, I would like the opportunity to discuss with you, other YMCA employees, and volunteers in small groups. I would like to discuss the aspects of both the program and our collaboration which you feel are and are not successful. In this way, we will be able to make appropriate changes to the program and also improve our collaboration. I would like your permission to tape record these group discussions.

I may present some of the results from this study at conferences. I will also publish the results in academic journals. However, **I will never release any information which would allow others to identify you.** Please note that I cannot guarantee the confidentiality of our discussions and meetings which will take place in group settings. However, the information discussed in these settings will be used only for the purposes of my research and the improvement of the after-school program. Also, all the notes and tape recordings I collect from our meetings, conversations, group discussions, and my observations will be stored in a locked cabinet at McGill University. Only my supervising professor and I will have access to these documents. Once the study results have been published, all original data will be destroyed.

Should you agree to some or all of the terms outlined above, please fill in the attached form and return it to Paula. Please note that signing this agreement form does not mean you have to participate in this study. It means you can participate should you want to. Also, you can stop participating at any time.

Please do not hesitate to contact me should you have any questions or concerns. Also, if you have questions or concerns about your rights as a volunteer in this project please contact the McGill Research Ethics Office at 514-398-6831.

Thank you in advance for your collaboration,

Paula Bush, Kinesiologist, MSc,
Doctoral Student
Tel : (514) 398-4184 ext. 00920
Department of Kinesiology and
Physical Education McGill
University
email : paula.bush@mail.mcgill.ca

Research Advisor
Enrique García Bengoechea, PhD
Tel : (514) 398-4184 ext. 0541
Department of Kinesiology and
Physical Education, McGill
University
email : enrique.garcia@mcgill.ca

Please keep this letter for your personal files

Page 2

Project: Physical activity promotion
YMCA Employee Consent form

Your name (please print): _____

I have read this letter and I understand that Paula Bush will use the data she collects for the purposes of her research and also to help the Pointe-Saint-Charles YMCA improve its after school teen programme. Therefore, I agree to have Paula Bush use information gathered

- ☐ **during our meetings**
- ☐ **during our informal conversations**
- ☐ **from observing my practices with the youth in the after school programme**
- ☐ **from digitally recorded group discussions**
- ☐ **from our emails**

Signature

Date

☐ **I would like to receive email updates about project activities**

email

Appendix I

Confidentiality Agreement



Confidentiality agreement between Paula Bush and the YMCA Pointe-Saint-Charles. (Signed 14/10/10)

Community Initiatives

International Initiatives

Children and Youth

Education and Training


Health, Fitness and Recreation

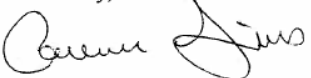
Donations and Volunteering

I, Paula Bush, agree to maintain strict confidentiality with regard to the **names, personal information, health issues and staff commentaries** in all documentation released to me, primarily the YMCA Teen Programs Nightly Check-Ins. The YMCA recognizes the validity and value of Miss Bush's research and requests that final findings be shared with both the Teen Programs Coordinator and the Centre Director prior to submission and publication.

By signing this release, the YMCA agrees to share elements of its internal records with regards to Teen Programming.

Paula Bush, M.S.C. agrees to maintain the aforementioned confidentiality clauses.


Sharon Parry, Centre Director


Connor Timmons, Teen Programs Coordinator


Paula Bush, M.S.C., McGill University

Appendix J

Data Collection and Entry Tools

1. Registration form to collect relevant demographic data for teens



TEEN ZONE
2009 - 2010

PLEASE PRINT CLEARLY

PARTICIPANT INFORMATION :	
PARTICIPANT: _____ <input type="checkbox"/> M <input type="checkbox"/> F	
<small>FAMILY NAME FIRST NAME</small>	
DATE OF BIRTH: ____ / ____ / ____ AGE: ____ SCHOOL NAME: _____	
<small>YEAR MONTH DAY</small>	
ADDRESS: _____	
<small>NUMBER STREET APT POSTAL CODE</small>	
NEIGHBOURHOOD: <input type="checkbox"/> PSC <input type="checkbox"/> Burgundy <input type="checkbox"/> St. Henri <input type="checkbox"/> Verdun <input type="checkbox"/> Other (specify) _____	
Participant's TEL. #: _____ Participant's E-MAIL: _____	
PARENT: _____	
<small>FAMILY NAME FIRST NAME</small>	
Tel. # home: _____ Tel. # work: _____ Cell: _____	
PARENT: _____	
<small>FAMILY NAME FIRST NAME</small>	
Tel. # home: _____ Tel. # work: _____ Cell: _____	
Parent's/guardian's e-mail: _____	
LANGUAGES SPOKEN: <input type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> Other (specify) _____	
HOW DID YOU FIND OUT ABOUT THE YMCA POINTE-ST-CHARLES TEEN PROGRAMS?	
<input type="checkbox"/> Friend <input type="checkbox"/> FACEBOOK <input type="checkbox"/> WEBSITE <input type="checkbox"/> ADVERTISEMENT <input type="checkbox"/> EMAIL <input type="checkbox"/> POSTER <input type="checkbox"/> OTHER (specify) _____	
SWIM LEVEL (Indicate the level last completed): _____	

EMERGENCY CONTACTS (OTHER THAN PARENTS/GUARDIAN)	
1. NAME: _____	Relationship to participant: _____
Tel. # home: _____ Tel. # work: _____ Cell: _____	
2. NAME: _____	Relationship to participant: _____
Tel. # home: _____ Tel. # work: _____ Cell: _____	

Activity Numbers

- 1- Drop-in
- 2- Homework Help
- 3- Hockey
- 4- Dance
- 5- Basketball
- 6- Cooking
- 7- Girls' Night
- 8- Rock climbing/Swimming

[illegible]

4. Excerpt from our Excel participation data entry tool. Each row represents one teen. Daily participation for each teen is entered and coloured columns total the number of teens and number of visits to the full program as well as each individual activity. Columns of demographic data for each teen are not shown.

MonNO V28	TueNO V29	WedNO V30	NOVPro gram: # teens	NOVPro gram: # visits	NOVDro p in: # teens	NOVDro p in: # visits	NOVHo me- work: # teens	NOVHo me- work: # visits	NOVHo ckey (MT): # teens	NOVHo ckey (MT): # visits	NOVVan ce: # teens	NOVVan ce: # visits	NOVbas ket-ball (W/F): # teens	NOVbas ket-ball (W/F): # visits	NOVDin ner night: # teens	NOVDin ner night: # visits	NOVGrl s' night: # teens	NOVGrl s' night: # visits	NOV Teen Night# teens	NOVtee night# Visits
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3			1	6	1	3	0	0	1	6	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	4	1	1	18	1	16	1	3	1	2	1	5	1	2	0	0	0	0	1	2
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1		5	1	4	1	3	0	0	0	0	0	0	1	1	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			1	5	1	2	0	0	0	0	1	2	0	0	0	0	0	0	1	1
			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		6	1	2	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0
		6	1	2	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0
		6	1	2	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0
		6	1	2	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0
			1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	8	16	61	293	46	209	7	17	22	64	6	17	18	37	10	18	6	7	23	30

Appendix K

YMCA Teen Program Evaluation Framework

This appendix contains excerpts from the teen program evaluation framework I prepared for the YMCA in April 2011: *Evaluating the YMCA Teen Program: Increased participation intensity, breadth, and duration leads to positive outcomes in youth*. The integral document is 23 pages and presents evidence from out-of-school-time literature regarding recruitment and retention of adolescents in after school programs, as well as specific quantitative and qualitative indicators and assessment means. All deletions are denoted by ***

Introduction

“Afterschool’ is the general term used to describe an array of safe, structured programs that provide children and youth ages kindergarten through high school with a range of supervised activities intentionally designed to encourage learning and development outside of the typical school day.” (Little, Wimer, & Weiss, 2008 p. 1)

Research has clearly demonstrated the association between afterschool programs and youth outcomes; however, many factors other than afterschool programs contribute to youth outcomes (e.g., family experiences, neighbourhood, peer group, school, etc.) (Granger, Durlak, Yohalem, & Reisner, 2007). As such, it is difficult to draw a cause-effect link between programs and youth outcomes. Many suggest supplementing

the measurement of youth outcomes with an ongoing assessment of program and staff practices (i.e., program quality improvement) (Granger, et al., 2007).

