# University of Alberta

"I've Never Been in a Program After School":
A Participatory Action Research Approach to Sports-Based 'Critical Hours' Programs

by

Lisa Nicole Tink

A thesis submitted to the Faculty of Graduate Studies and Research
in partial fulfillment of the requirements for the degree of

Master of Arts

Faculty of Physical Education and Recreation

©Lisa Nicole Tink
Fall 2011
Edmonton, Alberta

Permission is hereby granted to the University of Alberta Libraries to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only. Where the thesis is converted to, or otherwise made available in digital form, the University of Alberta will advise potential users of the thesis of these terms.

The author reserves all other publication and other rights in association with the copyright in the thesis and, except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatsoever without the author's prior written permission.

**Dedication**

For Aud.

**Abstract**

Accessible extracurricular programs have the potential to increase levels of physical activity after school (Weschsler et al., 2000). Using Participatory Action Research (PAR) the purpose of this study was to develop, implement, and evaluate a 'critical hours' sports-based program for students living in low-income areas of Edmonton, Alberta. The research took place in two schools and semi-structured interviews were conducted with 28 program participants and 19 stakeholders. The five themes that emerged were: 1) "I Play Those Games Nowhere Else," 2) "Just General Life Skills," 3) "How We Fit in the Whole Picture," 4) "It's Not Always Financial," and 5) "Plan for it Long Term." Findings from this research provide support for the need for 'critical hours' programs. Furthermore, this research is a practical example of how meaningful partnerships can lead to action at the individual, school, and community level.

**Acknowledgements**

First I would like to thank KidSport Canada for valuing my research and funding the 'critical hours' program. I would also like to acknowledge KidSport Alberta and KidSport Edmonton for allowing me to be a part of the KidSport Summer Camps, which is ultimately where this research project started. Additionally I would like to recognize the Edmonton Public School Board, the coaches, principals, teachers, and other community members for their contributions.

I would like to thank my supervisor, Dr. Tara-Leigh McHugh, for her support and guidance throughout the final stages of this journey. Your expertise and knowledge of PAR have been invaluable. I would also like to thank my committee members, Dr. Nancy Spencer-Cavaliere and Dr. Clive Hickson. Your contributions are greatly appreciated.

Further, I would like to thank Bethan Kingsley for her involvement from the beginning to the end. As a co-facilitator of the 'critical hours' program, friend, and fellow graduate student you have been instrumental throughout this process.

Finally, I would like to acknowledge the students who were involved in this research project. I enjoyed each day I spent with you in the gymnasium and without your involvement this study would not have been possible.

## Table of Contents

# Introduction

*I choose action research because I have a long standing commitment to developing more effective strategies and methods to promote social justice. . . I choose action research because I believe in old fashioned virtues like compassion and truth.*

This is what Ian Hughes stated when asked, "Why action research?" (Brydon-Miller, Greenwood, Maguire, & Members of the Editorial Board of Action Research, 2003, p. 7). The ability to articulate a respect for the knowledge communities bring to the research process and the ability to achieve positive change were the basic values underlying this statement (Brydon-Miller, et al.). Having conducted a participatory action research (PAR) project and also valuing the knowledge and experience that guided my research, I *could* highlight my commitment to community, my respect for people's knowledge, and the importance of collaboration. However, while I value each of those guiding principles that define and make action research a complex approach, I would not be true to my research process and the organic way in which it came about if I introduced my study in this way. Rather, I will discuss personal strengths, challenges, and interests that ultimately led to the development and completion of my Master's thesis.

I began my graduate career in the sport psychology stream within the Physical Education and Recreation Faculty. It was not until my last graduate class that I realized (or rather admitted to myself) I was not at all interested in improving the performance levels of elite athletes. I value competitive sport, have participated in competitive sport, and see a place for sport psychology within competitive sport. However, I knew that examining the motivation of elite athletes

or the behaviours of coaches was not something in which I was interested. As a result, I struggled to decide on a research topic that I was passionate about and would fit under the research umbrella of my then supervisor. This detour from the 'obvious path' in my program was not an easy choice but it was an intentional choice. It was a choice based on my attitudes and beliefs about sport, physical activity, and research at the time.

I can speculate that this choice was because it had been four years since I had played on a competitive team, because of my experiences as a coach, recreation coordinator and volunteer during those years, or because I was struggling with being back in academia. Whatever the reason, I knew that my interests had shifted from competitive sport to physical activity and that I was now interested in the role it played in the lives of children. I had worked at many different organizations, in many different roles, and with children and youth of all ages and backgrounds. Working with children and youth was not just a job it was an enjoyable experience; as a result, I knew that this was where the scope of my research should fall.

Despite this realization about the scope of my research, I did not choose to do a PAR project. Rather I chose a research topic that I was interested in and one where I hoped my participants would benefit from the process as much as I would. I chose to incorporate my values and to somehow combine research with action. This action would be in the form of an after school program and although I did not know it at the time, would be informed by PAR. PAR was a methodology that would allow me to exercise my commitment to community, respect the

knowledge of individuals, and realize the importance of collaboration when conducting research.

This project was not driven by methodological frameworks, theories, or policies. Rather it was my personal interests and beliefs that drove the relationships and collaboration resulting in the ‘critical hours’ program. PAR was not an intentional choice from the beginning but it was the logical and appropriate fit for me as a researcher, instructor, and community partner. It provided a methodological framework that allowed me to follow my passion, give my thesis a personal sense of meaning, and develop relationships during the development, implementation and evaluation of the ‘critical hours’ program.

# Review of the Literature

## Children's Physical Activity Levels

Although children and youth are the most active segment of the population, there is a marked trend toward an increase in sedentary lifestyles (Trudeau & Shephard, 2005). Over 90% of Canadian children and youth continue to fall short of the recommended 60 minutes of moderate-to-vigorous physical activity (MVPA) per day (Active Healthy Kids Canada, 2011). Physical activity levels and sport participation are lowest among children and youth from disadvantaged populations (e.g., immigrants) and children from low-income families (Clark, 2008). A major contributor to these inadequate activity levels is insufficient opportunities and physical activity programs (Active Healthy Kids Canada).

In 2005, Alberta Education introduced The Daily Physical Activity initiative (DPA) as a response to the need for increased physical activity among children and youth. The DPA initiative is based on the belief that healthy students are better able to learn and that schools are supportive environments for the development of positive habits needed for a healthy, active lifestyle. Therefore the goal of the DPA initiative is to increase students' physical activity levels. In an attempt to increase physical activity levels, the DPA initiative mandates 30 minutes of daily physical activity for all students in grades one through nine. It further stipulates that daily physical activities should: 1) vary in form and intensity, 2) take into account each student's ability, 3) consider resources available within the school as well as the community, and 4) allow for student

choice, ultimately increasing students' physical activity levels and developing positive habits needed for a healthy lifestyle (Alberta Education, 2005).

Based on the above guidelines and according to the *Daily Physical Activity Survey Report* (Alberta Education, 2008) the DPA initiative has shown positive results. Of the 1025 surveys that were returned, representing 83 different school authorities, school-level perceptions of the DPA initiative have been positively reported. Survey respondents indicated that their schools are meeting the guiding principles as stated in the DPA Policy. This has been achieved through increased facility usage within the school and by maximizing outdoor opportunities on the school grounds. Additionally the majority of respondents also agreed that the DPA initiative has had a positive impact on student learning, has contributed to student wellness, and is considered a positive initiative and a priority in their school.

Despite the reported positive impact of the DPA initiative, Albertan students' level of physical activity remains below national recommendations (Active Healthy Kids Canada, 2011). Although the DPA initiative impacts the levels of physical activity during the school day, the prescriptive approach is not focused on promoting a physically active lifestyle outside of school. Therefore, given the limited frequency and length of physical activity that can be achieved during school hours, teachers alone cannot facilitate the recommended amounts of physical activity. As a result, other sources addressing this physical activity deficit need to be identified and evaluated (Powers, Conway, McKenzie, Sallis, & Marshall, 2002).

**School-based Interventions**

The implementation and evaluation of programs have provided empirical support for the effectiveness of school-based physical activity interventions (Cale & Harris, 2006; Stone, McKenzie, Welk, & Booth, 1998). Studies evaluating the effectiveness of school-based interventions have demonstrated that comprehensive school-level interventions have the ability to increase physical activity (e.g., Ernst & Pangrazi, 1999; Nader, Stone, Lytle, Perry, Osganian, Kelder, et al., 2009; Sallis, McKenzie, Alcaraz, Kolody, Faucette, & Hovell, 1997).

Ernst and Pangrazi (1999) examined the efficacy of a school-based physical activity intervention titled Promoting Lifetime Activity for Youth (PLAY). The intervention targeted more than 20,000 students in grades 4-6 and was geared toward changing the behaviours of students and teachers. A total of 28 teachers were trained in a variety of games and activities that assisted students in being active. Half of the participating teachers were then asked to provide physical activity breaks lasting a minimum of 15 minutes each day with the other half having no responsibility for teaching the games and activities. The results revealed that the PLAY intervention increased the physical activity levels for all participants when teachers were actively involved in delivering games and activities.

Similarly, the Sports, Play, and Active Recreation for Kids (SPARK) study conducted by Sallis et al. (1997) evaluated a two-year school-based program for students in grades 4 and 5. The program was designed to increase

physical activity during school physical education (PE) classes and outside of school. The seven elementary schools involved in the program were assigned to one of three conditions: specialist-led, teacher-led, and control. In the specialist-led condition, certified physical education specialists implemented the programs. In the teacher-led condition, classroom teachers were trained to implement the intervention. In the control condition, no training was available and untrained classroom teachers taught the regular PE class. Results of the study revealed that students in the control condition had PE less frequently and spent significantly fewer minutes per week in PE. Students in the specialist-led class participated in 40 minutes of moderate to vigorous physical activity per week which was twice as many the control students, who only participated in 18 minutes of moderate to vigorous physical activity per week. The activity levels of the teacher-led students were in between, having participated in 33 minutes of moderate to vigorous physical activity per week. The SPARK study provides evidence that a health-related PE program, delivered by qualified staff, can increase physical activity levels.

The Child and Adolescent Trial for Cardiovascular Health (CATCH; Perry, Stone, Parcel, Ellison, Nader, Webber, et al., 1990; Perry, Sellers, Johnson, Pederson, Bachman, Parcel, et al., 1997) also provides evidence that school-based interventions are capable of increasing physical activity levels of students. Providing skills training in the areas of healthy eating, physical activity and non-smoking patterns, CATCH was successful in promoting healthful behaviour in elementary school children. Over a three-year period CATCH was delivered in 96

schools. The study samples included grade 3 students (1991-1992), grade 4 students (1992-1993), and grade 5 students (1993-1994). CATCH consisted of an Eat Smart food service program, CATCH Physical Education, classroom curricula, and parental involvement programs. Results revealed that the program provided a feasible multilevel health promotion program that increased exercise behaviours and improved eating for elementary students.

Despite the increases in students physical activity levels using school-based interventions, several limitations do still exist and must be acknowledged (Lubans & Morgan, 2008). First, most school-based physical activity programs have involved the evaluation of modified health-related PE classes (e.g., Sallis et al., 1997). Despite these modifications to PE classes, physical activity recommendations for children and youth cannot be met through PE alone (McKenzie, 2001). Second, many interventions are scheduled in addition to PE (e.g., Ernst & Pangrazi, 1999). These programs may not be feasible for all schools due to an already crowded curriculum (Biddle, Gorely, & Stensel, 2004). Last, interventions that have positively impacted physical activity behaviours are often multifaceted and comprehensive (e.g., Perry et al., 1990; 1997). Due to the lack of time and lack of facilities reported (Alberta Education, 2008), implementing such comprehensive programs in most elementary schools may not be a realistic goal (Boccaro, Kanters, Casper, & Forrester, 2008). As such, additional strategies for promoting physical activities in schools are needed (Lubans & Morgan, 2008; McKenzie, 1999; Powers, et al., 2002; Wechsler, Devereaux, Davis, & Collins, 2000).

Extracurricular programs offer promise for increasing physical activity opportunities in school settings. Extracurricular physical activity programs are defined as interventions that do not focus on modifications to school PE, taking place before or after regular school hours (Jago & Baranowski, 2004). They are designed to supplement PE and provide opportunities for students to participate in a variety of activities allowing for exploration of individual skills and talents in an inclusive student-centered environment (Bocarro, et al., 2008). Extracurricular physical activity opportunities have traditionally been interscholastic or intramural. Interscholastic sports programs consist of competition between different schools, whereas, intramural programs consist of competitive and non-competitive activities involving students from a single school (Wechsler, et al., 2000). Competitive interscholastic sports programs are more commonly available than after-school intramural programs but are limited to only the most talented student athletes (Bocarro et al.). Because intramural programs are designed for students with a wide range of abilities they have greater potential for improving participation in physical activity than do interscholastic sports. As a result, researchers are becoming more interested in the potential of these intramural programs targeting children who may not have participated in much physical activity and lack the skills to participate in competitive sports (Wechsler et al.).

Intramural programs typically focus on sports, fitness, and recreational activities and can be integrated after school as extracurricular physical activity programs (Wechsler et al., 2000). When delivered during the hours after school these programs provide additional physical activity opportunities for elementary

and middle school students helping them attain the recommended amount of daily moderate-to-vigorous physical activity (Strong, Malina, Blimkie, Daniels, Dishman, Gutin, et al., 2005). Intramural after-school programs have the potential to promote physical activity by providing structured and unstructured physical activity opportunities that teach fundamental movement skills (Trost, Rosenkranz, & Dzewaltowski, 2008). In addition to providing physical activity opportunities, these programs, when offered during the hours after school, can also promote the productive use of free time (Witt & Baker, 1997).

**Critical Hours**

Free time after school has become an important area of interest for researchers studying youth development. Researchers have expressed the need to examine these hours after school because during this time children and youth have "discretion as to how they use their time, freed from constraints of school and parental curfews" (Atkin, Gorely, Biddle, Marshall, & Cameron, 2008, p. 447). These hours, between 3 p.m. and 6 p.m., when children are not in school and do not have parental supervision because parents are still at work, have been coined 'critical hours'. Specifically, 'critical hours' is the "time period after school when children and youth are most vulnerable to be facing critical choices on their own" (City of Calgary, 2008, p. 5). It is during these hours that children and youth are more likely to engage in risk-taking behaviour (sex, drugs and alcohol) and become both perpetrators and victims of crime (Shann, 2001). Programs offered during these hours need to provide safe places for children and youth to develop skills, explore interests, and learn healthy living traits (City of Calgary). This is

particularly true in low-income communities where the neighbourhood is perceived as unsafe to play outside (Holt, Cunningham, Sehn, Spence, Newton, & Ball, 2009; Pate & O'Neil, 2009). In such communities schools may provide this necessary 'safe place' for children.

Studies documenting how children and youth spend their hours after school found children from low-income families spend more time in unsupervised and unorganized activities than middle-class children (Posner & Vandell, 1994; 1999). Shann (2001) examined these 'critical hours' in middle-school students from economically disadvantaged communities. Results indicated that opportunities after school were limited. The majority (77.2%) of students had no involvement in after-school programs with less than 10% spending 2 hours or more in structured activities. According to school personnel, the programs were simply not available to the students. Once most children left school they had little else to do but watch television (90% reported watching one or more hours of television), go out with friends (70% reported going out with friends for an hour or more), or simply hang out (55% of students reported "hanging out" for an hour or more).

Accessible extracurricular programs can reduce the amount of time children from low-income families spend unsupervised and also provide positive experiences in safe and structured environments. 'Critical hours' opportunities are extremely important for children and youth living in low-income areas because the rate of participation in recreation is significantly lower than children and youth from high-income families (City of Calgary, 2008). Children and youth

who reside in low-income neighbourhoods typically have less access to physical activity resources such as parks, playgrounds, and recreational facilities (Cohen, McKenzie, Sehgal, Williamson, Golineli, & Lurie, 2007). They are also least likely to attend supervised programs during the 'critical hours' after school (Shann, 2001). Extracurricular programs offered during these 'critical hours' can provide children from low-income families with experiences similar to their middle-class peers (Posner & Vandell, 1999). By providing structured and supervised environments, these programs can promote the constructive use of 'critical hours'. These hours after school provide enormous potential for desirable outcomes in children and youth; therefore developing 'critical hours' programs in areas where there are high levels of low-income is especially necessary (Witt & Baker, 1997).