Furthermore, **higher exposure to afterschool programs is associated with greater benefits for teens**. Specifically, those who participate 1) frequently in programs, 2) in several activities within the program, and 3) over a long period of time, reap the greatest benefits (Simpkins Chaput, Little, & Weiss, 2004). **Improving program quality leads to increased and sustained youth participation** (Deschenes et al., 2010), thus, it is important to **focus efforts on improving quality in order to improve youths' outcomes**.

Outcomes of adolescent after-school programs

After-school programs can impact youth outcomes in the following four categories:

Academic outcomes

Social/emotional outcomes

Prevention outcomes

Health and wellness outcomes

In Quebec, 61% of 13 year old girls and 57% of 13 year old boys are not sufficiently active⁵ to reap health benefits. Among 16 year olds, these percentages increase to 69% of girls and 60% of boys. Research has

⁵ These proportions are from a 2009 report; recommendations have since changed. The 2011 guidelines stipulate that teens must accumulate 60 minutes of moderate-to-vigorous physical activity EACH day. Thus, the proportion of teenagers who are sufficiently active is greater than what is indicated here.

demonstrated that afterschool programs have the potential to promote general health, fitness, and wellness by engaging teens in physical activities and sports, promoting the importance of healthy lifestyle behaviours, and providing healthy snacks (Little, et al., 2008). Potential health and wellness outcomes include (Little, et al., 2008):

- Better food choices
- Increased physical activity
- Reduction in BMI⁶
- Improved blood pressure
- Improved body image
- Increased knowledge of nutrition and health practices

Characteristics of high quality afterschool programs

According to research on afterschool program quality and its relationship to outcomes, other than ensuring adequate physical and psychological safety and effective management practices, quality afterschool programs also:

- 1) Provide appropriate supervision and structure,
- 2) Employ well-prepared staff,
- 3) Design and implement intentional programming with opportunities for autonomy and choice, and
- 4) Have strong partnerships with teens' schools and families as well as other organisations where youth spend their time.

Appropriate supervision and structure

Well prepared staff

Intentional Programming

⁶ BMI is the Body Mass Index. It refers to the relationship between an individual's height and weight. It is calculated as follows: weight in kilograms/height in metres²

This points to the importance of determining specific goals, and designing specific activities to achieve these goals (Little, et al., 2008).

Strong partnerships

Summary

1. Adolescents who participate frequently in afterschool programs, in several activities within the programs, and over an extended period of time experience academic, social/emotional, and overall healthy lifestyle behaviour and wellness benefits.
2. High quality programs are successful in recruiting and retaining teen participants
3. Improvements in program quality lead to improvements in recruitment and retention, and higher levels of participation can be associated with improvements in youth outcomes
4. Ongoing assessment of program quality can lead to informed decisions regarding program modifications. This will, in turn, lead to improved recruitment and retention of participants, and hence, participants' outcomes.

Part A of this document outlines assessment of participation. Part B outlines assessment of program quality improvement.

Part A. Assessing program participation

Indicators of participation

Teen program participation can be measured by four indicators outlined below. Each indicator captures a unique dimension of overall participation (Simpkins Chaput, et al., 2004).

Teens do or do not participate in the program

- This indicator is the one most often used by programs. It is the most cost-effective and easy to measure, *but it captures the least amount of information.*

Intensity of participation

- This indicator refers to the frequency of participation in terms of days/week
- Among teenagers, intensity of participation in afterschool programs has been found to be associated with the following outcomes (Simpkins Chaput, et al., 2004):
 - Higher academic achievement and grades;
 - Spending more time on homework;
 - Long-term educational and occupational outcomes;
 - Beliefs concerning school (e.g., higher belief that cheating is bad, feeling of belonging at school);
 - Lower problem behaviour, less cigarette and drug use;
 - Higher beliefs about abilities;
 - Engagement in more community service or volunteering;
 - Better emotional adjustment, increased happiness, lower suicidal risk;
 - More optimistic perceptions of the future
- Research has yet to identify a minimum level of intensity which may lead to these outcomes. However, outcomes improve with increasing levels of intensity (Simpkins Chaput, et al., 2004)

Duration of participation

- Varies from intensity in that it measures the history of attendance (e.g., 2 teens may participate 3 times per week (intensity), but one has been attending the program for 6 months, whereas, the other has been participating for 2 years (duration)).
- Duration of at least 1, but preferably 2 years is positively related to youth outcomes. Increased benefits emerge as duration increases (Simpkins Chaput, et al., 2004).

Breadth of participation

- This indicator refers to the number of different activities teens attend within the program.
- Although few researchers discuss breadth or use it as a predictor of youth outcomes, some evidence indicates that greater breadth of participation is associated with higher grades and academic test scores (Simpkins Chaput, et al., 2004).

Finally, youth benefits accrue with greater intensity, breadth, *and* duration of participation (Lauver, Little, & Weiss, 2004; Simpkins Chaput, et al., 2004).

Use of indicators

Assessing intensity, duration, and breadth of participation provides a more nuanced understanding of differences of patterns of participation among teens. Given that these indicators are associated with positive outcomes in youth, **it is possible to use this more detailed participation data to argue the effectiveness of the YMCA teen program** (i.e, If the Y can demonstrate that teens have increased their intensity of participation, then it can be

argued that the Y teen program quality has increased and is likely to lead to more positive outcomes in participants) (Simpkins Chaput, et al., 2004). Moreover, **understanding who is participating in which activities and when can provide insights for program quality improvement** (Simpkins Chaput, et al., 2004). For instance, tracking these indicators of participation allows for targeting recruitment to previous participants by, for example, placing individual phone calls to participants to encourage continued attendance (Deschenes, et al., 2010).

Although the benefits of teens' high intensity, breadth, and duration of participation are clear, **after-school programs face declines in participation throughout the teen years** (Deschenes, et al., 2010; Lauver, et al., 2004). Youth are attending programs between 0.9 and 2.4 days per week and most programs experience attrition of 20% to 40% of their registered teens early in the program year (Lauver, et al., 2004). Additionally, according to Little and colleagues (2008) when comparing youth across a variety of demographic variables, it is those who come from families with higher income and more education who are more likely to:

- 1) Participate in afterschool activities,
- 2) Participate with greater frequency during the week, and
- 3) Participate in a greater number of different activities within a week or a month

Research has identified many afterschool program characteristics which are associated with high retention rates⁷ among teenagers. "Findings suggest that high-retention programs have strong organizational capacity

⁷ For the data reported here, 'high retention' is defined as 50% or more of participants attending the program for 12 months or more (Deschenes, et al., 2010).

and sound program management. These programs' staff members have time to go the extra mile, attend meetings and plan programming, network with other providers and schools, and attend professional development opportunities"(Deschenes, et al., 2010. p. Xv).

Part B. 26 strategies to increase program participation and decrease attrition

Deschenes et al (2010) found **three structural features** that were associated with high retention programs:

- 1) **Being community based,**
- 2) **Enrolling 100 or more teens, and**
- 3) **Holding regular staff meetings.**

Being a larger program enrolling 100 or more youth per year might indicate a stronger organizational infrastructure and better resources that in turn contribute to stronger programs for adolescents. Meetings represent an intentional focus on program planning and management. Meetings also provide opportunities for critical thinking and problem solving which are elements of organisational capacity, and strong organisation capacity is a feature of high retention programs (Deschenes, et al., 2010). Meetings also provide a way for all staff members to stay informed about issues regarding particular youth or activities, which in turn, allows staff members to support youth collectively. Deschenes and colleagues (2010) also found a number of **program characteristics** which are associated with high retention programs. Following is a list of **26 strategies** derived from the structural features and program characteristics **associated with high retention teen after-school programs** (or in other words, high quality programs). I have grouped them into four categories:

- 1) Organisational capacity,
- 2) Staff commitment⁸,
- 3) Program structure, and
- 4) Addressing teens' needs and interests.

Unless otherwise indicated, strategies pertain to adolescents of all ages.

Qualitative and quantitative means of assessment are suggested.

Note: It may seem overwhelming to implement and assess all 25 strategies. Focussing on some of these strategies is adequate. In fact, **it is recommended that program providers choose a finite set of outcomes to work toward, align services with those outcomes, and use program quality improvement to make claims about potential impact on youth outcomes** (Granger, et al., 2007).

26 strategies employed by high quality programs

Note: details have been deleted for purposes of concision. In the original document, each strategy is accompanied by a brief description, supporting references, and suggested indicators and means to assess them.

Organisational capacity

1. Make use of relationships the Y has with other organisations and individuals (Deschenes, et al., 2010)
2. Staff members meet about the program for 30 or more minutes twice per month (Deschenes, et al., 2010)

⁸ Staff commitment can also be viewed as an element of organisational capacity

Staff Commitment

3. Reach out directly to teens and their families in their homes and communities (Lauver, et al., 2004)
4. Hire program staff who develop real connections with participants
5. Form strong relationships with new members within the first 2 to 3 months (Lauver, et al., 2004)
6. Stay informed about what is going on with teens outside of the program in at least 3 different ways (Deschenes, et al., 2010) (see examples in Table 1)

Program structure

7. Open the program 5 days per week (or more) and in the summer
8. Offer a flexible schedule so teens can sign up for certain activities and/or just drop in for others.
9. Offer at least 5-6 different types of activities
10. Provide at least 5 leadership opportunities (Deschenes, et al., 2010)
11. Offer a choice of interesting “real world” activities (Lauver, et al., 2004).
12. Offer a choice of several ‘drop-in’ activities (Lauver, et al., 2004).
13. Offer at least 3-4 opportunities to interact with peers (Deschenes, et al., 2010).
14. Offer youth their own space (Deschenes, et al., 2010).
15. Create structures and routines to make youth feel comfortable and safe

Addressing teens' needs and interests

16. Ensure teens can participate in the planning of activities (Lauver, et al., 2004)
17. Enlist teens' help to act as recruiters or program ambassadors (Lauver, et al., 2004)
18. Offer an orientation for new participants who may be nervous about participating for the first time or with older teens (Lauver, et al., 2004).
19. Provide opportunities the teens to not get elsewhere
20. Offer academic, leadership and community service activities
21. Provide formal and informal opportunities to explore and prepare for college and other post-graduation plans
22. Create programming for teens in 8th (and possibly 9th) grade that includes more responsibility and skills aimed at having a successful 9th grade year (Lauver, et al., 2004).
23. Give youth more responsibility through job-like programming, apprenticeships, and mentoring
24. Offer the content and the particular skills older teens want to learn
25. Recruit at risk youth⁹ (Lauver, et al., 2004)
26. Recruit groups of friends

⁹ At-risk youth have a higher likelihood of school failure, live in socially disorganized communities or have troubled family lives, use drugs or alcohol or have peer drug models, and have higher levels of school absences.

Combining strategies

Programs with high retention rates use more strategies to address an issue (e.g., leadership, parent engagement, etc.) than those with low retention rates (Deschenes, et al., 2010). Moreover, for each strategy many specific actions are possible. Some of these specific actions, when used alone, are associated with high retention rates. In Table 1, these specific actions are indicated with an asterisk. Those with no asterisk are associated with high retention when used in conjunction with the others.

Table 1. Specific actions that can be taken in each strategy

Provide at least 5 leadership opportunities	<ul style="list-style-type: none"> – Community service activities* – Youth council/decision making groups* – Volunteer opportunities* – Opportunities to serve in official ‘officer’ roles* – Opportunities to design/lead activities for peers or younger youth* – Paid staff positions* – Opportunities to have input into designing activities – Opportunities to work one-on-one with peers or younger youth – Opportunities to shape program rules
Keep informed about youth in at least 3 different ways	<ul style="list-style-type: none"> – Make school visits* – Collect report cards* – Meet regularly with youth one-on-one* – Contact parents regularly* – Publicly recognise teens’ accomplishments in activities outside the program*
Offer at least 2-3 rewards and incentives	<ul style="list-style-type: none"> – Jobs* – School credit* – Field trips* – Formal public recognition* – Financial incentives, – Awards/gift certificates
Offer at least 3-4 opportunities to	<ul style="list-style-type: none"> – Youth councils* – Groups to plan activities*

interact with peers	<ul style="list-style-type: none"> – Performances or presentations – Activities structured around small groups of teens – Time to hang out with peers
Employ at least 5-6 recruitment strategies	<ul style="list-style-type: none"> – Ask youth to refer friends, – Recruit at community events, – Staff members go into communities to tell teens about programs* – Ask youth to refer siblings, – Recruit through youth-led events, – Visit schools to get referrals, – Partner organisations refer youth* – Offer stipends to refer youth
Offer at least 5-6 different types of activities	<ul style="list-style-type: none"> – Youth employment/apprenticeship*, – College preparation*, – Leadership*, – Academics*, – Targeted course/training* – Prevention, – Enrichment, – Recreation)
Employ at least 7-8 parent engagement activities	<ul style="list-style-type: none"> – Hold individual meetings with parents* – Send parents program information* – Send newsletters with community resources* – Get parent input through surveys/group meetings* – Provide courses for parents* – Hold events for parents* – Invite parents to program activities, meet with parents formally, – Talk with parents by phone
Offer at least 6-7 services for youth	<ul style="list-style-type: none"> – Assistance with college applications*, – Sexual risk behaviour prevention* – Links to jobs* – DES help* – Paid jobs in the program* – Violence prevention* – Job skills* – Health* – Computers, – Life skills, – Drug prevention

References

- Deschenes, S. N., Arbretton, A., Little, P. M. D., Herrera, C., Baldwin Grossman, J., Weiss, H. B., & Lee, D. (2010). Engaging Older Youth: Program and City-Level Strategies to Support Sustained Participation in Out-of-School Time. Cambridge, MA: Harvard Family Research Project. Retrieved April 27 2011 from <http://www.hfrp.org/out-of-school-time/publications-resources/engaging-older-youth-program-and-city-level-strategies-to-support-sustained-participation-in-out-of-school-time>.
- Durlak, J., & Weissberg, R. (2007). The impact of after-school programs that promote personal and social skills. Chicago, IL: Collaborative for Academic, Social, and Emotional Learning. Retrieved April 27 2011 from <http://www.lions-quest.org/pdfs/AfterSchoolProgramsStudy2007.pdf>.
- Granger, R., Durlak, J. A., Yohalem, N., & Reisner, E. (2007). Improving after-school program quality. New York, N.Y: William T. Grant Foundation.
- Lauver, S. C., Little, P. M. D., & Weiss, H. (2004). Moving Beyond the Barriers: Attracting and Sustaining Youth Participation in Out-of-School Time Programs (*Issues and Opportunities in Out-Of-School Time Evaluation, Brief No. 6*). Cambridge, MA: Harvard Family Research Project. Retrieved April 27 2011 from <http://www.hfrp.org/publications-resources/browse-our-publications/moving-beyond-the-barriers-attracting-and-sustaining-youth-participation-in-out-of-school-time-programs>.
- Little, P. M. D., Wimer, C., & Weiss, h. B. (2008). Afterschool programs in the 21st century: Their potential and what it takes to achieve it. (*Issues and*

Opportunities in Out-of-School Time Evaluation, Brief No. 10.).

Cambridge, MA: Harvard Family Research Project. Retrieved April 27

2011 from <http://www.hfrp.org/publications-resources/browse-our-publications/after-school-programs-in-the-21st-century-their-potential-and-what-it-takes-to-achieve-it>.

Reisner, E. R., Lowe Vandell, D., Pierce, K. M., Bradford Brown, B., &

Pechman, E. M., Daniel. (2007). Charting the benefits of high-quality after-school program experiences: Evidence from new research on improving after-school opportunities for disadvantaged youth.

Washington, DC: Policy Studies Associates. Retrieved April 27, 2011 from

<http://www.statewideafterschoolnetworks.net/dat/promisingprograms1.pdf>

.

Simpkins Chaput, S., Little, P. M. D., & Weiss, H. (2004). Understanding and

measuring attendance in Out-of-School Time Programs (*Issues and Opportunities in Out-Of-School Time Evaluation, Brief No. 7*).

Cambridge, MA: Harvard Family Research Project. Retrieved April 27,

2011 from <http://www.hfrp.org/publications-resources/publications-series/issues-and-opportunities-in-out-of-school-time-evaluation/understanding-and-measuring-attendance-in-out-of-school-time-programs>.

Appendix L

YMCA Teen Program Evaluation Reports

This appendix presents excerpts from each of the quantitative and qualitative evaluation reports I prepared and submitted to YMCA partners, as well as some separate tables of results I submitted. Quantitative reports typically follow a similar format presenting results of similar analyses, together with program schedules, and participant names. To date, I have written and submitted 7 quantitative reports (Fall 2010 & 2011, Winter/Spring 2010 & 2011, Summer 2010 & 2011, and 2010 Annual report) ranging from 10-20 pages in length.

I have written and submitted one qualitative report to date. It covers one full year of qualitative data analysed according to our deductive framework presented in Appendix I and is 32 pages in length.