**Children of Low-Income**

Researchers have been interested in children living in low-income neighbourhoods due to the belief that children who do not have access to basic economic resources and assets are at a higher risk for negative developmental outcomes (American Psychological Association Task Force, 2007). It has been reported that low-income children suffer higher incidences of adverse health and other negative developmental outcomes than higher-income children (Brooks-Gunn & Duncan, 1997). Effects on well-being that have been associated with living in low-income neighbourhoods and conditions have included negative outcomes related to physical health (e.g. low birth weight, poor nutrition, and chronic asthma), cognitive ability (e.g. learning disabilities and school

achievement), and emotional and behavioural outcomes (e.g. aggression, fighting, and social withdrawal) (Bradley & Corwyn, 2002; Brooks-Gunn & Duncan, 1997; McLoyd, 1998).

Klerman (1991) suggests that one link between low-income and well-being is access to resources, which includes the inability to purchase goods and services essential for health and inability to secure appropriate health services. Additionally, Bradley, Corwyn, Caldwell, Burchinal, McAdoo, and Garcia Coll (2001) have indicated that children from low-income families have less access to a wide variety of recreational and learning materials from infancy through adolescence. Low-income parents are less likely to purchase learning materials, less likely to take their children to educational, cultural, or recreational events, and are less likely to regulate the amount of TV their children watch (Bradley, et al.). Limited access to these experiences and resources therefore mediates the relationship between family income and children's physical and cognitive development (Brooks-Gunn, Klebanov, & Liaw, 1995).

Child and family level interventions and service delivery programs can counter some of the negative outcomes associated with low-income (de Lone, 1979). More specifically, early childhood interventions, during the early school years, may be critical in reducing the impact of low-income (Brooks-Gunn & Duncan, 1997). Suggestions for such interventions have included focusing on nutrition (Brooks-Gunn & Duncan), learning-oriented programs (Brooks-Gunn et al., 1995), and after school care (Posner & Vandell, 1994). Participation in learning-oriented after school care programs not only provide low-income

children with an environment conducive to cognitive and physical stimulation (Posner & Vandell), they provide an environment where children benefit from positive role models who play an important role in monitoring children's behaviour when parents are not around (Jencks & Mayer, 1990). Advocacy efforts for policies and programs that improve the health and wellness in low-income neighbourhoods should therefore be encouraged (American Psychological Association Task Force, 2007). Such programs should focus on the cognitive, physical, emotional, and social development of children from low-income families.

**Critical Hours Physical Activity Programs**

In addition to influencing the above developmental outcomes, social and environmental variables are associated with children's physical activity levels (Sallis, Prochaska, & Taylor, 2000). Social variables include parent support and direct help from parents, whereas environmental variables include access to facilities and programs as well as time spent outdoors (Sallis et al.). Appropriate community infrastructure and parental support, however, are not equally available for all children (Kahan, 2008). This is especially true for those from low-income neighbourhoods. Due to the insufficient infrastructure and lack of resources in many communities, the ability to provide safe and accessible places for physical activity programs is often limited to the school (Gordon-Larsen, McMurray, & Popkin, 2000). Additional efforts by schools must therefore be made to increase the ability of youth from lower-income neighbourhoods to engage in physical activity (Trudeau & Shephard, 2005).

Schools serve nearly all children and are equipped with facilities specifically designed to promote physical activity (McKenzie, 1999). Because PE alone cannot provide children with the recommended amounts of physical activity, schools must ensure that opportunities are available outside of class (McKenzie). Feasible interventions within schools include extracurricular physical activity programs that extend beyond physical education class (Bocarro et al., 2008) and can be offered during 'critical hours'. Accessible and attractive school programs available during the 'critical hours' after school have the potential to increase students' physical activity levels (Kahan, 2008). Therefore whether programs are run by teachers or outside organizations, schools are an ideal location to house 'critical hours' physical activity programs.

Past studies have examined programs during these 'critical hours' and their contributions to psychosocial development of urban children from low-income families (Bruening, Dover, & Clark, 2009; Carruthers, 2006; Daud & Carruthers, 2008; Mahoney, Lord, & Carryl, 2005). In addition, there is a variety of research identifying the important features of such programs (Halpern, Barker, Mollard, 2000; Lerner & Galambos, 1998; Metz, Goldsmith, & Arbreton, 2008; Stiehl & Galvan, 2005; Thompson; 2009; Witt, 2004). Identifiable features of high-quality 'critical hours' programs include: providing safe places for participants where quality relationships can be developed (Halpern et al.; Steil & Galvin), allowing participants to make decisions about program content (Witt, 2004), creating an environment where participants are able to explore free play and structured activities (Metz, Goldsmith, & Arbreton; Thompson), and articulating focused,

well planned, and intentional goals (Metz et al.). This increased understanding of effective youth development and the identifiable features of high-quality programs provide a foundation for the integration of physical activity and youth sport into 'critical hours' programs (Coatsworth & Conroy, 2007). Therefore 'critical hours' physical activity programs should deliberately create opportunities where the program content and the instructional processes are both knowledge-based and child-centered (McLaughlin, 2000).

**Fundamental Movement Skills**

Providing students with knowledge-based experiences that encourage mastery and use both structured and unstructured instructional strategies to promote learning is important for children and youth (Bransford, Brown, & Cocking, 1999) and should be emphasized when developing physical activity 'critical hours' programs. Therefore instructional strategies to promote learning in 'critical hours' programs should be focused and intentional (Metz et al., 2008). More specifically strategies within physical activity 'critical hours' programs should promote learning by targeting specific skills. 'Critical hours' programs, focusing on physical activity, provide an ideal environment for targeting and acquiring basic or fundamental movement skills in children (Raudsepp & Pall, 2006). Such programs have the ability to complement school PE by providing additional opportunities for the development of fundamental movement skills (Foweather, McWhannell, Henaghan, Lees, Stratton, & Batterham, 2008).

The development of fundamental movement skills is basic to the motor development of children (Gallahue & Ozmun, 2006). Fundamental movement

skills, as defined by Gallahue and Ozmun (2002), are observable patterns of behavior composed of basic locomotor activities such as running and jumping, manipulative activities such as throwing and catching, and stability activities such as balancing. Fundamental movement skill development is not concerned with high degrees of skills, but rather with developing acceptable levels of proficiency in a wide variety of movement situations (Gallahue & Ozmun, 2006). Fundamental movement skills are therefore considered to be the building blocks that lead to specialized movement sequences required for participation in many physical activities for children, youth, and adults (Gallahue & Ozmun). As a result, Gallahue and Ozmun feel that children should be involved in a series of coordinated and developmentally appropriate experiences designed to enhance movement and the acquisition of the fundamental movement skills.

Recently Lubans, Morgan, Cliff, Barnett, and Okely (2010) conducted a systematic review of studies examining the relationship between fundamental movement skills and the associated benefits for children and adolescents. They examined 21 articles that assessed eight benefits (i.e., self-concept, perceived competence, CRF (multistage fitness test), muscular fitness, weight status, flexibility, physical activity, and sedentary behvaiour) related to fundamental movement skill competency. The review revealed a positive association between fundamental movement skills competency and physical activity in children and adolescents, a positive association between fundamental movement skills competency and CRF, and an inverse association between fundamental movement skills competency and weight status. These positive associations suggest that

teaching children to become competent and confident performers of fundamental movement skills may increase their physical activity levels, providing opportunities to improve fitness levels and reduce the risk of unhealthy weight gain.

The need to develop fundamental movement skills in Canadian children has become a focus of Canadian Sport for Life (CS4L) and Physical and Health Education Canada (PHE). Numerous resources highlighting the importance of the fundamental movement skills in children have been produced (e.g., Long Term Athlete Development Resource Paper, Developing Physical Literacy A Guide for Parents of Children Ages 0 to 12, FUNdamentals Movement Skills: Active Start & FUNdamentals Stage). Within these resources the development of fundamental movement skills, that permit a child to move confidently and with control in a wide range of physical activity, dance, and sport settings, has been defined as physical literacy (Canadian Sport for Life, 2008, PHE Canada, 2008). Specifically, the development of fundamental movement skills and physical literacy is highlighted in Canada's Long Term Athlete Development (LTAD) Model as Phase 2-FUNdamentals (Canadian Sport for Life).

The LTAD is a seven-stage model that aims to embed developmentally appropriate structures within sport, recreation, and education (PHE Canada, 2008). The FUNdamental stage of the LTAD focuses on developing children's physical literacy, emphasizing that the basic movement skills should be introduced through fun activities and games (Canadian Sport for Life). The FUNdamental movement skills outlined by Canadian Sport for Life (2008)

include locomotor skills (e.g., running, skipping, hopping, jumping, dodging), manipulative skills (e.g., catching, throwing, kicking, striking, dribbling), and stability skills (e.g., balancing, twisting). Developed between the ages of 6 and 9 years, the FUNdamental movement skills are assumed to be refined into sport-specific skills and provide the foundation for an active lifestyle (Canadian Sport for Life).

In addition to highlighting the importance of the development of the fundamental movement skills, Canadian Sport for Life (2008) stated that skill development should be well-structured, positive, and fun. They also recommend that activities focusing on fundamental movement skills should revolve around the school year and be enhanced by multi-sport camps. Similarly, Lubans et al. (2010) suggest that fundamental movement skill development should be included in school and community based interventions. Such programs should complement existing curricular programs, ensuring additional opportunities for the development of fundamental movement skills (Foweather et al., 2008). After school multi-sport clubs could therefore provide an ideal environment for the development of fundamental movement skills (Foweather, et al.).

**Cognitive Evaluation Theory**

Another important contributor, providing the foundation for continued physical activity, is intrinsic motivation (Whitehead, 1993). Intrinsic motivation is the "natural propensity to engage one's interests and exercise one's capacities, and in so doing, to seek and conquer optimal challenges" (Deci & Ryan, 1985, p. 43). Intrinsically motivated behavior is, therefore, done for interest, satisfaction,

or mastery. Extrinsically motivated behaviour, on the other hand, is done for an external reward or constraint. Cognitive evaluation theory (Deci & Ryan, 1985), states that children will be intrinsically motivated to participate in an activity if: (1) they believe they have some control over it, (2) they feel a sense of relatedness to it, and (3) they feel good about themselves when engaging in it. Social and environmental conditions therefore have the ability to facilitate or undermine an individual's intrinsic motivation (Deci & Ryan). Cognitive evaluation theory outlines the factors capable of influencing intrinsic motivation (Ryan & Deci, 2000) and explains these using four propositions.

The first proposition of cognitive evaluation theory states that activities that are intrinsically motivating are autonomous or self-determined (Deci & Ryan, 1985). More specifically, activities that promote autonomy and self-determination are those that provide choice, allowing individuals to be fully involved with the activity, and are determined by one's perceived locus of causality (Deci & Ryan; Ryan & Deci 2000). Activities that promote an internal perceived locus of causality (determined by one's own choices) will result in increases in intrinsic motivation. Activities that promote an external perceived locus of causality (controlled by factors outside oneself) will undermine feelings of autonomy, thus, decreasing intrinsic motivation.

For children to be intrinsically motivated they need to feel that they have some control creating a sense of autonomy (Mandigo & Holt, 2000). An autonomy-supportive climate is described as one where an "individual in a position of authority (e.g., an instructor or coach) takes the other's (e.g., a

student's or athlete's) perspective, acknowledges the other's feelings, and provides the other with pertinent information and opportunities for choice, while minimizing the use of pressures and demands" (Black & Deci, 2000, p. 742). Autonomy-supportive instructors therefore: (1) provide as much choice as possible within specific limits and rules, (2) provide rationale for tasks, limits, and rules, (3) inquire about and acknowledge other's feelings, and (4) allow opportunities for students to take initiatives and do independent work (Mageau & Vallerand, 2003).

The second proposition is based on an individual's need to feel competent and master optimal challenges (Deci & Ryan, 1985). Individuals feel competent if they have adequate ability or capacity to perform specific skills needed for particular activities. These particular activities are capable of providing an optimal challenge if the ability of the individual is matched with the challenge of the activity. Therefore, when individuals experience success or positive feedback during challenging activities competence is enhanced and intrinsic motivation increased (Deci & Ryan, 1985; 2000). Feelings of competence, however, will not enhance intrinsic motivation without an internal locus of causality. Individuals must not only experience competence, they must also view their behaviours to be self-determined (Ryan & Deci, 2000). In other words autonomy and self-determination are needed in order for competence to increase one's intrinsic motivation.

The third proposition in cognitive evaluation theory relates to the fact that events relevant to the initiation and regulation of behaviour will differ among

individuals, within different contexts, and at different times. Individuals can therefore attach different meanings to the same event based on perceived causality and perceived competence (Deci & Ryan, 1985). Accordingly, the event will be viewed as either informational, controlling, or amotivating (Deci & Ryan, 1985; 2000; Ryan & Deci 2000; 2002). Informational events are defined as those that allow choice and provide useful information for an individual to interact effectively with one's environment (Deci & Ryan, 1985; 2000; Ryan & Deci, 2000). Informational events, therefore, support autonomy. Controlling events are defined as those that create pressure to behave in a specified way. Controlling events are therefore not autonomy supportive implying that "one's behaviour is for someone else's purposes rather than for one's own" (Deci & Ryan, 1985, p. 64). Lastly, amotivation occurs when an individual is neither self-determined nor competent in their behaviour (Deci & Ryan, 1985; 2000; Ryan & Deci, 2000). Amotivating events, therefore, neither support autonomy nor perceived competence.

Perceived competence and perceived causality are directly affected by an event being viewed as either informational, controlling, or amotivating resulting in different functional significances (Deci & Ryan, 1985). Functional significance is the psychological meaning an individual attaches to a particular event. Choice and positive informational feedback facilitate self-determined competence, have informational significance, and increase intrinsic motivation (Deci & Ryan; Ryan & Deci, 2000). On the other hand, rewards and deadlines pressure people toward specific outcomes, have a controlling significance, and undermine intrinsic

motivation. The impact of an event on motivational processes is, therefore, determined not by the characteristics of the event but rather its psychological meaning for the individual (Deci & Ryan).

Proposition four examines the influence of individual motivational orientations on intrinsic motivation (Deci & Ryan, 2000). As stated by Deci and Ryan (1985) the intrapersonal context within which an event occurs will affect how it is experienced and thus influence motivational processes. Although there are tendencies for events to be experienced as either informational, controlling or amotivating, the intrapersonal context (motivational orientation) within which the event occurs will effect how an event is experienced therefore influencing motivational processes (i.e., whether the event enhances or undermines intrinsic motivation; Deci & Ryan, 1985; 2000).

Individuals with an ego motivational orientation have a tendency to view events as having a controlling significance thus decreasing intrinsic motivation. Individuals with a task motivational orientation have a tendency to view events as informational thus increasing intrinsic motivation. Individuals who are task oriented are, therefore, more intrinsically motivated than individuals who are ego orientated. Proposition four examines the intrapersonal contexts within which events occur. These motivational orientations largely influence intrinsic motivation as behaviours may be regulated or affected by motivational orientations, wholly within the person, having direct effects on motivational processes.

Simply put, cognitive evaluation theory states that self-determination and competence are the fundamental issues involved in intrinsic motivation. More specifically it states that: 1) intrinsically motivated activities are autonomous or self-determined, 2) intrinsic motivation is sustained by feelings of competence and optimal challenge, 3) the motivational impact of rewards and feedback is dependent on the attached psychological meaning, and 4) informational, controlling and amotivating events are based on both interpersonal as well as intrapersonal regulation (i.e., motivational orientation). Based on these fundamental issues surrounding intrinsic motivation, practical suggestions for optimizing success in physical activity settings with children have been suggested (Mandigo & Holt, 2000). These suggestions include: optimizing choice and control, minimizing the use of controlling external factors, optimally challenging students through individualized instruction, enhancing perceived competence, and stressing the importance of personal improvement (Mandigo & Holt).

Cognitive evaluation theory is of great applied significance and provides a framework for delivering child-centered physical activity 'critical hours' programs. This child-centered framework along with the previously mentioned identifiable features of high-quality 'critical hours' programs provide an increased understanding of effective 'critical hours' programs. While current research provides this framework for *what* quality 'critical hours' programs should look like there is still a need to examine the implementation of such programs, answering the question of *how* quality programs can effectively be delivered.

**Participatory Action Research**

Community organizations and universities have highlighted a need to collaborate with schools in an effort to support the implementation of programs promoting physical activity (Pate, Saunders, Dishman, Addy, Dowda, & Ward, 2007). Despite the need for community-university collaborations many studies have not addressed the feasibility of community collaborations, to implement after-school programs (Huberty, 2009). Partnerships among various stakeholders (e.g., community organizations) are needed to provide the differing views of *how* the development of after-school programs can be accomplished (Witt, 2004). In addition to community collaborations there is a need to focus on the design and evaluation of extracurricular school sport interventions incorporating inclusive, engaging, and theoretically-driven approaches to the promotion of physical activity (Lubans & Morgan, 2008). Research should therefore be aimed at improving school-based 'critical hours' physical activity programs by examining the implementation and design of such programs while documenting the challenges, barriers, and successes. Investigations should focus on views held among stakeholders of programs (Baker & Witt, 2000) including the experiences and perceptions of program participants (Carruthers, 2006).