NOTE: This appendix contains only excerpts from reports. Text has been deleted for purposes of concision or confidentiality. All deletions are denoted by ***

**Excerpts from: Report of Participation in YMCA Pointe-Saint-Charles Teen
Zone Activities (Winter/Spring 2010)**

Session Schedule

- Attendance for Teen Zone activities was taken from **January 25 to June 23rd**.
- Regular program activities ran Monday to Friday 4:00-8:00 and also Saturdays.
- No activities were held **Thursday May 18th** due to the **Public Assembly**.
- The first 3 on 3 basketball tournament was held **Monday May 24th** for **FestiPointe** (no attendance data available).
- **Friday May 28th** was the **YHL banquet**. All other activities were suspended for this day.
- **March 1st to 5th** was **March break**. A special schedule of activities was organized (see Appendix A).

Summary of Winter/Spring 2010 Session Participation Results

All participants

- Overall, 120 teens frequented the Teen Zone this session. Of these participants, 23% were girls.
- On average, the 120 teens came 8 times (min = 1, max = 78) for a total of 956 visits.
- 66 teens came 3 times or less, whereas, 27 teens came 9 times or more (Figure 4 & Table 4).
 - **Boys** (91) attended an average of 8 times each (min=1, max=78) for a total of 757 visits. 49 boys (54%) came 3 times or less, whereas, 19 (21%) came 9 times or more.

- **Girls** (28) attended an average of 7 times each (min=1, max=29) for a total of 198 visits. 17 girls (61%) came 3 times or less, whereas, 8 (29%) came 9 times or more.
- *******
- **Girls do not seem to have a consistent pattern of participation each month** (there are too few to do statistical comparisons) (Table 6 & 7).
- 13 teens (4 girls) participated at least once each month (see Appendix B for list of names).
- 30 teens (5 girls) participated in February, March and April (see Appendix B for list of names).
- **Although 120 different teens attended at least one activity during the session, few attended on a regular basis. On average, 50 different teens come each month.** (see Tables 5, 6 & 7 for repeat attendance numbers).

Attendance by Activity

- For boys, attendance was greater when ball hockey was offered.
- For girls, attendance was greater (though not consistently) when girls' night was offered.

Conclusions and Recommendations

- On average, teens participated less than once per week, and in March, April and May, most participants came only once or twice (see Figures 4, 7, 10, 13, 16 & 19).
 - **Recommendation:** Increase the number of teens who come once per week.
 - **Potential Strategy:** Develop other specific programs, similar to the Monday Hockey league, to increase number of teens who feel a sense of membership to at least one Teen Zone activity.
 - **Indicator to assess:** Daily participation of each teen

- Although fewer girls participated, they did so as often as the boys. This is encouraging as it would seem to indicate girls will come as often as boys, provided an activity they like is offered.
 - **Recommendation:** Create a sense of belonging to the centre (or at least membership to an activity) that exists among boys who come for ball hockey, for example.
 - **Potential Strategies:** Offer gym time for girls. Talk with schools for ideas of sports to offer. Possibilities include: volley ball, soccer, dance, Double Dutch. Also consider individual activities (e.g., running, walking, swimming). Also, continue to incorporate active transit into seemingly popular activities like cooking.
 - ***
- An average of 50 teens came each month, whereas, 120 different teens came overall. This indicates more than ½ of the total participants did not come regularly.
 - **Recommendation:** Decrease the gap between average number of teens who come each month and total number of teens who come during the session. Ideally, the same teens would participate each month.
 - **Potential strategy:** Implement a systematic promotion strategy (including assessing teens interests) to increase teens' repeat attendance
 - **Indicator to assess:** ***
- Many teens attended activities for the first time during the session. This means the number of teens who are aware of the Teen Zone increased (c.f. 2009-2010 Action Plan). However, most did not return (Tables 7 & 8).
 - **Recommendation:** Target promotion to new participants. Develop and implement a systematic promotion strategy (including assessing teens' interests) to identify new participants and increase their repeat attendance.

- **Potential strategy:** Work with Paula to develop a relevant promotion strategy. Determine a time line for development and implementation
 - **Indicators to assess:** Repeat attendance of new teens (quantitative). Reasons for teens' repeat attendance (qualitative)
- Attendance for specific days of the week varies month to month. It is important to be able to see what activities are popular with the teens for future planning. Other details can be important for understanding variations in attendance. For example, Girls' night (Thursdays) was popular in February, but dropped off afterwards due to some "girl drama". Girls' night picked up again in May when new girls joined. Another example concerns Tuesday attendance: was there a change when the graffiti activity began?
 - **Recommendation:** Maintain a record of the actual schedule of activities so this information can be matched with the participation information.
 - **Potential strategy:** Indicate specific activities on attendance sheet. Work towards tracking attendance by activity (e.g., On Mondays, do they come for "drop in" or for hockey?)
 - **Indicator to assess:** Attendance of each teen by activity

- Currently, we don't have much demographic information for each teen (neighbourhood, school, how they found out about the Y, postal code, etc.). Collecting this information will help determine what population segments are and are not being reached. This information, in turn, can help determine where to focus recruitment efforts.
 - **Recommendation:** Ensure each teen fills out the registration form.

Table 1. Monthly Attendance for Boys and Girls

	Boys and Girls		Boys		Girls	
	Number of Teens	Number of Visits	Number of Teens	Number of Visits	Number of Teens	Number of Visits
January	28	59	22	47	6	12
February	58	251	44	199	14	52
March	73	245	56	191	16	53
April	50	155	43	131	7	24
May	48	143	36	109	12	34
June	31	103	19	80	12	23
Total	120	956	91	757	28	198
New Teens	56		42		13	

Table 2. Correlations of Boys' Average Monthly Attendance

	Average	# Teens	Feb.	March	April	May	June
Feb.	4.52	44		0.915* *	0.857 **	0.894**	0.746* *
March	3.41	56			0.853 **	0.881**	0.735* *
April	3.05	43				0.866**	0.677*
May	3.03	36					0.775* *
June	4.21	19					

** $p < 0.01$

Excerpts from: Report of Participation in YMCA Pointe-Saint-Charles Teen Zone Activities Summer 2010 Session

Summary of Summer 2010 Session Participation Results

All participants

- Overall, **52 teens** frequented the Teen Zone this session. Of these participants, **17 (33%) were girls**.
- On average, the 52 teens attended Teen Zone activities **5.5 ± 6.9** times (min. = 1, max. = 28) for a total of **279 visits**.
 - In June/July (25 days) : **36 teens (13 girls)** participated a total of **152** times (girls' total number of visits = 46)
 - In August (19 days): *******
- 34 (65%) teens came between 1 and 4 times, whereas, 18 (35%) teens came 5 times or more.
 - **Boys *****
 - **Girls (17)** attended an average of **4.5 ± 4.0** times each (min=1, max=16) for a total of **77 visits**.
 - 41% of girls (7) came 5 times or more (10 came 1-4 times).

During the summer, 18 participants (3 girls) attended only one time (see appendix B for list of names). Since their low rate of participation may bias results, analyses were repeated without these teens.

- **Overall:** 33 teens participated between 2 and 28 times, with an average participation rate of **7.9 ± 7.6** times.
- **Boys:** 19 boys participated between 2 and 28 times, with an average participation rate of **9.8 ± 9.0** times.
 - 58% (19) participated 5 times or more (8 participated 2-4 times)
- **Girls: *****

Yearly Comparison of Summer Participation

Summer participation data has been collected since 2008. Table 2 shows the number of teens, the total number of visits, and the average number of times teens' participated each summer.

	2008			2009			2010		
	# Teens	# Visits	Average participation rate (range)	# Teens	# Visits	Average participation rate (range)	# Teens	# Visits	Average participation rate (range)
Total	22	102	4.6 (1-12)	28	191	6.8 (1-31)	52	279	5.4 (1-28)
Boys	15	68	4.5 (1-12)	22	180	8.2 (1-31)	35	202	5.8 (1-28)
Girls	5	26	5.2 (1-12)	6	11	1.8 (1-3)	17	77	4.5 (1-16)

Overall Results for January 25th to August 27th, 2010

- During this period, 139 teens have participated between 1 and 103 times each, for a total of **1230 visits** and an average participation rate of **8.9 ± 16.9** times.
 - **Boys** (103) have participated between 1 and 103 times, for a total of total of **954 visits**. The average number of times they visited the centre during this period is **9.3 ± 18.6**.
 - **Girls** (35) have participated between 1 and 40 times, for a total of total of **275 visits**. The average number of times they visited the centre during this period is **7.9 ± 10.5**.
- Given the overall uneven pattern of participation, data were analysed categorically.
 - When split into 2 groups: those with below average participation (i.e., 1 - 8 times), and those with above average participation (i.e., 9 time or more):
 - 19% of boys (19) participated more than average.
 - 31% of girls (11) participated more than average.

During this period, 47 teens (31 boys, 15 girls) visited the centre only once. Since their low rate of participation may bias results, analyses were repeated without these teens.

- Between January 25th and August 27th 2010, 92 teens participated between 2 and 103 times each, for a total of 1183. Their average participation rate has been **12.9 ± 19.6** times.
 - **Boys** (72) have participated between 2 and 103 times, for a total of total of **923 visits**. The average number of times they visited the centre during this period is **12.8 ± 21.4**.
 - **Girls** (20) have participated between 2 and 86 times, for a total of total of **204 visits**. The average number of times they visited the centre during this period is **13.0 ± 11.5**.
- **Boys:** 18% (13) came more than average (13 times or more). 59 boys participated between 2 and 12 times.
- **Girls:** 40% (8) came more than average (13 times or more). 12 girls participated between 2 and 12 times.

Excerpts from: Report of Participation in YMCA Pointe-Saint-Charles Teen
Zone Activities Fall 2010 Session

OVERALL PROGRAM PARTICIPATION

Table 3 Monthly Attendance for Boys and Girls

	Boys and Girls		Boys		Girls	
	Number of Teens	Number of Visits*	Number of Teens	Number of Visits*	Number of Teens	Number of Visits*
Sept.	54	175 (3.3 ± 4.4)	46	151 (3.3 ± 4.7)	8	25 (3.3 ± 2.2)

Oct.	84	237 (2.8 ± 3.4)	71	183 (2.6 ± 3.1)	13	54 (4.2 ± 4.5)
Nov.	83	309 (3.7 ± 4.0)	66	261 (4.0 ± 4.1)	17	48 (2.8 ± 3.4)
Dec.	52	168 (3.2 ± 3.1)	36	123 (3.4 ± 3.4)	16	45 (2.8 ± 2.3)
Total	127	890 (7.0 ± 11.3)	101	718 (7.1 ± 12.0)	26	172 (6.1 ± 7.9)
New Teens		58		44		14

*Average number of visits with standard deviation are shown in parentheses

• ***

Table 4. Monthly participation for Teens who Participated in Activities

Other than Hockey

	Boys and Girls		Boys	
	Number of Teens	Number of Visits	Number of Teens	Number of Visits
October	74	225 (3.0 ± 3.6)	61	171 (2.8 ± 3.3)
November	68	273 (4.0 ± 4.3)	51	225 (4.4 ± 4.5)
December	50	166 (3.3 ± 3.1)	34	121 (3.6 ± 3.4)
Total	111	840 7.6 ± 11.9	85	668 (7.9 ± 12.9)

*September is not included because we began taking attendance by activity in October

**Girls are not included as none played hockey; their statistics are thus constant

- The above two tables must be interpreted in light of the number of hockey games held each month***

BREADTH OF PARTICIPATION

Table 5. Number of Teens Participating in Multiple Activities

Activities	Number of Teens	Activities	Number of Teens
Drop in & girls' night	11	Hockey & rock climbing	4
Drop in & boxing	6	Hockey & dinner night	6
Drop in & basket ball	13	Hockey & Boxing	4
Drop in & homework	4	Boxing & basketball	3
Drop in & dinner night	9	Girls' night and rock climbing	5
Drop in & rock climbing	10	Girls' night & homework	3
Drop in & hockey	41	Boxing & Rock climbing	2
Hockey & basketball	11	Boxing & Dinner night	3
Drop in & homework & rock climbing	3	Girls' night & Dinner night	3

Intensity of Participation

Average weekly participation: During the 16 week session, 127 teens participated an average of 0.4 ± 0.7 days/week (range: 0.1 - 3.9 days/week)

- 101 Boys (80%): 0.4 ± 0.7 days/week (range: 0.1 – 3.88 days/week)
- 26 Girls (20%): 0.4 ± 0.5 days/week (range: 0.1 - 2.1 days/week)

Table 11. Average weekly participation for the 16 weeks of the fall 2010 session

Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Wk 13	Wk 14	Wk 15	Wk 16
N	13	19	20	41	33	16	51	77	36	44	40	48	51	38	24
\bar{X}	2.0 ± 1.2	1 ± 1.7	2.2 ± 1.0	1.5 ± 1.0	1.6 ± 1.0	2.0 ± 1.0	1.4 ± 1.0	1.4 ± 1.0	1.4 ± 1.0	1.5 ± 1.0	1.4 ± 1.0	1.5 ± 1.0	1.5 ± 1.0	1.9 ± 1.0	1.6 ± 1.0
	1	7	7	0	0	0	0	8	6	0	0	9	1	0	8

N : Number of teens; \bar{X} : average number of days of participation

DURATION OF PARTICIPATION

Table 12. Fall 2010 session participation for teens who attended the centre each month

Boys and Girls			Boys			Girls		
Number of Teens	Number of Visits	Average # visits (range)	Number of Teens	Number of Visits	Average # visits (range)	Number of Teens	Number of Visits	Average # visits (range)

Excerpts from: Report of Participation in YMCA Pointe-Saint-Charles Teen Zone

Activities Winter/Spring 2011 Session

Summary

Programming

- The winter/spring 2011 session was 24 weeks in length (January 3-June 23)
- Similar to 2010, special activities were held for the March break (see page 17 for the schedule). Nine boys and two girls participated in 1 or 2 of the 5 activities offered.
- The regular ball hockey season ran through April.

Reach

- 134 teens frequented the Teen Zone this session. Girls accounted for 26% (n = 35) of all participants.
- Compared to the winter/spring 2010 session, 11% more teens participated in the winter/spring 2011 session.
- The 134 teens made 1080 visits to the centre. Girls accounted for 23.3% of all visits.
- On average, 28 ± 11 teens frequented the centre each week
- **Over the course of the session there was an increase in the number of girls attending centre activities each week (compared to a decrease in 2010)**

Intensity of participation

- The 134 teens participated an average of 8.1 ± 14.5 days overall. Their average weekly rate of participation was 1.2 ± 0.5 days per week.
- Similar to the 2010 session, about half of all participants attended Teen Zone activities 3 times or fewer.
- Statistical tests reveal there is no significant difference
 - between the average overall rate of participation in 2010 and 2011
 - between boys' and girls' average weekly rate of participation in 2010 and 2011

Duration of participation

- 15 teens (5 girls) participated at least once each month. They account for 55% of all visits to the centre.
- These 15 teens participated significantly more often than those who did not attend each month.
- 55 of the teens (11 girls) who participated during the 2010 winter/spring session also participated during the 2011 winter/spring session. This represents a 46% retention rate.
- For these 55 teens, there is no difference between their average rate of participation in 2010 and 2011.

Recommendations

Reach

- Since there has been an increase in the number of girls who frequent the centre regularly, develop more girl specific programs, such as offering gym time for girls. Carry out specific promotion activities for the girl specific programs to attract additional girls.
- Many teens attended the Teen Zone for the first time during the winter spring 2011 session but did not become regular participants. We have no information about these teens (e.g., phone number, last name) and cannot, therefore, contact them to tell them about program activities. In the future, record full names, phone numbers, emails, and facebook names of new teens who show up to the centre, so that you can maintain contact and promote your programs.
- Take note of how new teens find out about the YMCA Teen Zone; you may then choose to focus your promotional efforts based on what you observe to be effective.

Intensity

- Take steps to reduce the proportion of teens who come infrequently.
- Ensure you have contact information for all teens

- Enter all teens as friends on your Facebook page, even those who do not participate often.
- Phone teens to tell them about specific activities (e.g., reminders about basketball practices, frequent calls to girls about girl specific activities)
- Send Facebook messages regularly to keep teens informed
- Ask teens why they do not come often and record the answers; we may be able to determine means to counteract their behaviour.
- Consider mailing information to specific teens (e.g., summer program schedule mailed to all hockey participants)

Breadth

Breadth of participation refers to participation in more than one activity within the Teen Zone programs. Greater breadth of participation is associated with greater program impact because a teen who participates in several activities benefits from a higher exposure to the Teen Zone.

- Although a number of teens who drop in also participate in at least one other activity, more effort could be focussed on this aspect of the program.
- Consider promoting specific activities (e.g., rock climbing) to recruit new teens. Then, encourage these new teens to transfer over to the drop-in and other activities
- Ensure accurate attendance taking. The numbers presented in Table 5 (page 10) seem lower than what they are in reality. An accurate picture of teens' breadth of participation will allow you to make claims about potential program impact.