Participatory action research (PAR) is one methodology capable of creating an environment that supports the emergence of the experiences of community members, teachers, and program participants (McIntyre, 2000). It is a methodology based on collective efforts and as a result, a suitable methodology for understanding the development and implementation of physical activity

'critical hours' programs. It is action-oriented research in which people address common needs in their day-to-day lives and, in the process, generate knowledge by analyzing their own circumstances (Park, 2001; Stringer & Genat, 2004). PAR is based on the assumption that traditional research methodologies are unable to provide adequate insight into social issues and offers alternative strategies for exploration that are more attuned to peoples realities (Stringer & Genat, 2004). The process involves the formation of partnerships among people with problems to solve, researchers, and those who control public services (Frisby, Reid, Miller, & Hoeber, 2005).

In contrast to conventional research, PAR calls for the active involvement of the community in defining research problems, executing programs, and interpreting results (Greenwood, Whyte, & Harkavy, 1993). The assumptions underlying PAR challenge researchers in sport and physical activity to examine how knowledge is constructed, how relationships with research participants are formed, and how the research benefits those participants (Frisby, Crawford, & Dorer, 1997). Additionally, PAR has the potential to examine how physical activity and sport systems, at a local level, can provide greater access to individuals living in low-income neighbourhoods (Frisby et al.). By incorporating program participants, community partners, and service providers, PAR provides an avenue for examining barriers to sport and physical activity (Frisby et al.). In using a PAR methodology the beneficiaries and providers of sport and physical activity services (e.g., program participants, community organizations, schools) can be included in the research process ultimately providing insight into *how* the

development, implementation, and evaluation of 'critical hours' programs can be accomplished.

A PAR approach supports the exploration of experiences on several levels including the individual, school, and community (McIntyre, 2000). The examination, of the experiences at these various levels, has the potential to lead to the initiation of proactive strategies (McIntyre). Schools have been recommended as possible areas for implementing proactive strategies (Heilman, 1998) and the relationships that form among university researchers, school teachers, and community members have been important to improvements in social knowledge and in the community (Greenwood et al, 1993). School-based research involving community partners has been documented as an approach successfully resulting in school-based programs (e.g., Leff, Costigan, & Power, 2004; Potvin, Cargo, McComber, Delormier, & Macaulay, 2003; Vecchiarelli, Prelip, Slusser, Weightman, & Neumann, 2005). Using a PAR model, programs have been developed based on the particular needs of the school and community as articulated by the stakeholders. Leff, Costigon, and Power (2004) illustrated how PAR can be used to co-construct a whole school intervention through collaboration with university researchers, school staff and community members. Highlighting the process for developing and implementing a playground-based prevention program, school and community partners were actively involved in the implementation, data collection, and data interpretation process. The partnerships developed illustrate how PAR can be used to collaboratively improve future school practice.

Similarly, Potvin, Cargo, McComber, Delormier, and Macaulay (2003) suggested, through their experience implementing the Kahnawake Schools Diabetes Prevention Project, that community health promotion can be successfully implemented when equal partnerships between community stakeholders and university researchers are established. Vecchiarelli, Prelip, Slusser, Weightman, and Neumann (2005) also highlighted how PAR was used to develop a school-based environmental intervention, supporting healthy eating and physical activity. Through the use of PAR the school, community stakeholders, and the research team shared in the decision-making process creating a participatory environment approach aimed at changing student, school staff, and community stakeholders' attitudes and behaviours.

Past research provides evidence for the effectiveness of PAR in developing and implementing school-based programs. With input from community stakeholders and school staff, improvements in social knowledge, the school, and the community have been demonstrated (Greenwood et al., 1993). PAR enables researchers to integrate methods with input from key community stakeholders to create and evaluate potentially effective programs (Leff, 2004). By jointly developing procedures with school and community partners a program is more likely to be responsive and acceptable to the school and community (Nastasi, Varjas, Schensul, Silva, Schensul, & Ratnayake, 2000). Additionally, partnerships between school staff, community members, and university-based researchers can be helpful in building schools' capacities to promote child development (Dowrick, Power, Manz, Ginsburg-Block, Leff, & Kim-Rupnow,

2001). Therefore, PAR provides an avenue well suited for the development, implementation, and evaluation of school-based physical activity programs.

**Purpose Statement**

'Critical hours' physical activity programs have the potential to access children and youth within a school context. These programs can provide a safe place for youth to spend their hours after school, particularly in communities where the neighbourhood is perceived as being unsafe for children to play outside (Holt et al., 2009; Pate & O'Neil, 2008). The benefits of youth sport programs include physical, social, and psychological development, and key features promoting the development of these assets have been identified (Fraser-Thomas, Cote, & Deakin, 2005). More work, however, is needed in examining the challenges and opportunities during the implementation and delivery of these programs in a school setting. Therefore, the purpose of this study was to develop, implement, and evaluate a 'critical hours' sports-based program for students who attend school in a low-income area of Edmonton, Alberta. Using a PAR methodology, stakeholders and program participants were actively involved in guiding the development, implementation, and evaluation of the program.

The development of the 'critical hours' program refers to the collaborative process resulting in the creation of the 'critical hours' program. The implementation of the program highlights the activities that emerged during the development of the program resulting in action at various levels. The evaluation of the 'critical hours' program consisted of examining the participants' experiences about the 'critical hours' program along with detailed descriptions of

activities and actions. This form of evaluation adheres to qualitative program evaluation as described by Patton (1987). He argued that qualitative program evaluation is a process, which begins as raw, descriptive information about programs from direct quotations describing experiences and knowledge, or from detailed descriptions of activities, behaviours, and actions that are part of the experiences. When evaluating the program and to ensure clarity in reporting the results, the participants have been identified as either stakeholders or program participants. Stakeholders included participants working at a school or organizational level as well as the coaches who contributed to the delivery of the program. Program participants included the students who participated in the 'critical hours' program. Based on this and focusing on the stakeholders' and the program participants' experiences, the following research questions were addressed:

1. What are the challenges and opportunities during the development and implementation of the program?
2. What are the stakeholder's (teachers, principals, community partners) perceptions of issues relating to the provision of 'critical hours' programming?
3. What are the program participant's perceptions of the programs content and delivery?

The findings highlight experiences in an extracurricular setting providing information that has the potential to support the development and implementation of future 'critical hours' sports-based programs.

## The 'Critical Hours' Program

Participatory Action Research (PAR) is founded on the belief that people are knowledgeable about their intentions and actions, and are able to create change in their own lives (Kemmis & McTaggart, 2000). PAR has also been documented as a research approach that has been successful in developing and implementing school-based programs with input from community stakeholders and school staff (e.g., Leff, et al., 2004; Potvin, et al., 2003; Vecchiarelli et al., 2005). As a result PAR, was deemed an appropriate methodology for developing, implementing, and evaluating the 'critical hours' program.

Similar to conventional research, researchers involved in PAR typically seek to develop a deeper understanding of a particular issue (Wadsworth, 1998). However the three attributes distinguishing PAR from conventional research methodologies are a community-based analysis of social problems, shared ownership of the research, and an orientation toward action (Kemmis & McTaggart, 2000). These three attributes guided and were adhered to during the development, implementation, and evaluation of the 'critical hours' program. Community partners were directly involved in the development of the program addressing the need for more physical activity opportunities in low-income areas of Edmonton, Alberta. It was assumed that program participants felt ownership of the program, as they made decisions and provided feedback throughout the research process. Similarly, stakeholders provided insight into the development, implementation, and evaluation of the program. This shared insight and feedback from the various stakeholders and program participants provided relevant

information regarding the ‘critical hours’ sports-based program as well as similar programs in these communities. Lastly, the research was seen as being action oriented with the implementation of the program itself and through the knowledge generated as a result of the research process.

The local understandings of stakeholders and program participants informed the research process generating knowledge and informing action. In developing the ‘critical hours’ program, stakeholders, program participants, and myself continuously cycled through dynamic processes of investigation and knowledge generation. This cyclical, reiterative process as described by Stinger and Genat (2004) consists of five phases: 1) research design, 2) data gathering, 3) data analysis, 4) communication, and 5) action. This five phase model provides a framework for the activities that researchers and participants engage in when trying to systematically investigate the issue or problem that has been identified (Stringer & Genat). The various components of each phase as it relates to the ‘critical hours program’ are presented in Figure 1. They are presented in a linear form for purposes of clarity, however each should be envisioned as a cyclical, reiterative process.


Figure 1. Five Phases of Participatory Action Research adapted from Stringer & Genant (2004).

Using Stringer and Genat's (2004) five phases of PAR and the components within each phase, the development, implementation, and evaluation of the 'critical hours' program are described. In an attempt to accurately represent stakeholders' and participants' experiences, as well as my challenges, barriers, and successes, as researcher and instructor, the conventions of a realist and confessional tale guide this written report.

The most striking characteristics of realist tales are the almost complete absence of the author from text (Van Maanen, 1988). Words, actions, and thoughts expressed are not those of the researcher but are rather the authentic and representative remarks of the participants (Sparkes, 2002). These characteristics allow the reader to develop a strong sense of the participants' voices. Using direct

quotations of program participants and stakeholders, opinions about the 'critical hours' program are represented to the reader in a way that I, the researcher, would not be able express through my interpretation. This objectivity throughout parts of the text distances me from the data allowing for individual interpretation, about the 'critical hours' program. Distance and objectivity, while useful for some sections of text, do not however allow for a holistic view of the 'critical hours' program. Therefore, it was imperative that my voice, as both the researcher and the instructor, was heard. This was accomplished using characteristics of a confessional tale.

Confessional tales according to Sparkes (2002) allow for the voice and concerns of the researcher to surface. They become highly personalized, revealing what happened in the research process from start to finish, focusing on the details that constitute the field experience of the author. In drawing on these principles it was assumed that my participation in the program and resulting experiences would be represented accurately. By including excerpts from my field notes, my thoughts and actions prior to the beginning of the 'critical hours' program, are accurately represented. This was done in an attempt to provide an account of how the research began and to gain a general understanding of the processes that led to the creation of the 'critical hours' program. The confessional tale exists in a symbiotic relationship to the realist tale (Sparkes, 2002) with each benefiting from distinct characteristics of the other. For this reason both were used to represent the experiences of the participants, the stakeholders, and me within the proposed 'critical hours' sports-based program. Using characteristics from the realist and

the confessional tales the five phases of this PAR are described. Including the voice of the researcher and the participants' has been done in other PAR studies (e.g., McHugh & Kowalski, 2011) in an attempt to ensure that the entire research process is adequately represented.

**Phase One: Research Design**

The objective of this first phase is to identify the key issues and the people who are affected by these issues, refine research objectives, and establish the scope of inquiry (Stringer & Genat, 2004). Researchers and stakeholders will, as a result, work through various components within the research design. Specifically, these components include an in-depth account of the preliminary picture, research focus, and research frame, and a detailed description of the working principles, ethical protocols, and goodness criteria (Stringer & Genat).

**Preliminary picture.** Constructing a preliminary picture of the project is the first step in the research process (Stringer & Genat, 2004). This is accomplished through collaboration with other stakeholders in identifying the research problem and the people affected. Developing the preliminary picture for this study was done during the development, implementation, and evaluation of the KidSport Summer Sports Camps, in which I was involved. By creating relationships with various stakeholders from KidSport Alberta, Edmonton Public School Board (EPSB), and Provincial Sport Organizations the key issues were identified and a preliminary picture of the research was constructed.

My initial involvement with this PAR project was driven by my desire to make this research meaningful, not only to myself, but to provide something

tangible for participants. As a result I decided that I wanted to create an after-school program for elementary students. Initially, this idea was vague and the scope was seen as unmanageable for a Master's thesis. It was unclear what my research questions would be and how the program would unfold. What was clear, however, was that my focus would be on creating an after-school physical activity program.

After weeks of conversations, with my supervisor and other graduate students, and examining the logistics and the possibility of delivering an after-school program, the City of Calgary released a report titled *Critical Hours: A Plan to Invest in Calgary's Children*. This proposed three year business plan aimed to coordinate a comprehensive and accessible network of 'critical hours' activities for Calgary's children and youth. In the fall of 2008, this 'critical hours' initiative was circulated to numerous youth-serving organizations (e.g., City of Edmonton, EPSB, KidSport Alberta) in Edmonton. These organizations, aware of the need for 'critical hours' programming in Edmonton, began to coordinate resources to support communities and establish programs that met the needs of communities in Edmonton. In acknowledging the need for more physical activity programs in North East Edmonton, EPSB approached KidSport Alberta creating the initial partnership for both the KidSport Summer Sports Camps and the 'critical hours' programs.

The partnership between EPSB and KidSport Alberta began as a direct result of the Alberta Initiative for School Improvement (AISI; Alberta Education, 2005). The AISI supports the improvement of student learning by encouraging

schools, families, and the community to work collaboratively, introducing innovative initiatives based upon local needs. As a result the EPSB identified the need to provide additional support to low-income areas of Edmonton, in the form of physical activity programs. In addressing the needs and challenges in low-income areas the EPSB introduced the Community Collaboration Project. This project aims to bridge the efforts of families, schools, and community agencies developing a shared responsibility for the development of children. Recognizing the need for collaboration surrounding the development and implementation of physical activity programs in low-income areas EPSB approached KidSport Alberta.

KidSport Alberta is a non-profit organization that provides support to children, removing financial barriers that prevent them from playing organized sport (KidSport Alberta, 2009). They operate on the assumption that through participation in sport children and youth learn values of cooperation, team play and friendship, commitment to goals, personal excellence, and self-esteem. KidSport provides opportunities to participate in sport by: (1) raising funds in the community to pay registration fees, (2) gathering used equipment for use in sport programs, and (3) advocating the value and benefit of kids playing sports in pursuit of lifelong health and wellness. KidSport Alberta, traditionally being a funding agency, had not been directly involved in developing and delivering programs. Despite this, KidSport agreed to an initial meeting with an employee from the EPSB to discuss the possibility of collaborating. Aware of my interest in

physical activity programming for children, the Executive Director of KidSport Alberta asked if I would like to attend the meeting.

It was in January 2009 when my initial involvement with EPSB and KidSport Alberta began. I attended a meeting between EPSB and KidSport Alberta to gain an understanding of their organizations and what their vision was for the program. My thoughts about the meeting were recorded in my first reflexive journal entry.

> Feb 18, 2009
> I left my first meeting with EPSB and KidSport feeling unsure. Unsure about whether or not any progress had been made in relation to the development of a program. A lot of questions were asked, during the hour I was there, by both parties involved; myself, I sat quietly trying to figure out my role in things. It was my understanding, not having met with either organization before, that EPSB wanted KidSport to help develop and deliver sports programs in schools identified by the Community Collaboration Project (*Reflexive Journal).*

This initial meeting began the development of what would later become the KidSport Summer Sports Camps. I was however still unsure of my role in the program from both a research and community perspective, but knew that I had developed some key relationships that would be influential in the research process. Upon my reflection of the initial meeting I had attended I wrote:

> Feb 19, 2009
> I am excited about the fact that I am creating some community connections. The program I am hoping to develop for my thesis could potentially be possible in one of the schools identified by EPSB. My relationship with KidSport and EPSB will have to further develop but my invitation to be involved with the summer programs is an excellent start. My participation with these organizations, however small it may be, is a potential way to begin my fieldwork and begin the initial stages of organizing and developing the program I plan to run (*Reflexive Journal).*

At this early stage in the research process, it was not clear to me how KidSport and EPSB would become involved with the research process. I did however see a connection between what each organization was trying to accomplish and the vision I had for the 'critical hours' program. KidSport, EPSB and I were ultimately interested in providing accessible physical activity programming to students in Edmonton and I knew that this partnership, if successful, would eventually influence the research process.

During the months of March, April and May I continued to attend meetings with staff from KidSport and EPSB. It was during these meetings that I began to question my role in the project. My original intention was to develop relationships, ultimately allowing me to develop a program for my own research purposes. As my involvement increased I began to become invested in what would soon be the KidSport Summer Sport Camps. The camps, if successful, would be an opportunity for students from low-income neighbourhoods to attend a free summer sports camp that they likely would not have the opportunity to otherwise. I was proud of that and as a result I began to question my role as a researcher and camp employee.