Program reach

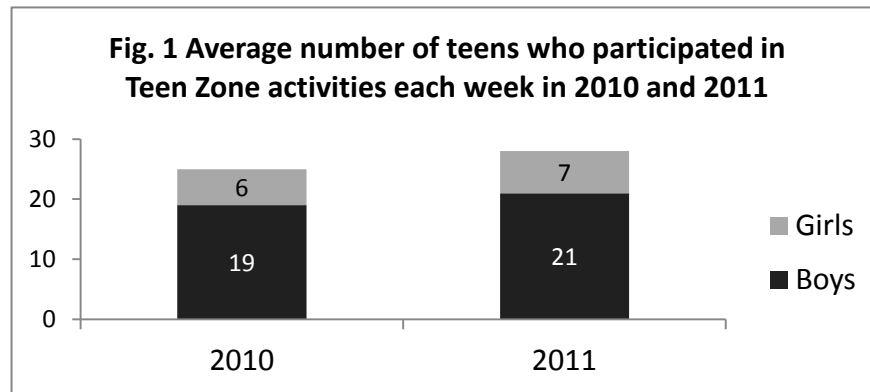
Compared to the winter/spring 2010 session:

- 11% more teens participated in the winter/spring 2011 session
- 32% more girls participated in the winter/spring 2011 session
- The proportion of female participants increased by 4%

Table 1. Number of teens who attended Teen Zone program activities in 2010 and 2011

Boys and Girls		Boys		Girls	
2010	2011	2010	2011	2010	2011
120	134	92	97	28	37
		76.7% of total	72.3 % of total	23.3% of total	27.6 % of total

In 2011, an average of 28 ± 11 teens attended Teen Zone activities each week. This is not significantly different from 2010 (25 ± 9 teens, on average, each week). The average number of teens present in the Teen Zone each week is shown in Figure 1.



As shown in Figure 2, the number of teens who attend the teen zone each week decreased over the 24 week session. However, this decrease is less pronounced in 2011 as compared to 2010 (the pattern of participation of the 2 years is not correlated: $r = .303$; $p = .171$). This is due to an **increase in the number of girls present in the centre each week**. As shown in Figure 3, the number of girls present each week decreased over the course of the 2010 season, whereas, it increased over the 2011 session ($r = -.535$, $p = .010$).

Fig. 2 Total number of teens each week in 2010 and 2011

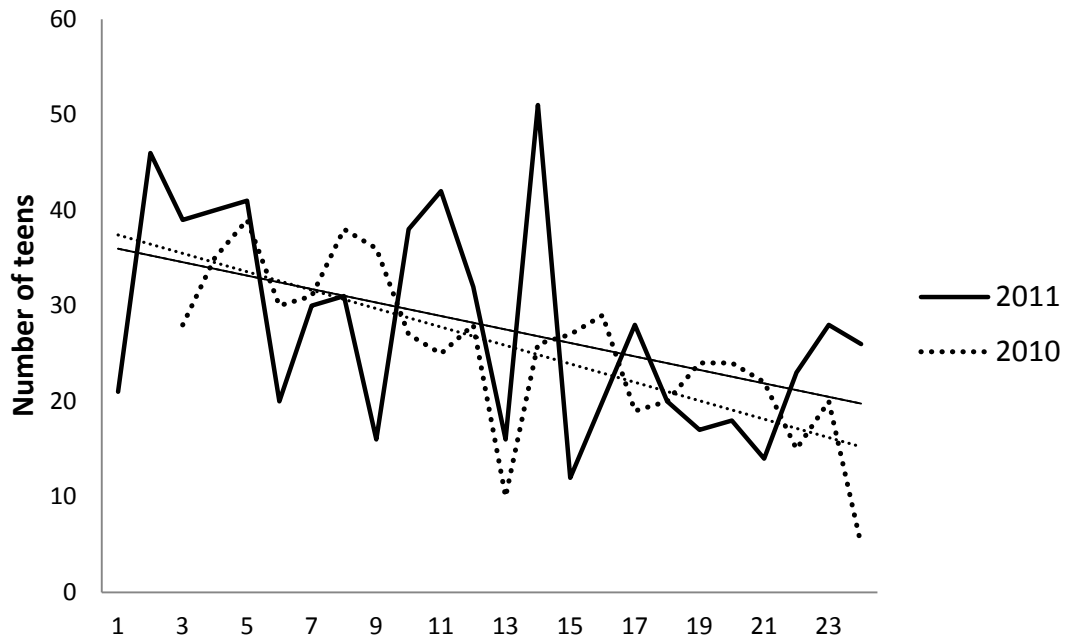
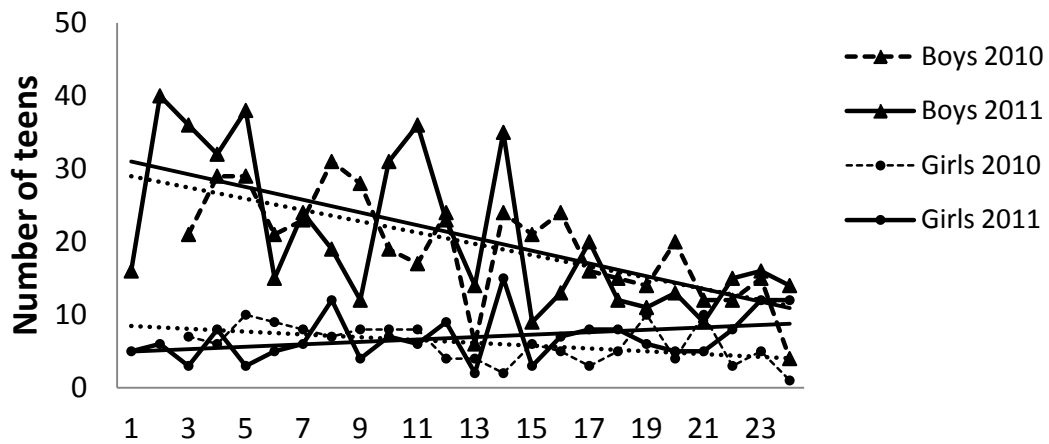


Fig. 3 Total number of boys and girls each week in 2010 and 2011



Overall program participation

Table 2. Total number of teens and total number of visits each month

	Boys and Girls		Boys		Girls	
	Number of Teens	Number of Visits*	Number of Teens	Number of Visits*	Number of Teens	Number of Visits*
Jan.	73	242 (3.3 ± 3.2)	61	211 (3.5 ± 3.2)	12	31 (2.6 ± 3.1)
Feb.	59	178 (3.0 ± 4.0)	44	141 (3.2 ± 4.4)	15	37 (2.5 ± 2.4)
March	66	229 (3.5 ± 4.0)	54	195 (3.6 ± 4.3)	12	34 (2.8 ± 2.0)
April	59	131 (2.2 ± 2.4)	44	95 (2.2 ± 2.6)	15	36 (2.4 ± 1.9)
May	45	143 (3.2 ± 3.4)	33	99 (3.0 ± 3.4)	12	44 (3.7 ± 3.7)
June	42	157 (3.7 ± 3.65)	23	94 (4.1 ± 3.8)	19	63 (3.3 ± 3.0)
Whole session	134	1080 (8.1 ± 14.5)	97	828 (8.5 ± 15.8)	37	252 (6.8 ± 10.4)
New Teens	33		18		15	

*Average number of visits with standard deviation are shown in parentheses

- ***
- 10 boys and 5 girls attended centre activities at least once each month
 - These 10 boys account for 56.3% of boys' total visits to the centre (466 out of 828 visits)
 - These 5 girls account for 50.4% of girls' total visits to the centre (127 out of 252 visits)
- ***

Intensity of Participation

Average rate of participation over the full session

- Overall, teens attended the Teen Zone an average of 8.1 ± 14.5 days. There was no statistically significant difference between the average rates of participation observed during the 2010 and 2011 sessions (2010: 8.0 ± 13.5 days, on average)
- There was no statistically significant difference between boys and girls average rate of participation in 2011 (Boys: 8.7 ± 15.9 times; Girls: 6.8 ± 10.5 times)

Average weekly rate of participation

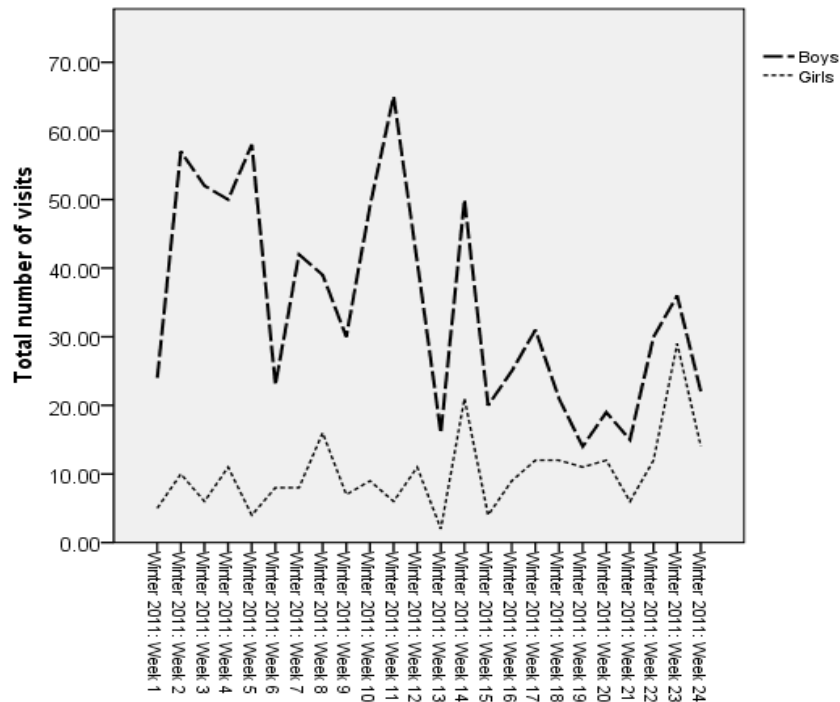
- ***
- The number of visits each week for boys and girls is shown in Figure 5.

Core group's average rate of participation

- 15 teens attended centre activities at least once each month
- Their overall average attendance was 39.5 ± 24.6 days (compared to 4.1 ± 4.7 days for those who came fewer than 1 time each month).
 - Boys: 44.0 ± 26.5 days
 - Girls: 25.8 ± 13.1 days
- Their average weekly rate of participation was 2.0 ± 0.9 days per week (compared to 1.1 ± 0.3 times per week for those who attended centre activities fewer than 1 time each month).
 - Boys: 2.3 ± 0.9 days per week
 - Girls: 1.5 ± 0.5 days per week
- **The difference in average overall rate of participation between the core group and the rest of the participants is statistically significant (Mann-Whitney U = 21.5 p = .000 effect size = .54)**

- The difference in average weekly rate of participation between the core group and the rest of the participants is statistically significant (Mann-Whitney U = 140.5 p = .000 effect size = .57)

Figure 5. Number of visits per week for boys and girls



DURATION OF PARTICIPATION

- 10 boys and 5 girls attended a teen zone activity at least once each month during the winter/spring 2011 session. A list of their names is provided on page 11.
- 55 teens attended centre activities in both the winter/spring 2010 and winter/spring 2011 sessions. This represents a 46% retention rate from 2010 to 2011.
 - 44 boys attended centre activities in 2010 and 2011. Their pattern of participation in 2010 is moderately correlated with their pattern of

participation in 2011.

$\tau=.48$, p (one tailed) = .000

- 11 girls attended centre activities in 2010 and 2011. Their pattern of participation in 2010 is moderately correlated with their pattern of participation in 2011.

$\tau=.56$, p (one tailed) = .010

BREADTH OF PARTICIPATION

Overall program

- 134 teens participated in program activities an average of 8.1 ± 14.5 times.

Drop-in

- 115 teens took advantage of the drop-in centre an average of 7.2 ± 13.3 times.
 - Boys: 81; average participation rate: 7.9 ± 14.6 times
 - Girls: 34; average participation rate: 5.8 ± 9.5 times

Comparison tables 2010-2011

Prepared following meeting in February 2012 about results where I learned of other reporting needs.

	Boys and Girls		Boys		Girls	
	Number of Teens	Number of Visits	Number of Teens	Number of Visits	Number of Teens	Number of Visits
Winter 2010	120	956	191	757	28	198
Summer 2010	52	279	35	202	17	77

Fall 2010	127	890	101	718	26	172
Winter 2011	134	1080	99	828	35	252
Summer 2011	75	538	42	292	33	245

Winter 2010-Winter 2011

11% increase in number of teens; 13% increase in number of visits

Summer 2010-Summer 2011

44% increase in number of teens; 93% increase in number of visits (session was 1 week longer in 2011)

	Boys and Girls		Boys		Girls	
	Number of Teens	Number of Visits	Number of Teens	Number of Visits	Number of Teens	Number of Visits
Feb. 2010	58	251	44	199	14	52
March 2010	73	245	56	191	16	53
April 2010	50	155	43	131	7	24
May 2010	48	143	36	109	12	34
June 2010	31	103	19	80	12	23
June/July	37	152	24	106	13	46
August 2010	34	127	24	96	9	31
Sept. 2010	54	175	46	151	8	25
Oct. 2010	84	237	71	183	13	54
Nov. 2010	83	309	66	261	17	48
Dec. 2010	52	168	36	123	16	45
Jan. 2011	73	242	61	211	12	31
Feb. 2011	59	178	44	141	15	37
March 2011	66	229	54	195	12	34
April 2011	59	131	44	95	15	36

Appendix L YMCA Teen Program Evaluation Reports

May 2011	45	143	33	99	12	44
June 2011	42	157	23	94	19	63
June/July 2011	57	280	30	147	27	133
August 2011	55	258	30	145	24	112
Sept. 2011	70	297				
Oct. 2011	74	258				
Nov. 2011	61	293				
Dec. 2011	41	169				

Compare change in number of teens vs. change in number of visits. For example:

- In October 2011 there was an 11% decrease in number of teens compared to October 2010, but a 15% increase in number of visits.
- In December 2011 there was a 21% decrease in number of teens compared to December 2010, but the number of visits was the same both years.
- In June 2011 there was a 35% increase in number of teens compared to June 2010, and a 52% increase in number of visits.

Average # teens per day (SD)		Average # teens per day (SD)	
		January 2011	12 ± 10
February 2010	13 ± 7	February 2011	9 ± 8
March 2010	11 ± 8	March 2011	10 ± 9
April 2010	6 ± 7	April 2011	9 ± 5
May 2010	7 ± 4	May 2011	7 ± 5
June 2010	5 ± 3	June 2011	9 ± 5
June/July 2010		June/July 2011	11 ± 4

August 2010		August 2011	11 ± 6
September 2010	9 ± 5	September 2011	14 ± 9
October 2010	10 ± 7	October 2011	15 ± 9
November 2010	13 ± 8	November 2011	13 ± 6
December 2010	7 ± 6	December 2011	9 ± 5

In both years there were 5 hockey games in November; this can account for the higher numbers relative to the other months

Given the large standard deviations it is unlikely there has been a statistically significant increase in the average number of teens per day each month.

However, it would appear there are more busy days than in the past

The following are excerpts from the report of qualitative data entitled: Pointe-Saint-Charles Y Teen Program Evaluation April 1, 2010 - March 30, 2011.

Staying informed about various aspects of teens' lives

After school teen program research has indicated the importance of staff staying informed about what is going on with teens outside of the program in at least 3 different ways (Deschenes et al., 2010). YMCA teen program staff have surpassed this by staying informed about teens':

- relationships (romantic and friends),
- issues and situations in their personal and home lives,
- school situations,
- drug use and abuse, and
- what teens do after the teen zone program closes at 8 PM

Staff have stayed informed primarily via their observations and conversations with the teens about various aspects of their lives (note that it is not always clear whether it is the staff or teens who brings up a particular subject). **Additional strategies could be used.** For example, Deschenes, et al. (2010) found the following strategies are associated with programs with high rates of retention:

- Publicly recognise teens' accomplishments in activities outside the program
- Meet regularly with youth one-on-one

Check-ins indicate that parents and guardians have also been a source of information, though to a lesser extent. **Reaching out more to schools and families could increase staff's knowledge of the teens and their ability to intervene accordingly.** For example, Deschenes et al. (2010) found the following strategies are associated with programs with high rates of retention:

- Visiting schools
- Collecting report cards
- Contacting parents regularly

Staff develop real connections with teens

- Check-ins indicate that staff regularly participate with teens in various activities (pool, ping pong, board games, recreational basketball).
- Since April 2010, there has always been one male and one female youth worker employed and both are bilingual. This was not always been the case in the past.
 - Text deleted for purposes of concision

Since April 2010, discussions have covered:

- ***
- other issues described as “meaningful”, “thought provoking”, “more positive and respectful”, and “on point”

Reaching out directly to teens and their families

Potential means to reach out directly to teens and their families include phone calls, home visits, school visits, visits to group homes and HLMs, and presence during community events. Programs with high rates of retention use strategies to engage families (Deschenes, et al., 2010). Establishing relationships with the program's staff can help teens and their parents to feel comfortable with the program (e.g., checking in with new participants regularly, checking on them when their attendance drops off, and contacting them to find out why they left the program (Lauver, et al., 2004)).