> April 20, 2009
> This is where my role as both a student, needing to conduct research, and a potential employee blur. Could it be possible for my research to suffer by giving too much time to the camps? Could my ability to help with the development of the camps be affected by my need to get "something" out of my involvement relevant to my research? How do I ensure that my involvement benefits the camps and still conduct research that will result in me getting my thesis? (*Reflexive Journal)*

Despite concerns about my various roles it did not prove to be an issue. This was in large part due to the fact that all parties involved had a similar vision

about the direction of physical activity programming. Because of this clear vision and the like-mindedness of all parties involved, my decision to take the camp coordinator position on May 13, 2009 was an easy one. Excited about the offer, I became even more invested in the camps and they were soon just as important as my original research focus. I anticipated that the partnerships developed during the KidSport Summer Sports Camp would continue throughout the development and implementation of what would later become the 'critical hours' program.

As my involvement in the camps increased my relationships with individuals and collaborations with organizations began to grow. I was responsible for booking all the Provincial Sport Organizations (PSOs), securing donations from community organizations, and communicating with families. In addition I was meeting with the principals of the schools identified by the Alberta Initiative for School Improvement. Together we developed processes of recruitment and discussed the logistics of the camps, making them suitable for each community. I was beginning to see how each connection I had made was influencing the research process and that if the camps were successful my chances of working in the schools would be increased.

The KidSport Sport Camps were, in fact, described as being very successful by community organizations, schools, camp participants, and KidSport Staff. They ran for four weeks in July, 2009 providing mini-sports camps for children from low-income neighbourhoods in Edmonton, Alberta. Each week the program functioned out of a different school located in a low-income neighbourhood of North East Edmonton. It was available to students for no cost.

Provincial Sport Organizations (PSOs) provided coaches each day to facilitate a variety of sport sessions (e.g., rugby, handball, basketball, volleyball, wrestling, tennis, soccer, karate, athletics, orienteering, lacrosse, ultimate). It was these camps and the involvement of the various organizations that ultimately provided the framework for the 'critical hours' sports-based program.

It was during my initial involvement with the KidSport Summer Camps that I was able to develop a preliminary picture of the research process. Although I had an idea of what I wanted to do for my thesis it was through meetings and conversations that I was able to identify the key issues, examine the capacity of each organization in the delivery of physical activity programs and develop the relationships that made the 'critical hours' program possible. Although questions surrounding my role as a researcher surfaced and questions surrounding the logistics of the program still needed to be answered I had been successful in, what some would argue is the most important principle of PAR, developing relationships. I was invested in the camps, the people and the organizations and because of my investment I was able to develop relationships that would continue to grow as the research process continued and the 'critical hours' program began to take shape.

**Research focus.** Once initial relationships have been developed and the preliminary picture has been constructed the key issues need to be refined. One of the major strengths of PAR is the ability for researchers to tentatively state the problem, then refine and reframe the study throughout the process (Stinger & Genat, 2004). Focusing the research and formulating questions is a reflective

process, requiring researchers to engage in conversations with stakeholders and examine all dimensions of the issue causing concern (Stringer & Genat). By developing clear, precise, and focused research questions researchers take an essential reference point in their inquiry (Stringer & Genat). These questions serve as a framework throughout the research process and are based on the key issues previously highlighted.

Although all research is grounded in a set of questions, the research umbrella of PAR helps generate a set of overarching questions that guide the study (Craig, 2009). In addition to addressing the three primary research questions, this study also used information that was generated during the KidSport Summer Camps to guide the development, implementation, and evaluation. These conversations, during the first eight months of the research process, allowed for us to modify and refine parts of the summer program, making it more suited to the needs of the stakeholders and the program participants. As a result of these conversations with school staff, principals, and provincial sport coaches, information was revealed that I would not have otherwise known. Although it was clear that there was a need to examine the challenges and perceptions in delivering physical activity programming after school, how this was going to be done was still not clear.

> July 16, 2009
> We are two weeks into the summer camps and already stakeholders have made important contributions to the research process. I have discussed the direction of the research with many individuals involved in the camps and all seem to be excited about the potential opportunity, offering advice surrounding school choice, grades, recruitment and other activities. Many decisions are yet to be made and despite their valuable contributions I need to be aware of the time and resources that are available. In addition I

> need to ensure I don't make any promises to schools or organizations that I won't be able to follow through with (*Reflexive Journal)*.

The contributions that the stakeholders made not only shaped the development of the program they refined my attitude towards PAR and my role in the project. Working collaboratively with others has been reported to not only create change in community and organizational settings but also to create personal changes in the researcher (Brydon-Miller, et al., 2003). Initially, I was involved in the KidSport Summer Camps because I was hoping to gain some connections, increasing the likelihood of delivering an after-school program. Now I was not focused solely on the research, but rather focused on creating something for the kids. I had become invested in the kids involved in the KidSport Summer Camps, invested in the work that each individual (e.g., principals, EPSB employees, Provincial Sport Coaches, Kid Sport employees) was doing during the development of the camps, and I valued the shared vision of increasing accessible physical activity opportunities. I was no longer looking at the 'critical hours' program as something I would develop and deliver but rather as something that would be created together.

> August 8, 2009
> Now that the camps are completed I need to shift my focus back to the after-school programs. Being involved in the camps has however given me a greater appreciation of what it takes to develop a program and the challenges involved. I have come to the realization that despite my good intention I wouldn't have been able to develop and deliver an after-school program on my own. The expertise and connections from every individual involved in the summer camps was needed for the camps to be successful. I'm assuming that this will prove to be the same with the after-school program. At this point I don't know exactly what the after-school program will look like but input from conversations during the summer camps has provided the skeleton to what will soon be the 'critical hours' program. Principals, KidSport Employees, EPSB employees, Provincial Sport

> Coaches, and the camp participants have all contributed to beginning the process and their voices have been influential (*Reflexive Journal).*

This realization of my role in the research process was a milestone for me as a researcher. I began to really understand the need to have stakeholders and participants involved throughout the research. I better understood the attributes guiding PAR methodology, and valued the working principles within it. My interactions and conversations with stakeholders and program participants now became important for a different reason. I was no longer trying to build relationships, rather I was trying to build a program with as much input from stakeholders and program participants as I could get. Conversations and meetings were now centered on the 'critical hours' program and ideas surrounding the development and implementation were becoming a reality.

> September 16, 2009
> Both my formal and informal conversations with stakeholders has given rise to what I am confident will be a successful 'critical hours' program. I am now making informed decisions based on what they want and need rather than my assumptions as a researcher. Together we have identified the two schools that I will be working in, the specific grades that I will be working with, and the content of the program. Stakeholders have identified the need to continue physical activity programs during the school year and the need to provide programming for division 1 students. This was based on the fact that the majority of intramural and sports programs available target division 2. Stakeholders also expressed concern about the sport specific nature of the KidSport Summer Sports Camps and asked that if a 'critical hours' program were to be delivered that it focus more on general physical activity rather then being sport specific. They felt that this would allow more students to be successful in the program. While these decisions could have been made without the input of the stakeholders I can now be certain that each of these decisions have been made with the best interest of all stakeholders in mind (*Reflexive Journal).*

The general questions that prompt PAR are revealed through problem identification along with questions and ideas that are used as catalysts (Craig,

2009). The need for affordable physical activity opportunities in low-income areas of Edmonton was identified as the key issue. This key issue guided the development of the three research questions. Further conversations revealed the need for sustainable physical activity programs for division 1 students (grades 1-3). Questions surrounding the logistics of such programming as well as the differences between individual schools were also raised. As a result the logistics guiding the aforementioned research questions were agreed upon and the program specifics were focused.

**Research frame.** Before commencing research, the scope of inquiry needs to be established (Stringer & Genat, 2004). This is done by making decisions about the sample, the setting, and the scope of the research (Stringer & Genat). The researcher will identify: Where will the research take place? When will it begin? How long will it take? Who are the stakeholders and participants? (Stringer & Genat). Answering these questions was done in a collaborative manner with stakeholders from KidSport Alberta, Edmonton Public Schools, and Provincial Sport Coaches. As a result the setting and participants for the 'critical hours' program were identified.

***The setting.*** PAR is considered a field-intensive process requiring the researcher to take an active part in the environment being studied (Craig, 2009). Wolcott (1995) asks what it is that brings fieldworkers into a setting in the first place and are they well situated, in this setting, to learn what it is they set out to learn? Consistent with the other phases of the research process, identifying the

schools and deciding on program content was done with the stakeholders and program participants.

Throughout the KidSport Camps there had been key individuals, providing feedback surrounding the camps and offering suggestions for improvement. As a result, they were the stakeholders that I developed close relationships with and informed many of the decisions guiding the development of the 'critical hours' program. Therefore, there seemed to be a natural progression from the camps to 'critical hours' program.

> September 12, 2009
> Oak Creek is one now officially one of the schools that the 'critical hours' program will be running in. I developed a relationship with Nicole over the summer and because of the support she provided, as a school health facilitator, as well as her excitement about having the program in Oak Creek I think that the recruitment and implementation will be smooth. Being involved in the summer camps definitely increased my access into the schools but it also allowed me to develop those relationships prior to the 'critical hours' program which I'm guessing will make the implementation a lot easier than if I was trying to develop those relationships at this time (*Reflexive Journal)*.

The 'critical hours' program took place in two elementary schools (Cedar Heights and Oak Creek) located in low-income areas previously identified by EPSB. The program ran for three months in each school (September-December at Cedar Heights and January-April at Oak Creek) on Tuesdays and Thursdays during the 'critical hours' after school. It operated out of the gymnasium at each school and provided a healthy snack (e.g., fruit, vegetables, yogurt, milk, juice) and physical activity in the form of games and sports. Myself and another graduate student (Bethan) with extensive experience working with children in both a recreational and competitive sport setting, facilitated program activities

day-to-day. In addition to the regular gym activities that were delivered by the instructors, sport coaches also delivered individual sessions (e.g., handball, wrestling, tennis, basketball) sessions throughout the program. Program activities were based on FUNdamental movement skills (Canadian Sport for Life, 2008) and it was delivered using the propositions outlined in Cognitive Evaluation Theory (CET; Deci & Ryan, 1985). The FUNdamental movement stage has been identified as being critical for the development of physical literacy creating the foundation for continued physical activity (Canadian Sport for Life). Using the guidelines outlined in the FUNdamental stage of the Long Term Athlete Development (LTAD) plan a combination of unstructured play and instruction from instructors and various sports coaches focused on numerous skills and sports.

The program participants took an active role in developing and planning the 'critical hours' program. The decision to have the program participants take an active role in planning was based on the assumption that in doing so they would be more intrinsically motivated to actively participate. The 'critical hours' program was therefore implemented using the propositions outlined in cognitive evaluation theory. Activities were delivered using autonomy-supportive behaviours that: (1) provided choice within specific limits and rules, (2) provided rationale for tasks, limits, and rules, (3) acknowledged participants' feelings, and provided opportunities for individual success, (4) provided activities that were optimally challenging, (5) acknowledged the ability of all participants, (6) provided a task-oriented environment defining success as improvement, (7)

encouraged progress and effort over winning, and (8) viewed mistakes as opportunities to learn. This was also consistent with the principles outlined in PAR.

***Participants.*** Participants for this study included stakeholders and program participants. Stakeholders for the purposes of this study are defined as those who have affected the project, contributed to the project, and are interested in the project. Stakeholders therefore included teachers of the participants, the principal of the schools, sport coaches from various organizations (Provincial Sport Organizations, Coaches from the University of Alberta, Instructors of Physical Activity Classes at the University of Alberta, Undergraduate students from the Faculty of Physical Education and Recreation), members of KidSport Alberta, as well as a representative of Edmonton Public School Board who was involved in identifying the schools and establishing connections. The decision to interview teachers was based on the assumption that teachers' perceptions of the program are needed to fully explore the holistic impact of the program in the school setting. The opinions from a representative of Edmonton Public Schools, as well as the principal's views in relation to challenges and successes of development, implementation, and evaluation of the program were included as they have the potential to enhance the replication of similar programs in other elementary schools located in low-income areas. Members from KidSport Alberta and sport coaches offered insight into physical activity program planning, implementation and resources. A total of nineteen stakeholders were involved in this study.

For the purposes of this study program participants are defined as those students who took part in the 'critical hours' program. Program participants were purposefully sampled within the identified elementary schools. With purposeful sampling, participants are selected because they are able to purposefully inform an understanding of the research problem central to the study (Creswell, 2007). Therefore, program participants included males and females in grades 2 and 3 from two schools (i.e., Cedar Heights and Oak Creek) located in low-income neighbourhoods. Grades 2 and 3 were chosen in an attempt to provide these students with physical activity programs similar to those previously offered to the older grades during the summer. It was a decision that all the stakeholders agreed upon. The ages of the program participants, 7 to 9 years, are also consistent with what has been identified as the optimum time to learn the fundamental movement skills. This is a critical stage for development and it is between the ages of 6-9 that the foundations of these skills are developed (Canadian Sport for Life, 2008).

Identifying the individual program participants in grades 2 and 3 was done using the expertise of the school staff. It was agreed upon that the program would be offered primarily to those students who would not have other opportunities for extracurricular sports programming. Program recruitment varied at the different schools. At the first school, I was directly involved in the promotion of the program providing registration forms and speaking to the identified students. The second school handled recruitment internally using a staff member to identify and register students. Despite the different approaches both programs filled up very quickly. Originally, the maximum number of program participants registered in

each program was decided to be 15 from each of the two identified schools, for a total of 30 program participants. This decision was based on having an appropriate staff to student ratio as well as the gym space and equipment available. It was assumed that 15 would be a manageable number of program participants allowing for adequate amounts of individual feedback and maximum success during activities. During the registration process however it became clear that we needed to determine participant numbers based on individual school circumstances and needs (e.g., number of classes, class size, gym size, interest in the program). As a result, a total of 14 participants were registered in the first school and a total of 21 participants were registered in the second school.

Although participants were not asked to identify their ethnic origin, more than half of the participants did disclose this information over the duration of the program. Specifically, of the 14 participants registered at Cedar Heights 9 self-identified as white Canadians, 1 as Chinese and 2 as Turkish. The school partner, who has relationships with the participants, identified the other two participants as having African and Arab origins. Of the 14 participants at Cedar Heights 5 were first generation Canadians with English being their second language. Similar to the first school some participants did self-identify over the duration of the program at the second school. Of the 21 participants at Oak Creek 5 self-identified as white Canadians, 5 as Aboriginal, 3 as Iraqi, 1 as African-Canadian, and 1 as Mexican. The school partner then identified 3 participants as having African origins, 1 with East Indian origins, and 1 with South East Asian origins.

Of the 21 participants at Oak Creek 9 were first generation Canadians with English being their second language.

Based on the unique needs of each school the 'critical hours' program ended up looking very different in the two schools. The number of program participants, the ages of the participants, the sports and activities that were delivered, and even the snacks that were served varied based on the decisions made by the program participants and the school staff. The one thing that was consistent however was the importance of input from the stakeholders and the program participants in creating the 'critical hours' program.

***Working principles.*** Working principles were identified for the 'critical hours' program during the framing of the research. In adhering to working principles it is assumed that the degree of engagement by stakeholders and program participants will be heightened (Stringer & Genat, 2004). The working principles for the purpose of this study included relationships, communication, participation, and inclusion.

Relationships are central to any PAR project and in some cases are viewed as one of the phases of the research process (Frisby et al., 2005). Building trust is instrumental to any PAR project and therefore developing and maintaining trusting relationships is essential. Relationships also provide a basis for continuing activities over long periods (Stringer & Genat, 2004). In developing relationships during the study feelings of equality among all program participants and stakeholders were stressed. Cooperative environments that promote relationships

were encouraged during the delivery of the program as well as in dealings with various stakeholders.

The benefits of these relationships not only allowed for decisions to be made, they also presented opportunities (e.g., connections with schools, continued involvement from Provincial Sport Coaches, funding from KidSport Canada to deliver the program) increasing the success of the program. These relationships were fundamental in the development of the program and I now question if the program would have been possible without them.

> September 20, 2009
> My role throughout the development of the program has changed dramatically. I began this project with nothing more than an idea. During this time it was assumed that I would be the developer, decision maker, instructor, and researcher. It wasn't until my involvement in the KidSport Summer Camps that I began to realize the importance of relationships and collaborations. I am now not only questioning if the 'critical hours' program would have become a reality without the help of each of my stakeholders but am also questioning my original motives as a researcher. I must admit that when this project began my intention was to 'help' students who didn't have access to sports programs. As I became more invested in the project, listening not only to stakeholders but to the students as well, I have started to view things differently. The program is not something that I am doing alone and ideally every stakeholder will see benefits by the end. The exact benefits for each individual stakeholder are yet to be reported but what I can comment on at this point is the importance of building relationships, communication and stakeholder involvement in the development of the 'critical hours' program (*Reflexive Journal).*

Communication was also stressed within this cooperative environment. The quality and consistency of communication have a vital effect on interactions during the research process (Stringer & Genat, 2004). Because of this, listening to each other and understanding what has been said were the guiding principles of any open discussions. This active participation during discussions throughout the

research process created opportunities for individuals to perform specific tasks relevant to the study. Active participation in research can be empowering and often results in high levels of personal investment of resources and time (Stringer & Genat). This inclusion as a result of active participation ensured that all groups benefited from the activities. In addition, it provided them with the opportunity to work with other organizations addressing the need for increased physical activity programs in low-income areas of Edmonton, Alberta.

Building relationships, communication, participation and inclusion were important principles adhered to during the development stages of the 'critical hours' program. These working principles (Stringer & Genat, 2004) increased the engagement of stakeholders as well as the quality of the research.

***Ethics.*** The three levels of ethical approval that were obtained for the purposes of this study were: 1) Ethics certificate from Faculties of Physical Education and Recreation, Agricultural, Life and Environmental Sciences and Native Studies Research Ethics Board, 2) Cooperative Activities Approval from the Associate Dean of the Faculty of Education, and 3) Edmonton Public School Board Approval.

Ethical codes guide research behaviour and the degree to which research is ethical depends on the researcher's interactions with research participants (Glesne & Peshkin, 2004). The research design therefore needs to protect the well being of participants through specific ethical protocols (Stringer & Genat, 2004). Protocols often require those facilitating research to obtain informed consent from all participants. Informed consent aims to inform participants of the nature of the

study, ask if they wish to participate, assure confidentiality, and advise them that they can withdraw at anytime (Stringer & Genat). Prior to obtaining informed consent information letters, outlining the nature of the research, were given to program participants and stakeholders (See Appendices A, C, and D).

Informed consent for program participants was obtained using written consent forms sent home with each participant (See Appendix B). In order for program participants to take part in the 'critical hours' program they had to return the form signed by themselves and a parent/guardian. Consent to participate in the research study (i.e., interviews) was separate and participants did not have to consent to being a research participant in order to take part in the program. Using informed consent forms (See Appendix E) consent from the stakeholders was also obtained prior to interviews being conducted. Through informed consent, potential participants were made aware that participation and continued participation was voluntary; participants were informed of possible risks and benefits of participation and any other aspects of the research process were explained (Sands, 2002).

The relationships that develop between the researcher and their participants during PAR have the potential to alleviate power-imbalances (Tom & Herbert, 2002). However, due to the nature of the relationship participants might reveal personal or confidential information (Reid, Frisby & Ponic, 2002). As a result, confidentiality was ensured throughout the research process. Information provided by one participant during interviews and conversations was not shared with other participants and vice versa. Only information relevant to the research

questions was used during the communication of the results. Pseudonyms have been assigned to participants and schools during the communication of these results to ensure anonymity for all participants. Furthermore, codes were assigned to differentiate between program participants (e.g. P1), stakeholders (e.g. S1), and coaches (e.g. C1). It must be noted however that the actual names of two organizations (KidSport and the Edmonton Public School Board) as well as the researcher (Lisa) and the research assistant (Bethan) have been used throughout the document. This was done at their request, and in an effort to recognize their contributions throughout the research process as well as their dedication to improving the 'critical hours' experiences for students in North East Edmonton.

***Goodness criteria.*** Schwandt (1996) described criteria for qualitative inquiry as "standards, benchmarks, and in some cases regulative ideals, that guide judgments about the goodness or quality of inquiry processes and findings" (p. 22). Sparkes (2002) offered a perspective in which trustworthiness takes on meanings based on the goals of inquiry, and that no single criterion can produce credible research. This non-foundational approach (Sparkes, 1998) suggests that criteria, in the form of lists, can be seen as characterizing traits that influence judgments of good research. These characterizing traits can be added to or taken away from the 'list' depending on the purpose and the context of inquiry. Criteria selected to enhance the 'goodness' of the study included prolonged engagement, critical reflexivity, technique triangulation, and member checks.

Put simply, prolonged engagement is "being there" long enough to build rapport and trusting relationships in an attempt to fully understand the culture

(Wolcott, 1995; Lincoln & Guba, 1985). Through an extensive fifteen months of persistent observation, in both the KidSport Summer Sports Camps as well as the 'critical hours' program, I was able to build rapport and trusting relationships with various stakeholders. The subjectivity of the researcher during this prolonged engagement must be monitored allowing the reader to understand the researcher's position within the inquiry. Creswell (2007) acknowledges the importance of clarifying researcher biases using both internal (reflexive journal) and external ('critical friend') measures. Using a reflexive journal I was able to gain clarification about biases and prejudices that have likely shaped my interpretations as a researcher and an instructor. In addition, I was able to expand and reflect on the program events drawing on both experience and expertise gained working in various roles (e.g., sport coach, camp instructor, camp coordinator, recreation programmer). A 'critical friend' was also beneficial in providing an external check for the research process by questioning meanings, methods, and interpretations I have made. For the purposes of this program my 'critical friend' was a PhD student from the University of Alberta who helped with the research process and the facilitation of the program day-to-day. Using a reflexive journal and a 'critical friend' (Emerson, Fretz, & Shaw, 1995; Glesne & Peshkin, 1992) personal biases, assumptions and actions during my time in the program were explored.

Technique triangulation is when data is produced by different collection techniques (Creswell, 2007). Essentially the researcher makes use of multiple sources and methods to provide evidence surrounding specific themes. For the

purposes of this study, participant observation, formal and informal interviews, and field notes were used in an attempt to provide corroborating evidence shedding light on the identified themes and perspectives (Creswell). Member checks was the final strategy used, ensuring the 'goodness' of the data. Through member checking the researcher works to ensure findings represent the participants fairly (Glesne & Peshkin, 1992). For the purposes of the study member checks were done with stakeholders in relation to the interpretations made about their specific interview guide. A summary of the results, providing a brief description of the themes and accompanying quotes, were also sent to each stakeholder. They were asked to provide feedback about the accuracy of the interpretation through email or a face-to-face meeting.

Member checks were not conducted with program participants. This was not because secondary accounts of their experiences were viewed as unreliable but because of limited accessibility to program participants the following school year. While it would have been beneficial to return to the children for further details and clarification about their experiences it is assumed that the representation of their experiences was not compromised as a result of not doing so. The representation of the original data is justified in that children most often respond in a positive way to interviewing in a familiar environment (Gallop, 2000), when they know and have a positive relationship with the researcher (Dockett & Perry, 2009). Therefore it is assumed, given the nature of the 'critical hours' program and the relationships with the program participants, that the

reported responses are meaningful, valuable, and accessible accounts given their experiences in the program.

Although researchers who engage in action research are often able to ascertain the worth of their research based on the relevance for the participants, by recording and reviewing the research procedure it is assumed that the entire process is adequately and accurately represented (Lincoln & Guba, 1985). It is based on this that the above criteria (prolonged engagement, critical reflexivity, technique triangulation, and member checks) were chosen to ensure the 'goodness' of the study. In addition to the aforementioned 'goodness criteria', the working principles (relationships, communication, participation, inclusion) that were previously highlighted are assumed to also add to the 'goodness' of the study. This is consistent with what Stringer and Genat (2004) describe as important features of action research. Specifically, they state that engaging people as direct participants ensures 'goodness' but also enhances the possibility of effective change.

**Phase Two: Data Gathering**

In an effort to understand the experience and perspectives of stakeholders and participants the purpose of this phase was to gather information from a variety of sources to provide an understanding of the key issues (Stringer & Genat, 2004). Interviews were the principle means for understanding the experiences and perspectives of program participants and stakeholders. They provide stakeholders and program participants with the opportunity to share their experiences and to extend their understanding of the issues being explored (Stringer & Genat). Data

collection also included participant observation, a field log, and a reflexive journal.

**Interviews.** Interviews enable participants to describe situations and reveal their own interpretations of issues being investigated (Stringer & Genat, 2004). They not only provide a record of views and perspectives but also recognize the legitimacy of participants' points of views. During the 'critical hours' program, informal and formal interviews took place with program participants and stakeholders. Informal interviews consisted of conversations during group and individual meetings that occurred throughout the program. Relevant information during these conversations was recorded in my field log. Formal interviews were prearranged and semi-structured in nature. Semi-structured interviews are prearranged and involve a specific set of questions to be asked based on an interview guide (Sands, 2002). The interview guides, which are described in more detail below, consisted of predetermined questions relating to general themes observed throughout the research process allowing participants to guide discussion. Formal semi-structured interviews therefore provided a flexible format allowing for open communication from program participants and stakeholders about the programs development, implementation, and evaluation.

Formal semi-structured interviews were conducted with program participants upon completion of the program. Ten out of 14 participants were interviewed from the first school and 18 out of 21 participants were interviewed from the second school for a total of 28 program participants interviewed about their participation in the 'critical hours' program. Reasons for program

participants not being interviewed varied; four program participants were not interviewed because their families moved, one was asked to leave the school, one had to quit the program because parents were not able to pick him up, and consent was not given for one participant.

The decision to conduct interviews at the end of the program was based on the answer to Wolcott's (1994) question "when to deliver formal interviews?" Researchers are more likely to use interviews near the conclusion of field research, when they know the questions that need to be asked and have a clear idea of how to ask them. Interviews were conducted face-to-face with program participants during the regular scheduled program time. Based on the time needed to conduct each interview, two or three participants were interviewed each day during program hours until all interviews were completed. Interviews were conducted in the program participant's classroom and lasted approximately 30 minutes each. A semi-structured interview guide (See Appendix F) was developed using general themes observed over the course of the program. Cognitive Evaluation Theory (Deci & Ryan, 1985) was used as the theoretical framework in developing additional questions that addressed the autonomy-supportive pedagogy adopted in the program. It was with these questions that I learned about participants' meanings in relation to specific situations and how they perceive not only the program but also physical activity as a whole. It was stressed before and during each interview that the participant would be guiding the discussion making them aware of the importance of their voice (Wolcott, 1994).

The stakeholders were interviewed in a similar manner. Formal semi-structured, face-to-face interviews were conducted with 19 stakeholders including participants' teachers, the principals, employees of community organizations, sport coaches, and a representative of Edmonton Public Schools. A specific interview guide was developed for each of the stakeholders (See Appendices G, H, and I) addressing the successes, challenges, barriers, as well as the impact of the program and recommendations for future programs. Interviews with the stakeholders provide an asymmetrical form of conversation with one party seeking information and the other providing it (Wolcott, 1994). Interviews were scheduled and conducted when convenient for each individual and in a location of their choice (e.g., school office, KidSport office, University of Alberta). Each interview lasted approximately 60 minutes.

**Observation.** The purpose of observation during PAR is to provide more detailed descriptions of individuals' actions and the context in which they occur (Stringer & Genat, 2004). By carefully and systematically recording experiences the main outcome was to understand the setting, the program participants, and their behaviours (Glesne & Alan, 1992). By immersing myself in the program as the main instructor I was also able to gain a sense of the challenges, barriers, and outcomes of the program. My role as the instructor also allowed me to observe teachers', principals', parents', and community partners' behaviours surrounding the programs structure and delivery.

Initially, it was difficult to determine the significance of each observation within the program. Wolcott (1995) described the problem of trying to decide

what to look at, what to look for, and whether to take a close look at something or a broad look at everything. Initial observations began with the KidSport Summer Sport Camp followed by descriptions of the 'critical hours' program setting and environment. These initial observations were examined in relation to the research problem including participant's behaviours toward physical activity and the program itself. In keeping with the principles of emergent design it was assumed that as time in the field increased, the focus of observations would change. This is something that I was aware of and the use of both a daily field log as well as a reflective journal aided in identifying important and relevant events.

The daily field log was a way to generate rich data by recording observations through field notes. Field notes are the main method for translating what is seen and experienced into images and words that can be accessed at a later date (Sands, 2002). Written field notes were recorded immediately after meetings and after each individual program. These field notes provided a detailed account of the descriptions of participants, the school, activities, delivery, interactions, and conversations over time. Glesne and Peshkin (1992) agree that while field notes should be descriptive in nature they should also be analytic. Analytic notes include any ideas or comments the researcher has about a situation during observation. Using analytic notes I was able to reflect on concerning events, themes, interactions or insights about observations. It is therefore important to distinguish between what was observed and researcher interpretation (Krane & Baird, 2005).

**Reflexive journal.** A reflexive journal was also a source of data during the 15 months of fieldwork. It is separate from the field log and provides a place for the researcher to reflect upon the research process, personal behaviours, bias, and struggles (Wolcott, 1995). It is in this journal that the researcher documents, analyzes, and assesses the research process (Emerson, Fretz, & Shaw, 1995) recording decisions and insights over time. Ultimately it is the researcher's attempt to make themselves more accountable sharing their experiences and insights with the reader (Altheide & Johnson, 2011). It enables the reader to approach the research interactively and critically examine the research and how any unforeseen consequences were handled (Altheide & Johnson).

Reflexivity is essential in qualitative research (Holloway, 1997). The researcher is the main research tool and it is therefore crucial that he or she practices reflexivity while using 'self' as an instrument (Holloway). In keeping a reflexive journal, I was able to critically examine personal biases, assumptions and actions during the development, implementation and evaluation of the 'critical hours' program. The purpose of keeping a reflexive journal was not solely to capture my voice but to also provide intimate details of the experience, as I understood it. The reflexive journal has been drawn upon throughout this thesis to add emotion and context to various aspects of the research.

**Phase Three: Data Analysis**

Analysis does not refer to a stage in the research process but rather a continuing process that should begin just as soon as research begins (Glesne & Peshkin, 1992). The purpose of data analysis is to sift through the accumulated

data and identify the most pertinent information (Stringer & Genat, 2004). Data analysis was conducted following the three aspects outlined by Wolcott (1994): description, analysis, and interpretation.

**Description.** Description consists of observations made by the researcher as well as reported to the researcher by others. Description therefore addresses the question "What is going on here?" By carefully presenting just the facts, at an appropriate level of detail, description is the foundation upon which qualitative research is built (Wolcott, 1990). The researcher 'describes', through progressively focusing the description on critical or key events (Creswell, 2007). When describing critical or key events, Wolcott (1994) suggests the researcher ask the question "Is it relevant to the account?" In an attempt to provide relevant detailed description a useful technique is progressive focusing (Wolcott). This is based on the idea that critical events will be revealed over time and as a result the focus may change as research progresses. This descriptive account may be revealed by "slowly zooming from broad context to the particulars of the case, or starting with a close-in view and gradually backing away to include more context" (p. 18). The descriptive account may therefore surface from either direction and is dependent on critical or key events.

Description is the customary starting point for qualitative inquiry and through rich description the program development, environment, setting, and participants have been communicated directly to the reader. By providing an accurate account of the preliminary picture, research focus, and research frame key issues and critical events have been presented. Every detail considered for

inclusion must be subjected to the researcher's critical judgment with the intent that treating descriptive data as fact will allow the data to speak for itself (Wolcott, 1994). It is only after the development of this presentational account that the analytical and interpretive dimensions of this transformation can proceed (Wolcott).

**Analysis.** Analysis identifies essential features in the data providing a systematic description of interrelationships among them. Analysis therefore addresses the question "How do things work?" Analysis, when taken from its broader definition of 'transforming data' and narrowed for the purposes of qualitative inquiry, refers to the "systematic procedures followed in order to identify essential features and relationships consistent with the descriptors" (Wolcott, 1994, p. 24). Simply put, analysis can be viewed as a sorting procedure providing a systematic way to identify key elements, relationships, and patterned regularities introduced in the descriptive phase. Once these critical elements in the descriptive phase have been identified, Wolcott advises they be broken down into units that are small enough to invite rudimentary analysis after which the researcher will attempt to begin to build the analysis up again. This allows data to be deconstructed in an attempt to later reconstruct it in a meaningful way.

During the deconstruction of the data, content analysis was used to examine various texts (interview transcripts, field log, reflective journal) collected during the course of the program. Content analysis uses a set of procedures that allows researchers to identify and analyze the presence, meanings, and relationships of words and concepts making inferences about them (Weber, 1990).

When conducting a content analysis words, phrases, or other units of text in the same category or theme are presumed to have similar meanings or relationships (Weber). Contextualizing these common meanings and relationships found within the data was done using relevant literature. The reconstruction of the data provided structure to the analysis further guiding interpretation (Wolcott, 1994).