Check-ins indicate ***

With regards to making direct contact with the teens: ***

It is possible additional phone calls were made but not recorded in the check-ins.

It could be important to ensure all contacts made are noted (whether via phone, email, Facebook, etc.). Then, we can trace possible relationships between phone calls and attendance to assess the effectiveness of this strategy.

Employ at least 7-8 parent engagement activities

Research indicates that high retention programs employ 7-8 different parent engagement activities,

This is an area where the teen program could improve; according to the check-ins on a few such activities were carried out during the year: *Text deleted for purposes of concision*

Qualified personnel

This year, all staff completed their rock climbing certification. This increased the ability of the team to offer this activity. (Prior to Tamara and Nathan getting certified, only Rafael was qualified to take the teens rock climbing and the activity was cancelled in his absence.)

Staff also attended many training programs regarding issues that had arisen in the Teen Zone:

- gang training, STM & SPVM, P10¹⁰, suicide prevention, Sexpressions¹¹.

Advertising the staff's qualifications may improve individuals' and the community's impression of the program, which could in turn have a positive influence on teen recruitment.

Program structure

Open the program 5 days per week (or more) and in the summer

Research shows that programs that are open at least 5 days per week and remain open during the summer have higher rates of retention than those that are open fewer days per week and/or closed during the summer months. This past year, the YMCA teen program was open 5 days per week year round except during statutory holidays. This represents an improvement from when the program was open 4 days per week (prior to the 2008-2009 year), closed in the summer (2007), or closed for the last 2 weeks of summer (2008).

Offer youth their own space (Deschenes, et al., 2010)

The Y offers teens their own room and specific hours of gym time. Further, this past year, girls' activities have often taken place in either the locked Teen Zone space or in Studio B, ensuring that girls not only have their own time slot, but also their own space.

Offer at least 5-6 different types of activities including drop-in and structured activities

Research indicates it is important to offer teens at least 5-6 different types of activities, including a choice of various drop in activities as well as structured

¹⁰ Project 10 works to promote the personal, social, sexual and mental well being of lesbian, gay, bisexual, transgender, transsexual, two-spirit, intersexed and questioning youth and adults 14-25

¹¹ Sexpressions provides comprehensive sex education for youth across Canada

ones. This is particularly true when serving teens from underserved communities (Lauver, et al., 2004).

The teen program offered 11 types of activities this past year: ***

Augmenting the homework help program together with offering leadership, community service, and job help in a more systematic and regular way are means to build on the current strengths of the program.

- Further, tailoring activities according to age (12-14 year olds may be more apt to participate in structured activities, 15-17 year olds may be more interested in activities related to employment and post secondary education), and sex is important.
- With regards to physical activities, research suggests offering activities with different levels of competition, individual and team sports, co-ed and gender segregated activities, and in general, activities that incorporate a high degree of choice.

Offer at least 2-3 rewards and incentives

Various types of awards and incentives have been identified in the teen program literature:

- Public recognition
 - The annual hockey awards banquet is a form of public recognition the program offers
 - Has there been any form of public recognition for the graffiti initiative?
- Field trips
 - ***

Offer at least 6-7 services for youth

Afterschool teen program research indicates that high retention programs offer at least 6-7 services for youth (Lauver, et al., 2004). Following is a list of specific

services that are associated with high retention and the associated actions taken this past year.

- Assistance with CEGEP applications
 - Staff offered help to AM for his application and also spoke with YP and JS about university.
 - On February 9th, staff took 4 teens to visit Dawson

- ****

Employ at least 5-6 recruitment strategies

Lauver et al. (2004) found that teen programs with high rates of participant retention also actively recruit new teens using at least 5-6 different strategies, such as: ***

There is little information in the check-ins about recruitment strategies employed.

- In 6 instances staff mention promoting the program and its activities to teens who are in the centre.
- In 2 instances staff mention advertising girls' night via Facebook,
- In 7 instances teens were phoned to remind them about an activity.
- **A more consistent strategy that exploits events, media and interpersonal communication channels should be developed and implemented.**

Program development

During the year, staff generated many ideas for activities and events and made a lot of suggestions. It is not always clear if these ideas are based on staff observations or teen requests. It would be important to note this as responding to teens' interests/needs is an effective way to ensure their continued participation. Table organises ideas according to the month they were recorded in the check-ins.

Questions to consider with regards to the table:

- Were these ideas implemented? Why or why not? With what effect?
- Are these ideas still relevant?
- Can these ideas be implemented in the coming year?

Month	Activity/event ideas	Behavioural intervention ideas	Staff/program needs
April	<i>Quotations from nightly check-in documents were included in the original table, but have been deleted here for purposes of concision and confidentiality</i>		
May			
June			
July			
August			
September			
October			
November			
December			
January			
February			
March			

Girls' night

Girls' night started being offered at the end of May 2010, and became progressively institutionalised over the year.

Month	# of times offered	Activities	# of times cancelled	# of times girls attended	Attendance
May	2	Movie downtown, boxing class			ooo
June	1	Bracelets		1	ooo
September	1	Yoga		2	ooo
October	4	Yoga, eye make-up workshop, movie downtown, photo shoot			9 girls; 22 visits
November	4	Bball, movie, linocut print making			5 girls; 7 visits
December	2	Dancing			3 girls; 3 visits
January	3	Movie, rock camp for girls workshop,		1	6 girls; 9 visits
February	4	Self defence			7 girls; 12 visits
March	2	Self defence	1		5 girls; 8 visits

* These totals are higher in reality; attendance per activity is only available for 6 of the 9 months

Rock climbing

Between September and April, teens went rock climbing 15 times. At first, only Rafael was certified to belay. In October, Tamara and Nathan completed their certification.

Despite the current feeling among staff that teens' interest in this activity has waned, **I would recommend maintaining this activity, but increasing promotion efforts.**

- Take pictures at Allez-Up and hang them in the Zone (consider enlarging some pictures) and on the Y Teen program Facebook page;
- Phone, text, and/or Facebook teens to remind them about the activity;
- Encourage teens about their climbing abilities (e.g., MM has demonstrated talent for and enjoyment of rock climbing) in front of each other on climbing and non-climbing days.
 - Text deleted for purposes of concision

Table of quantitative data deleted for purposes of concision

Basketball

Basketball was offered twice per week this year (Wednesday and Friday). The check-ins indicate 45 instances of basketball, but it is not always specified if these instances are games or practices (7 games (including 2 at du Parc Y and one at NDG Y) and 16 practices are specified).

I recommend continuing to phone the teens, as well as communicating with them by multiple other means (facebook, texting, visits to schools).

Dinner night

Homework Help

Homework help was scheduled twice each week between September and March. The check-ins indicate that 8 teens did homework 21 times between September and January, inclusively. Note that there is a discrepancy between the check-ins and the excel participation sheet, as indicated in the table.

On 9 occasions, a tutor was present but no one did homework.

On 7 occasions, teens did homework when no tutor was present.

Table of quantitative data deleted for purposes of concision

Ball Hockey

The success story the check-ins tell is the integration of the AdoZone (francophone) teens in the Teen Zone. There are 6 references (September, November, January, February, March) about AdoZone teens arriving early or staying after their game.

- **It may be important to ensure these teens know the summer 2011 schedule.**
They are already familiar with and comfortable in the Teen Zone, so it will be easier to recruit them.

- **A summer schedule may be sent to all hockey participants.**

.....

During the year, some special activities were offered within the hockey league program:

In the table below, the numbers of teens and numbers of visits include Monday and Thursday hockey. **To have even finer detail about hockey, you may want to consider taking attendance separately for league and practice nights.**

Additionally, to better understand the 'number of teens' participating in the league, it would be helpful to know which teams play each month and how many players per team. This way, we could determine the percentage of players who participate.

Table of quantitative data deleted for purposes of concision

Boxing

For the most part, the information in the check-ins regarding boxing is about which teens attended.

In a few instances staff note that teens seemed to enjoy the activity. **To better assess the relative success of this activity, it is necessary to take note of what teens do and say to give staff this impression.**

Table of quantitative data deleted for purposes of concision