**Interpretation.** Interpretation addresses the meanings and contexts of the whole research process by asking: "What does it all mean?" As information is analyzed researchers become more aware of the need to define more clearly the meanings intended behind critical issues enabling participants, stakeholders, and researchers to achieve greater insight and understanding (Stringer & Genat, 2004). Therefore, interpretation of these meanings is also a data transformation step. The researcher goes beyond the data transcending the factual accounts and cautious analyses asking the question "what is to be made of them?" (Wolcott, 1994). Drawing inferences from data, using theory to link to larger issues, speculating about comparative interpretations, personalizing interpretations, and forging interpretation through expression the researcher is able to make sense of what goes on and to explain and understand beyond what can be accomplished during description and analysis (Creswell, 2007; Wolcott).

Interpretations of data were made in order for the reader to develop an understanding that could not be possible through mere description (Wolcott, 1994). These interpretations were based on all forms of data collected during the program drawing on links to theory, comparisons to similar programs, and my own personal experiences.

**Phase Four: Communication**

The purpose of this study was to develop, implement, and evaluate a 'critical hours' sports-based program for students who attend school in a low-income area of Edmonton, Alberta. Themes, which are supported by direct quotes, have been used in an effort to highlight the experiences of the stakeholders and program participants throughout this PAR project. Using Wolcott's (1994) description and analysis the key elements, categories, and themes were initially identified. Reviewing the interview data, I reflected on what was said and was able to form initial categories. Further examination of these categories allowed for interpretation of the data and the identification of five themes. The five themes that emerged are: 1) "I Play Those Games Nowhere Else," 2) "Just General Life Skills," 3) "How We Fit in the Whole Picture," 4) It's Not Always Financial," and 5) "Plan for it Long Term." It must be noted however that despite attempting to accurately represent the data each of the identified themes are not mutually exclusive and there are some data that could apply to more than one theme simultaneously.

**"I play those games nowhere else".** The 'critical hours' program was an opportunity for program participants to be exposed to new opportunities. Specifically, participants were exposed to programming opportunities they would not otherwise get, new sports and physical activity, and to after school programming.

Exposure to new opportunities was a major benefit of program participation. Stakeholders discussed the need for accessible physical activity

opportunities for students not enrolled in other extracurricular activities. S4 described the 'critical hours' program as an opportunity for program participants to participate in a sports program they would not otherwise get by saying:

> Well I guess I just can't stress the importance of it enough, like particularly with the kids that you're trying to attract to a group, to a critical hours program. These are kids who are probably not signed up for other sports and don't have other resources in the family and other opportunities. So it's even more key that we make sure that all kids get to participate *(S4)*.

By providing the 'critical hours' program directly in the school, students who normally would not get the opportunity to participate in a physical activity program were introduced to new sports. Reaching students who would not normally be involved in sports programming outside of their school was reported by C4 who said:

> By going to the schools you're reaching the kids that haven't actually shown an initial interest or haven't actually figured out that they want to play sports yet. So you're kind of targeting a whole new, I guess market that hasn't gotten this opportunity yet. So you're really helping them, the people who need it the most…*(C4)*.

Similarly, C8 discussed the need for school-run 'critical hours' programs by saying, "Main thing is these kind of programs are very important for kids who don't have opportunities to go into actual programs. Plain and simple."

In addition to the 'critical hours' program being a new opportunity, exposure to new sports and activities was reported. Providing participants with opportunities to experience new sports and the resulting benefits was discussed by C6 who said:

> … I think the exposure to different sports at a young age is really important because it can help them make decisions as they get older as to what they actually enjoy doing. I think that through the exposure to the

> different sports you know, being exposed to different like movement is really important. I guess depending on what the different sports were that they're being exposed to different types of movement (*C6).*

The ability of the 'critical hours' program to expose students to and offer activities not available at their school was also discussed by S5 who said, "And the other part for me is I look at the fact that there were so many things on that schedule that we can't give them." The 'critical hours' program and its ability to provide programming unavailable at the school level was further discussed by C5 who said, "They gain the opportunity to learn more about something they might not normally get to learn about 'cause in the phys. ed. program I mean you learn about stuff but not to the extent you will in this program."

Program participants also reported exposure to new opportunities and sports. Providing participants with a program opportunity they would not otherwise get was described by P1 who said, "I never been in a program after school. These are my very first two." She continued to elaborate on why this was one of her first sports programs saying:

> I like the ones that we do lots of sports 'cause we don't, I, my parents they don't have enough money for a lot of sports things. The only thing they had money for one time was with soccer equipment because I was joining soccer and, and they got me a soccer ball to do it at home…*(P1).*

Exposing participants to sports they had not played before was also discussed by P2 who said, "I learned some sports and some games…I play those games nowhere else."

In addition to exposure to new sports and opportunities, stakeholders and program participants reported the variety of sports offered over the course of the program to be a benefit. Whether activities were something that program

participants had not experienced before or something they loved to play, exposure to a variety of activities was reported as a strength of program delivery. This was explained by S8 who said:

> Diversity I guess of programming. The kids were excited to come back the next day because they knew there was going to be something different. And whether it be something, a sport that they loved and play all the time or something that they've never tried before. I think the variety was really important as well *(S8)*.

In addition S3 expressed the advantages of teaching a variety of different sports and the benefit for continued physical activity by saying, "…the more times you offer different sports that offer different skills, they're gonna be exposed to that type of a coordination issue and I think instead of just focusing on the one type of skill I think it's important for these kids to be exposed to everything…" C4 added to the importance of sampling many different sports in elementary school stating, "…especially at that age 'cause nobody really knows what sports they're good at or what they want to do when they're that young. So by providing them a wide range of opportunities it's, I think, a great idea."

Program participants also viewed doing a variety of sports and activities during the program as a benefit. When discussing program content and variety of activities with the program participants P5 described things that he enjoyed saying, "That there's lot of activities. And sometimes you get to change the equipment that you'll have lots and lots of fun." This is similar to what P16 stated, describing the best things about program as "All the sports that we did…when we practice all the sports like soccer, hockey, um tennis…"

Exposure to physical activity in general, rather than simply exposure to a variety of sports, was another major benefit of program participation reported by stakeholders and program participants. School employees (principals, teachers, school health facilitators) as well as other stakeholders discussed the benefits in relation to increased physical activity for program participants. An example of this increase in physical activity was given by S1 who said:

> I think just it was something that was really beneficial for the kids to have something to go to twice a week and to learn lots of new skills and to have an opportunity to be physically active for a good hour and a half at least twice a week when otherwise they probably would not have been doing that *(S1)*.

In addition to being physically active after school the program allowed participants to learn the fundamental movement skills (e.g., run, jump, throw, catch) necessary for continued physical activity participation. The benefit of being physically active and learning about these basic movement skills was discussed by S3 who said:

> My assumption would be that the participants are getting physical activity twice a week that they may not be getting otherwise, they may just be going home and hanging out. They're getting an introduction to basic skills, basic fundamental physical coordination skills that they may not otherwise get if they're not a kid that goes home and plays outside *(S3)*.

Aware of the benefits of physical activity and the negative effects of sedentary behaviours, the need for physical activity during the 'critical hours' after school was also discussed. Focusing on the rising rates of obesity, one major program benefit identified by C4 was how it was able to provide an environment where students could be physically active. "Well for one I think it's really good that

they're being active 'cause there's a lot of unhealthy kids out there these days. The childhood obesity is a pretty big issue arising lately."

Physical activity was a benefit of being involved in the program also reported by program participants. When asking program participants about their after school activities it was clear that physical activity opportunities were limited. The majority of program participants reported sedentary activities during the 'critical hours' when not in the program. When asked what he would be doing when not in the program P16 said, "I would probably watch some TV, eat supper and go bed. " Similarly, P25 said "I think watching TV, or playing with my Barbies or Polly Pockets." Increased sedentary behaviours and the need for more physical activity opportunities during the 'critical hours' was clearly explained by P2 who said:

> P2: At home I mostly do nothing that's active.
> Q: You don't?
> P2: No the only thing, the only way I get active is run and I mostly run at recess.
> Q: And what do you do at home that you don't think is very active?
> P2: Watch a movie. *(P2)*

Increasing the students' physical activity levels, through exposure to sports programming, was also consistent with school objectives. As a result this increase in student physical activity levels was also a benefit for the school. The program's ability to increase students' physical activity levels and its impact on the school was described by S2 who said:

> I think it's a benefit to the school because it supports our endeavour to increase physical activity amongst children. So I think it certainly supports us in that regard. It didn't cost the school anything, the facility was available, the gymnasium was available to provide space for that program and to provide the time as well. So I think overall I think it's a benefit

> because as I said we are providing physical activity, which is one of those things that we are trying to encourage our children to do *(S2)*.

Similarly, S5 discussed how the program was consistent with the school's objectives saying, "But I think for us, for our school because we do promote so much and we do want our kids to be so physically active… we like that physical activity part of it."

Stakeholders also identified exposure to after school opportunities as a benefit of the 'critical hours' program. The program was offered during the 'critical hours' after school when many parents were still at work and supervision was no longer the school's responsibility. As a result the program was identified as a safe alternative for students during these 'critical hours' after school. Providing a safe alternative where students could be actively engage in a safe, supervised environment was a benefit discussed by S2 who said:

> I think there are certainly benefits to having a program like that because it does engage children after school. And sometimes if you have children who are latchkey children they're going home and they're letting themselves into the house because their parents are still working, till 5:00 or 4:30, it does provide them with a chance to engage in something that is positive. And they're less likely to perhaps get into some trouble if they're doing an activity that's supervised, than if they've gone home *(S2)*.

Similarly, S3 described the benefits of the program expressing the need for a safe environment after school in low-income neighbourhoods saying, "…It's safe, instructors are safe, the adults are safe, the location's safe, you know, so it, it's a positive for that child as well." C9 added to these benefits saying, "…keeps them off the streets. Keeps them out of trouble."

By providing a safe, supervised environment program participants were also exposed to fun opportunities in an after school setting. An example of this

was given by C10 who, having coached a sport specific session, not only identified fun as a benefit, but rather the biggest benefit to program participation: "…I think the biggest benefit was that they had a good time. They had fun and they can go and tell their friends "Hey, this was a really good time we should try this out". Similarly, when discussing the program benefits S4 discussed having fun by saying, "I think just the fact kids are having fun, like more kids need to have more fun and it's a great way to end the day and have a few laughs." The program was also described as an outlet for participants, providing an environment where they could enjoy themselves away from home. This was described by C2 who said, "I think they're having fun, like I said, who knows what they're dealing with at home but it gives them the chance to have fun…"

Program participants also discussed having fun and getting excited about the program. When given the opportunity to "say anything" about the program P6 said "I'll say that program's really fun and you're trying to keep us healthy and active." Similarly, in response to what he liked best about program P24 said:

> I like coming here because I don't like staying home most of the time 'cause my annoying brothers annoy me, and these sports and stuff are fun 'cause it's the only sports I went to and I was asking my mom, I was begging her if I can come 'cause I like it here, it's so fun *(P24)*.

Overall, exposure to the program provided program participants with the opportunity to have fun in a safe, supervised environment and be exposed to a variety of sports and new physical activity opportunities.

**"Just general life skills".** In addition to providing exposure to new opportunities the 'critical hours' program was described as an environment where program participants learned general life skills. A variety of intra- and

interpersonal skills and concepts have been reported as a result of program participation. The overall impact of the program and its ability to teach social skills that students might not be learning at home was discussed by S1 who said:

> I think that some of our kids don't really get a lot of that support at home in terms of good social skills and things and so helping them to learn those skills, which will be helpful in any setting, is good *(S1)*.

When examining what intrapersonal skills and concepts stakeholders felt program participants were learning as a result of the 'critical hours' program, increasing self-confidence and self-esteem were the two intrapersonal concepts reported most often. The program was viewed as an environment where students were successful in new activities, increasing their self-confidence and their willingness to try new things. This willingness to try new things as a result of engaging in program activities was discussed by S2 who said:

> I think they benefit in the sense that it can help their self-esteem; it can help their self-concept because as they engage in those activities hopefully they're going to get better at doing them and that can increase their self-confidence. Not only with that physical activity or game that they're engaged in but perhaps a willingness to try other things as well. So I see that as valuable *(S2)*.

A more specific example was given by S6 who described the increase in one student's confidence by saying:

> I think someone like Umar, I think just because he's kind of an all over kind of kid, being successful there I think just helped him, you know, whether we saw it transfer into the class room I don't know but I think for him it was good. Just a little confidence, yeah, built some confidence for him *(S6)*.

An increase in confidence during PE class was another benefit of the 'critical hours' program. Stakeholders discussed the impact of being successful in a physical activity setting on the self-confidence and self-esteem of program

participants. The direct results of this increase in self-esteem and how it transferred to physical education was reported by S5 who said:

> Self esteem, well I mean that goes along with the confidence. Their self-esteem definitely is higher because they want to participate more in gym, as well. I noticed when I was writing report cards this term I was able to do a lot more "the student participates in gym" …There really wasn't any wallflowers standing against the wall *(S5)*.

Stakeholders also reported that parents were beginning to see increases in their children's willingness to participate in physical activity and how they credited the 'critical hours' program with this. One student's attitude shift was highlighted by S1 who said:

> …one student's mother…she said was that, in her daughter, she noticed some big changes in her daughter because she went from being kind of hesitant to participate in some activities or very easily deterred if something happened, if she got injured or whatever…but now she was very interested and keen to participate regardless of that *(S1)*.

In addition to the above intrapersonal concepts, stakeholders felt that program participants learned interpersonal skills as a result of program participation. The interpersonal skills that were reported the most by stakeholders were interacting with others and working as a team. The ability of the 'critical hours' program to provide an environment where students were working together was discussed by S7 who said:

> And just learning different uh, just general life skills about you know, how to interact with different groups of people and being part of a team, because some of them might not, even though it's not a, a team per se, it's still a smaller group of kids that could definitely act as a team in the activities that they're doing *(S7)*.

The benefits of having to work in a group, outside of the classroom, were also discussed by C6 who said, "You know, benefits of them having to work with each

other. Like in a non-school kind of setting…they did have to learn to work with the other people that are in the group."

Program participants also identified and discussed learning various intra- and interpersonal skills and concepts over the course of the program. When asked what they had learned in program P14 said:

> I feel like I'm learning that, that to play as a team. If there's a person left out who has no partner you let them join and sometimes if, if you don't get right, if you can't, if you aren't, can't get a goal the first time you, when the puck comes around you shoot it and try again *(P14)*.

Similarly, P3 discussed learning about teamwork by saying:

> P3: We learned how to work as a team.
> Q: Yeah. Who taught you to learn how to work as a team?
> P3: Lisa and you.
> Q: How did you have to work as a team? Do you remember?
> P3: So they, the other team couldn't get a goal. And we could *(P3)*.

Learning about cooperation during the program was described by P24 who said he had learned "How to cooperate with others and new games." P26 discussed learning about sportspersonship by saying he learned about, "Having sportsmanship and be kind to others…" Finally, the willingness to try new activities and make new friends was discussed by P24 saying, "I learn in program, to meet new people and to learn new things."

Overall the 'critical hours' program was credited with teaching a variety of intra- and interpersonal skills and concepts. Stakeholders and program participants identified the increases in self-confidence and self-esteem as a result of participation in the program. Additionally they felt that teamwork, cooperation, and sportspersonship were stressed throughout.

**"How we fit in the whole picture".** Key components during the development, implementation, and evaluation of the 'critical hours' program were the partnerships that were developed and the connections that were made. The 'critical hours' program was described as a place where stakeholders were able to learn about and work with other organizations, where program participants were able to connect with their school and community, and where relationships were developed between program participants, coaches and instructors.

The various roles of each organization and the resulting effectiveness of each partnership was discussed by S9 who said:

> Oh I think the collaboration was fabulous because the schools got the space and has the children, the university brought the expertise of the teaching staff and the program, KidSport brought some funding that was needed, whether it was equipment or whatever was needed to the program. And I think that's essential. And I think that was really good. I think that that is a really great partnership *(S9)*.

The effectiveness of these partnerships during the program was likely due to the fact that some of these relationships were established prior to the 'critical hours' program (during the KidSport Summer Camps). Because these partnerships were already in place it was assumed that the development and implementation of the 'critical hours' program was made easier. The benefit of these existing partnerships was discussed by S1 who said:

> We already had a relationship and I think too maybe it was easier for me to sort of promote it and kind of talk to Bob about it because it was like, you know what, they've already been here. They did a great job for our kids in the summer. We already have a relationship with them *(S1)*.

In addition to increasing the effectiveness of the 'critical hours' program these existing and new relationships were also a benefit to the individual

organizations. The ability to learn about and understand the mandate of other participating organizations was viewed as something positive, increasing organizational scope as well as knowledge about other organizations. Increasing scope and the importance of understanding the bigger picture in relation to organizational structure was illustrated by S9 who said:

> First of all, we learn about how other organizations work, we learn about the mandate of other organizations. Then we have a better understanding of how we fit in the whole picture. Because sometimes when we work within our own organizations we can only see so far. We don't get to see the bigger scope, right? I think just coming together to work for families and to provide children with something positive; you know I think that that's huge *(S9)*.

A specific example of increased scope due to the partnerships created during the 'critical hours' program was given by KidSport. The 'critical hours' program was a new initiative for KidSport, focusing on physical activity programming rather than their traditional sport funding. This shift

from sport to physical activity is what ultimately led to a perceived increase in scope. When discussing the inclusion of physical activity in addition to sport S7 said:

> Well our focus is always gonna be on sport. But I think what we've done with the additional programs that we do is kind of stretch that a bit to be a bit more embracing of the whole physical activity aspect, so although we will always, or traditionally we will fund kids, we wanna help be part of that awareness piece to make sure that it's not just sport, it's physical activity in general and so creating opportunities for kids to be physically active in their community *(S7)*.

Similarly, S8 suggested that increasing their scope was a benefit for them as well as the kids that they fund. "I guess just in turn makes us a more well-rounded

organization, the more notches we can have on our belt in regards to getting kids into sport opportunities is always good."

By providing program participants with the opportunity to participate in their sport, one provincial sport organization ensured the students were learning about new sporting opportunities available in Edmonton. C8 described the benefit it had on his sport by saying:

> I mean first of all we get the exposure. Most of those kids didn't know who we are and whenever we say wrestling the first thing we got…Oh it's a WWF [World Wrestling Federation] star or WWE [World Wrestling Entertainment] star and so that's the other thing. The other benefit we have is we kinda show them the non-violent side of the sport. I mean we were so inundated with the MMA [Mixed Martial Arts] and you know all the people wearing the Tap Out hats this mixed martial arts fighting and we're not about that right? We're, we're an amateur sport *(C8)*.

This increase in awareness of provincial sports organizations and knowledge about existing opportunities was assumed to increase the number of students who continued with community sports. S3 described how KidSport funding is important once program participants were aware of what was available in their community by saying, "I think it's important that the KidSport program then be introduced to them when they are ready to take that step into the bigger community."

Taking this step into the bigger community and creating community connectedness was a reported benefit as a result of delivering the 'critical hours' program directly in the school. An example of this was given by S3 who felt that program participants learned about opportunities within their community as a result of program participation. She described program participation as the first level of exposure leading to further community involvement by saying:

> A lot of them are immigrant families I would assume and I think it's critical for those kids to understand that there is sport opportunities for them here, that there is a community here that they could get involved in. Just in talking to some families, not necessarily directly involved with the critical hours program, but a lot of these families don't connect to their greater community, even though it's their schoolmates or their friends in the community, they don't really connect with them in terms of what the opportunities are for them. So having it in their school where they can participate with other kids that may be low-income that aren't ESLs, it's huge for these kids to realize that there's tons of sport opportunities out there for them, and that it doesn't have to be a huge endeavour to participate in these sports, but having it in the school is super *(S3)*.

In addition to connecting to the greater community, the 'critical hours' program was credited with helping program participants' feel a part of their school community and improving overall attitudes. By creating a space for them after school S4 assumed that they felt more connected to their community, school and teachers.

> Well, I think the benefit is it helps children and youth feel part of the community even more if they're doing fun activities after school. They get to see their school as being the hub of their life and offering good things, so it actually probably enhances their view of education and teachers and school as being a friendly thing because they're having fun there *(S4)*.

Stakeholders also reported a relationship between wanting to be at school and the 'critical hours' program. This relationship was discussed by S5 who credited the 'critical hours' program with increasing participants' attendance. "They were always at school on Tuesday, Thursday. It didn't matter... 'Cause they wanted to be there. They wanted to go to that program."

Another important contributor to improving community awareness and attitudes toward school were the relationships that were developed with the instructors and coaches. Stakeholders felt that developing relationships with program participants and being a positive role model both in and outside the

program was especially important when working with these children. A specific example of how stakeholders thought the instructors were able to connect with the participants was demonstrated by S1 who said:

> I think too just the people running the program is really important as well. I think 'cause we want the kids to have positive role models, to have people who are accepting of them. And really I think people warm towards them and make them feel comfortable and feel safe and things like that. I think you and Bethan were great with that *(S1)*.

Similarly, S4 discussed the need for children to have role models and people to connect to, saying "…and having some adult role models is huge in kids' lives. You need many adults in your life who support you and give you positive feedback and so I'm sure that that program did that for those kids as well…"

Program participants also reported developing positive relationships with the instructors. Although they didn't directly discuss the relationship, it is assumed that their responses about the instructors indicated that a positive relationship existed. For example, when asked, "Can you tell me what are the best things? P22 said, "Seeing you." Similarly when asked, "Tell me why you get excited about program?" P13 said, "You guys." Further discussion revealed that P22 and P13 felt this way because the instructors were fun.

Coaches also reported developing relationships and feeling connected to program participants as a result of their involvement with the program. This was due largely to the fact that many of the coaches had not delivered programs in low-income areas prior to the 'critical hours' program. As a result they became aware of the impact that their involvement in the program had on participants.

The effect on individual coaches and their ability to make a difference was highlighted by C6 who said:

> I think that probably the biggest benefit for me was even just seeing what it was like, in the sense that I had said like I hadn't worked with very many low-income kids prior to then, so even just kind of seeing the difference that you could make in an hour of hanging out with those kids, and the fact that, you know, even just realizing the opportunities that they perhaps don't have and what a difference a small program could make *(C6)*.

The 'critical hours' program also provided an environment for teaching that many of the coaches had not experienced before. The connections and partnerships that resulted in the 'critical hours' program provided the coaches who were undergraduate students with an opportunity they had not experienced before. C1 described his involvement in the program as a teaching opportunity by saying:

> I've never really been presented with an opportunity to teach something other than what I've already done, like soccer and stuff. So Don was pretty much like "yeah, you want to go to an elementary and teach some tennis?" And I mean that's the first time…So it's like might as well. I enjoy it so I don't think of it as really like that big of a task *(C1)*.

Similarly, C3 discussed the benefits associated with working with elementary students:

> C3: I'd never actually really worked with kids that young, like in a teaching sort of a capacity …
> Q: OK and are you in education?
> C3: I am yeah, so I thought I might help out a little bit, just one day's not gonna make the difference but at least get a taste of it *(C3)*.

Relationships and connections made were an essential component of the 'critical hours' program. As a result, the 'critical hours' program was described as a place where stakeholders were able to learn about and work with other organizations. Additionally the program provided an environment where program

participants were able to connect with their school and community, and where relationships were developed between program participants, coaches and instructors.

**"It's not always just financial".** When discussing the accessibility of the 'critical hours' program stakeholders highlighted the common barriers to physical activity programming that families living in low-income areas often experience. Barriers were identified as those things limiting participation in physical activity programs and included a lack of opportunities and facilities in low-income neighbourhoods, cultural barriers, cost, and transportation. Additionally, stakeholders reported access to schools along with a lack of resources (e.g., funding, staff) as barriers that limit the implementation of after school programs in low-income areas.

The lack opportunities was a major barrier limiting participation in low-income neighbourhoods. Specifically, North East Edmonton was identified as an area with limited physical activity and sports programs available for children and youth. The lack of physical activity opportunities available to families living in the identified communities was reported by S9 who said:

> So really right around this area like in North East Edmonton there's not a lot. So there are little pockets of programs that are being offered after school. But the free programming, you know I know there are some churches that offer some you know free gym night or something like that. But really, I don't think there's a lot out there. Like some elementary schools may offer a little bit of like a free gym time you know once or twice a week, but it's dependent on teachers who volunteer to do this *(S9)*.

Similarly, S5 said:

> As a community, I don't see much, I mean I know the kids will tell me they'll go play soccer. But that's really the only physical activity that I

> hear the kids talk, really about. The fact that they play soccer and things like that. Other than that a lot of them will be like, oh I was at daycare. You know that's really what they're getting. You know, that's more their physical activity *(S5)*.

When discussing the barriers associated with having limited opportunities available within these low-income communities, stakeholders identified the direct impact on the students. A specific example outlining the lack of opportunities for one program participant was given by S6 who said, "I guess Courtney, I was thinking about Courtney because I think in that situation specifically if she can't do it not through home, like if it's not through school then she just doesn't get it."

A lack of facilities in North East Edmonton was also seen as a barrier further limiting the opportunities available for participation in physical activity. The lack of community facilities located in these low-income neighbourhoods was discussed by S2 who said:

> Well in terms of this community here I'm not aware of a lot of sports programs being available. Part of the problem is close to us there isn't a lot of; there aren't a lot of facilities close to our school. We don't have a community league that is right next door that offers a skating rink in the winter, anything like that. Any facilities that are available are a little ways away, and so given the clientele that we have at our school sometimes it's difficult for them to get to those other places *(S1)*.

C4 also identified increased barriers due to a lack of accessible community facilities saying:

> Yeah well there really, like there's definitely also maybe a lack of actual facilities and programs going on. So there should maybe be new facilities built to provide them, 'cause a kid on the north end isn't gonna drive all the way to the south side to play a sport necessarily, 'cause the parent might not have time to drive them an hour to get to the other side of the city. They might be working a job or two jobs that it just wouldn't work. So definitely have to make sure that all the opportunities are provided for them in that sense *(C4)*.

In addition to limited facilities, being new to Canada was also a barrier to physical activity participation reported by stakeholders. Minimal participation by new Canadians due to a lack of information about accessible programs was discussed by S7 who said, " For families, a lot of those families in those areas, if they're new immigrants or new to that area, they're not gonna know necessarily where the programs are." Similarly, S4 discussed the barriers associated with program participation for new Canadians saying:

> I think knowing about the programs. I think there's a barrier right now where the groups don't even know about, you know, KidSport and some of our leisure access programs because there aren't enough people out there being able to talk in the different languages about them, and where we've seen it take off it's because a few people in one cultural group figure out how it works and then they educate the others in their community about how it works, so it is a matter of the community becoming educated and spiraling *(S4)*.

The language barrier for new Canadians and how it was a barrier for program participation was further discussed by S7 who said:

> Well with KidSport we deal a lot with new immigrants, new Canadians, and English not being a first language they're not as, you know I kinda touched on it, but not knowing or not understanding what programs are available. Not having somebody within the community that they can go to give them information. How are they supposed to know where to go? *(S7)*

Other barriers limiting program participation for new Canadians included barriers surrounding cultural beliefs. The barriers due to cultural beliefs that were discussed by the stakeholders included the restrictions that certain cultures have for girls with respect to physical activity. Cultural restrictions due to gender were discussed by S1 who said:

> Some of the cultural limitations like girls being able to play in dresses and things like that. You know or wearing their hijabs I think they're called, I can't remember but Yeah. So definitely that as well… even the types of

> activities that kids can participate in again girls especially if they're wearing skirts or if they're you know maybe they shouldn't be doing like balancing on their hands and upside down things that wouldn't really be a good thing so *(S1)*.

Similarly, S3 discussed these cultural limitations saying:

> …it's not always just financial, a lot of it is cultural, some of these families don't want their daughters participating in sports, some of the families don't care if their kids play sports so they're not gonna even bother filling out the forms so that the kid can do it no matter how bad the kid wants to do it *(S3)*.

Cost and transportation were also heavily reported as barriers. Stakeholders discussed financial barriers for families living in low-income communities due to costs associated with registration, equipment, and transportation. These financial barriers were discussed by S8 who said:

> There's a number of barriers and I think it depends on the communities that you're looking at. But I think for the most part, for low-income families obviously cost is a big one. So financial barriers which prevents them from being able to pay the registration fees, being able to pay for equipment, being able to cover travel costs *(S8)*.

Similarly, S2 recognized these financial barriers and the need for subsidized or free programming, saying:

> The other thing would be is there a cost factor that's associated with it too? Because we're in a lower socioeconomic area parents aren't always able to afford something like that. So if there is a way to subsidize the program or to offer it free of charge in some way so long as the parents meet the criteria, then I think that could be good *(S2)*.

Despite transportation being a barrier in relation to cost, stakeholders also identified the difficulties surrounding the logistics associated with travel to and from sports programs for families living in low-income communities. Because program opportunities were limited in the identified communities and many families relied on public transportation, participation in programs outside the

identified communities was reduced. An example of this was given by S9 who said:

> But most of the families that are in poverty are dependent on the bus system, and some of them don't even have access to the bus system. So if it's not something within their neighbourhood, um you know outside of the City of Edmonton providing green shacks in the summer, there's nothing else really for the kids to participate in *(S9)*.

Not having accessible program opportunities within their communities and the difficulties surrounding transportation when having more than one child was also discussed by S3 who said:

> I think the biggest barrier is definitely the transportation, getting kids to and from. And also if we're talking about the immigrant families, a lot of these families are single parent families, and they have multiple kids, and they have other kids at home, so they can't be dragging four or five kids with them to take them to these sporting events, so they don't do it *(S3)*.

These barriers surrounding cost and transportation were evident even in the 'critical hours' program. One student who was originally enrolled in the program stopped attending after a few weeks. When discussing the reasons why he had stopped attending S5 said "probably it was just travel or like being able to pick up…". Despite the program being offered at the students school, transportation was still a barrier to participation for him and his family. The student's reaction to this barrier and not being able to continue to come to program was captured by S5 who said:

> He was very disappointed that he couldn't do it. He actually he had written…it was kind of a persuasive letter asking for something and he had actually written could I just please go, you know just for one day out of the week? …so I know for him it was very hard *(S5)*.

In addition to the above barriers limiting program participation, barriers to program implementation, such as a lack of funding, "manpower", and space were

also reported by stakeholders. The need for financial resources to run a program and the lack of funding available to KidSport was reported by S7 who said, "Funding, I mean because I think right now KidSport Edmonton is not in a position to take that on, absolutely not, if it wasn't for the university kind of running it right now, it wouldn't happen, because we don't have the money." Similarly, a lack of money and the result on creating sustainable programs was discussed by S9 who said "And the grants that are out there right now are not sustainable. You might get it for 3 years and then after the 3 years it's like, find your own money or you know or they're not renewing grants. How can you sustain anything?"

Project staff was another resource limiting the delivery and sustainability of physical activity programs. The limited staff available to run physical activity programs was a barrier to program implementation reported by stakeholders. This lack of "manpower" and the overall effect on program delivery was discussed by S3 who said:

> I think ultimately if KidSport had the manpower and had the ability it would be a no-brainer in terms of a program that we could offer, but right now KidSport Edmonton is not in a position to be able, to be offering programs, like we just don't have the staff and we don't have the volunteer base and we don't, just don't have that right now *(S3)*.

The need for staff and funding was also discussed by S8 who said:

> I mean if we had lots of staff and if we had staff who were dedicated to programs, it wouldn't be as much of an issue. So yeah, I think that's the biggest one for us. And then obviously funding as well. Trying to find appropriate grants that are willing to support a program like this is always a challenge. But at the same time I don't think we've had a huge problem finding the funding. It's just mainly finding the people to be able to do it *(S8)*.

Access to school space was another barrier limiting program implementation. Accessible space in schools was a barrier for community organizations and was something that stakeholders felt limited the delivery of physical activity programs in communities lacking other available facilities. Although stakeholders were aware of reasons for the limited access within schools, they felt that access to the school was fundamental in delivering accessible, sustainable programs in low-income communities. Reasons why access was limited were discussed by S2 who said:

> …our school just can't have an organization bring in a program and operate it without having somebody present in the school, and so it either has to be custodial people who are here already working during the evening cleaning the school, I mean that's one possibility. Our school district does have a host and hostess who can be available to open and close a school but those arrangements have to be made through central office, through leasing. And they have to be approved as well. Because in those situations whoever is acting as a host or a hostess may be in possession of the key. So that's important. So it's you need to have someone available to let them in and out of the building. And to be here during that time. And that can be difficult *(S2)*.

Due to these restrictions surrounding school use, access to gym space during the 'critical hours' is currently a barrier. Despite the 'critical hours' program gaining free access to the school this is often not the case for other organizations. Stakeholders recognized the unique circumstances under which the 'critical hours' program was implemented and felt other organizations should be able to access the school space as well. S8 discuss these unique circumstances saying:

> We've been very fortunate to find a great partner in the public schools who has really pushed for us to get us access into the facilities. But without that connection to that individual has really vouched for us, it you know, it just doesn't happen for a lot of organizations who have really

> great programs but have nowhere to conduct them. So I think it's really unfortunate that we have these facilities, but just don't you know, there's some barriers in the way to using them. I think we need to really get down to how we can open them up for other groups *(S8)*.

Overall, stakeholders identified a variety of barriers limiting the implementation of and participation in physical activity programs for families living in low-income neighbourhoods. A lack of available opportunities, limited community facilities, issues surrounding transportation and cost were all barriers reported for families. In addition stakeholders recognized the difficulties for many new Canadians surrounding language barriers and cultural beliefs when registering and participating in programs. A lack of funds, "manpower", and limited access to school space were also barriers that stakeholders identified and felt should be reduced to ensure the successful implementation and delivery of programs in low-income communities.

**"Plan for it long-term".** When examining the 'critical hours' program, stakeholders provided suggestions for future programs. Specifically, stakeholders argued that it is important for future programs to consider sustainable programming, discussed the need to expand the program, and highlighted necessary improvements for program recruitment and communication.

The lack of sustainability with the 'critical hours' program was noted as something that future programs should address. This program was only offered for a predetermined amount of time, with no follow-up or continued programming for participants. S9 discussed the importance of sustainability by saying:

> Well sustainability, right? When we do the one shot deals, the kids actually lose out. 'Cause they actually want something another time, right?

> And when we can't provide that, I don't know if that's the best. That's a weakness *(S9)*.

Similarly, C6 also viewed the short-term programming as a challenge that should be addressed, yet recognized the limitations of the program and highlighted the attempt that was made to provide sustainability:

> …I think that the fact that at the end of the program that even though, you know, you weren't gonna be going to this school any more but that they were allowed to keep one piece of equipment, and that then, not only did you just kinda give it to them and send them off, but then that you told them, you know, how they could incorporate that into kind of like their daily activities, I think that that's awesome because then it's providing more kind of sustainability, right, as opposed to just, you know, a short term program and then leaving *(C6)*.

Similar to the providing sustainable programming, stakeholders felt that future 'critical hours' programs should be expanded. Expansion included increasing the number of schools the program was operating in as well as increasing the length of each individual program. Providing programming opportunities to more schools was suggested by S8 who said:

> Well I think obviously the need in a city like Edmonton is huge. So being able to touch on, on two schools is great but you know, maybe in the future being able to open it up to more schools. Because we know there are lots more kids out there who do need our help and who aren't getting these kind of opportunities. So finding a way to not only continue to build relationships and help the kids in those schools, but then also to extend it to other schools and other communities as well who really need it *(S8)*.

Increasing the length and the resulting benefits for program participants was reported by C6 who said, "I mean like obviously always I would say that length of a program, and I'm sure you know this…obviously the longer the program the better the impact on the children, …" Similarly, increasing the program so that it

ran over the course of the full school year was reported by S6 who said, "I don't know. I mean I guess like I said before, like making it like full year…"

In light of such suggestions, participants also recognized the importance of funding for sustainability and expansion. This need for long term funding was discussed by S8 who said:

> Well obviously the funding, so being able to secure long term funding for a program like this, whether it be uh 3 years, 5 years, something so that the organizations can plan for it long term. And then also by having funding then we can hire staff to be able to conduct the programs, to build the partnerships with the other organizations who are going to be involved as well *(S8)*.

S7 also discussed the need for sustainable funding saying:

> …it is a matter of securing funding over a sustained period of time that would allow a program to run for you know, years to come and have that security, the knowing that you don't have to try and find new funding year after year after year *(S7)*.

Despite acknowledging the need to expand the program and the role of sustainable funding, especially in selected communities, stakeholders also recognized the importance of delivering quality programs. As a result they recognized the danger in expanding before the program, the schools, and the staff are capable of doing so. An example of this was given by S7 who said:

> Well I mean, in terms of changing it would be a matter of I think expanding it. I mean having it in every school that would want the program would be the ideal. I think having it, doing the program well in selected schools is more important at this point to really get a feel for what works and what doesn't work, so as the program grows … we want it to go in every school, but it has to be done well, and if you don't have the capacity to do it I don't know…(*S7)*.

In addition to the need for sustainable long-term programming in more Edmonton neighbourhoods, stakeholders felt that recruitment for the 'critical

hours' program should be examined. Stakeholders felt that registration could be done differently to ensure the students, who would most benefit from the program, were getting a chance to be involved. Although the 'critical hours' program was intended to reach students who didn't have access to other extracurricular physical activity opportunities stakeholders still felt the need to improve the process for future programs. Therefore, changes to the recruitment process and registration forms were suggested. An example of how the registration forms could be changed was given by S1 who said:

> You could even put it on the application form and say like what other activities, what other sports do you play? Or do you play any sports outside of school? Are you involved in other, any activities outside of school? And they could list them and then…that would give you an idea which kids are doing things and which ones aren't *(S1)*.

Similarly S2 said:

> …there needs to be a screening process with that registration form. Like even if it's simply do you participate in other sports? What sports do you participate in? How many times a week do you do it? Like those kind of things should maybe be on…You know, 'cause I think the biggest thing for the 'critical hours' program is not just the KidSport perspective-getting kids, low-income kids involved in sports, that can't afford it, I think it's also has a huge a social benefit of offering these opportunities to kids that aren't doing it *(S2)*.

Building upon this notion, school identification and community needs assessments were also suggestions for increasing the success of future programming. The majority of stakeholders highlighted the need for programs during the after school hours in low-income neighbourhoods. By identifying neighbourhoods where physical activity programs were limited, the program was able to target students who may not be involved in other physical activity opportunities. Specifically, S4 felt that the choice of schools and communities

was accurate by saying, "I think the schools you targeted were right on, you know, in terms of what I understand the needs are in the communities, and it was right after school…" Similarly, S1 provided an example of how providing accessible programming in low-income neighbourhoods is especially important while parents are still at work:

> I think especially in lower-income communities it's a good thing to have something that's free for the kids, something that's positive for them, something that they can go to for a couple of hours and have fun and you know by the time it ended…people were getting home from work *(S1)*.

Additionally, delivering programs in communities where the need is high was thought to be essential for program sustainability. Stakeholders felt that by tailoring programs to meet the needs of the community and delivering them in schools where the need for programming was high it would increase program participation. The importance of community and school assessments and the resulting effects on program sustainability was discussed by S4 who said:

> We need to find a way to match what the community needs are with having open doors at those schools. So there's no sense in having a school open in a neighbourhood where an after-school care program isn't gonna work either. So it's like knowing your community well enough to know is this a community that could sustain an after school care program? And then making it free and affordable *(S4)*.

The need for school identification was further discussed by S9 who said:

> Well one thing that I think is really important is that demographics need to be studied really well identifying the right school to put the program in is essential, not every school, even schools right next to each other sometimes have very different demographics. So really looking at putting programs where the really high poverty pockets are. That's really important *(S9)*.

Improved communication was another change that stakeholders felt was necessary for future programs. It was reported that prior to program

implementation teachers were unsure about the demands that would be placed on them and how this research-based program would differ from other after school programs. An example of this was given by S2 who said:

> One of the biggest challenges was having teachers I guess buy into it or accept it as a valuable program. In this case I think that was because it was a research project. And so then it's, well what does that mean for me as the teacher? You know, how am I going to be involved? I think if you're just offering a program after school I think, I don't think that I would have that kind of problem *(S2)*.

When discussing how this challenge could be addressed it was suggested that early communication and meetings with all teachers is needed during initial phases of future programs. Providing all teachers with a program background and specific plans was suggested by S1 who said:

> I think maybe come to a staff meeting before, like the month before you're gonna start the program. I mean obviously the principal would be the one that you would kinda go through for that but maybe come to the staff meeting and just saying you know the principal's given us the go-ahead to do this. This is what we're going to be doing in the school. This is why and here's kind of the background, like this is where our program's coming from *(S1)*.

Despite identifying the need for continuous communication with school staff, stakeholders recognized the demands that existed for teachers and principals often making communication difficult. In response to these demands stakeholders felt that identifying a contact person within the school would be beneficial. This contact person would be able to communicate with school staff and program instructors throughout the program. An example of how a school contact person could increase communication about program activities was given by S1 who said:

> I think having, maybe having like a key contact person in the school I don't know like that's my, 'cause the principals are really busy so if it's a matter of them designating somebody to kind of be the go to person to, with certain things whether it's the you know the administrative assistant, whether it's the teacher, whether it's somebody like me, I don't know *(S1)*.

Although communication was viewed as an important feature within the program, stakeholders also felt that the organizations involved in the 'critical hours' program had responsibilities outside program development and implementation. A lack of communication and knowledge transfer surrounding existing programs and practices was something that stakeholders identified. This lack of communication resulting in organizations replicating programs was described by S8 who said:

> I think that we kind of just get so focused on what we're doing that sometimes we just don't stop to think about, OK before we go and create something else, is there anybody out there already doing the same thing? So I think it's just lack of, just plain lack of communication and just thinking that we have to always recreate the wheel *(S8)*.

The need to reduce the amount of replication and ensure that all organizations, with similar goals, shared information and resources was further discussed. In an attempt to decrease the amount of overlap in programming, knowledge transfer was suggested. An example of knowledge transfer in the form of a symposium was given by S4 who said:

> I think I'd take the results from here and also what's happening in Calgary with their critical hours and then maybe do a little symposium where you brought the key players together, not just people like myself who already are on the bandwagon going rah rah, but bring some of the policy makers and the decision makers together and show them the results and talk about how can we make this happen in the least expensive way? *(S4)*.

Collaborations were a last recommendation surrounding the sustainability of future physical activity programs. Stakeholders discussed the responsibilities of

various levels of government, community organizations, universities, schools and families in the provision of 'critical hours' programs. Despite having different roles in the implementation and delivery of physical activity programs it was reported that to be successful, collaboration at various levels was necessary. The need for a collaborative partnership with municipalities, communities, and schools was discussed by S8 who said:

> I think connecting with a whole bunch of different partners, 'cause we know we've all gotta work together in this thing. So connecting with the City of Edmonton social workers who work with those families. Connecting with the teachers, the principals, the schools, being visible, being a presence there *(S8)*.

The responsibility, at a more grassroots level was further discussed by S1. She acknowledged the need for schools, community organizations, and parents to share responsibility by saying:

> I think it's everybody's. It's a shared responsibility. Like it's not I think it's definitely the school's…I think too the parents need to take some initiative. You know just like community organizations, that this is their mandate, I think need to definitely be involved in terms of getting, like putting themselves out there, getting in contact with schools and trying to sort of set these things up… I think it's a shared responsibility *(S1)*.

Expanding beyond this grassroots approach, stakeholders identified the benefits of university partnerships and the expertise that university staff and students possess. The need for community-university partnerships was discussed by S8 who said:

> Well I think what the university lends is just a lot of credibility to a program. So if we can partner with the university, people really see that as being credible, right? Obviously people that are experts in the area of childhood physical activity, physical activity programming, because at KidSport we're not physical activity programmers. We are more on the side of maybe the social work end of things, or the fund development, marketing side of things. But having people who are experts in programming and childhood development helps us as well *(S8)*.

Lastly, the role of the government in this collaborative process and the need for municipal, provincial, and federal governments to fund these physical activity programs was discussed. An example of this was given by S4 who said:

> We would have to get all the levels of government really involved to make that kind of thing happen on a big scale, and I don't think the city probably has the funding to do it all by themselves. They need an injection of some provincial money, and I don't think the schools can probably fit that into their budget either, so I hesitate to say whose responsibility it is. I think all the players have to get around the table together and problem solve it together *(S4)*.

The future directions identified by stakeholders outline practical solutions, which could increase the sustainability of future programs. Stakeholders discussed how long-term funding for physical activity programs in low-income areas is vital to the sustainability of future programs. Additionally, they discussed the need to conduct accurate needs assessments and ensure adequate communication between organizations, knowledge transfer, and collaboration at various levels.

# Discussion

## Phase Five: Action

The aim of participatory research is to integrate knowledge with action to address `real-world´ needs (Israel Schulz, Parker, & Becker, 2001; Cargo & Mercer, 2008). Such needs are relevant to and based on local understandings of participants (Stringer & Genat, 2004). Providing after school physical activity programs for low-income children was identified as a `real world´ need by the multiple stakeholders in this study. A co-learning process between stakeholders and the researcher enabled a form of action that was both coordinated and collaborative (Cargo & Mercer, 2008). The synergy created through the partnership (Weiss, Anderson & Lasker, 2002) led to the implementation of an after-school 'critical hours' program for children in two low-income communities in Edmonton, Alberta. The most significant contribution of this research was the creation of the 'critical hours' program, and the various benefits it had on the program participants, stakeholders, and the researcher.

Action can take many forms and be implemented at various levels (Reid, Tom, & Frisby, 2006). The 'critical hours' program has made an impact at an individual, school, and community level. Program participants experienced action at an individual level through participation in the program and exposure to new activities and sports. They were active two days a week during the 'critical hours' after school. Program implementation also increased physical activity opportunities for grades 2 and 3 students within the selected schools. The school offered an accessible after school program, at no cost, to students in grades two

and three. Additionally, relationships were built with provincial sport organizations at a school level that could influence future sports-based programs. Finally, the collaboration between the schools, sport coaches, and the university provide an example of action at a community level. By working together to develop, implement, and evaluate the 'critical hours' program the collaborative efforts provide an example of how universities, schools, and community organizations can work together to address important issues facing children and youth. The experiences and outcomes of the 'critical hours' program provide understandings that could enhance or change practices for future critical hours programs. These changes in practices have the potential to result in continued action at a community level.

When trying to understand the impact of PAR, levels of action can be conceptualized in a number of different ways. Reason and Marshall (1987) describe these different levels suggesting, "All good research is *for me*, *for us*, and *for them*. It speaks to three audiences, and contributes to each of these three areas of knowing" (p. 112). The action is for *me,* when the research process and the outcomes excite and inspire the individual researcher. The action is for *them,* when it contributes to academic literature and elicits a new way of thinking. The action is for *us,* when it is practical, effective, and useful.

**For me.** Throughout the research process the 'critical hours' program contributed to these three levels of action. For *me,* as a researcher, the process became more than just about the research outcomes. I developed relationships with the program participants and stakeholders, learning with every interaction. I

was continually challenged as a result of using PAR and believe that I have grown as a researcher. The guiding principles of PAR supported the creation of dialogue and mutual support that not only resulted in the 'critical hours' program but also resulted in becoming a more invested, impassioned researcher while working towards the completion of my Master's degree.

In order to be true to the principles of PAR it is important to embrace and examine the multiple identities that shape and inform engagement with community members, peers, and the academic world (Brydon-Miller et al., 2011). Through a reflexive process, I questioned the various roles that existed for me throughout the development, implementation, and evaluation of the 'critical hours' program. This reflexive process allowed me to further explore each of these roles while developing relationships within a community research setting. The program therefore created an opportunity where I was able to examine my abilities as a researcher, facilitator, and student whilst drawing on past experiences as a coach, recreation coordinator, and volunteer.

**For them.** For the academic community, the 'critical hours' program will be an important contribution to the PAR and physical activity literature. This research contributes to the PAR literature in that it serves as a practical example of a PAR project completed for a Master's degree. Due to the methodological concerns, conducting PAR for a Master's thesis is rare. Long-term commitment is difficult for student researchers (Minkler & Hancock, 2003). Gibbon's (2002) describes conducting PAR at a doctoral level and explains how the time-consuming nature is particularly problematic because of the limited time within

doctoral programs. This is even more problematic for Master's students since they have more restrictive timelines to work within. While I recognize that there is a longer time commitment when choosing to do a PAR study, I agree with Minkler and Hancock who state that the long-term commitment is justified by the value of the research.

Graduate programs have detailed protocol and specific requirements and limitations. Therefore student researchers must develop research competencies, identify an area of interest, design a proposal, and gain university ethics prior to engaging with participants (Gibbon, 2002, Reason & Bradbury, 2001). However, by taking control of the research process, researchers act in a way that is contrary to participatory action principles and the defining partnership of PAR (Burgess, 2006). In staying true to the participatory nature of PAR and still adhering to the graduate protocol outlined by my university, the first steps I took were to build relationships.

Strong relationships are key factors in the success of action research projects (Stringer & Genat, 2004). Additionally, Frisby, Reid, Millar, and Hoeber (2005) state that building trust is essential during the early stages of PAR therefore developing and maintaining trusting relationships must be central throughout the research process. While this need to develop relationships seems obvious it was not until the 'critical hours' program was actually running that I realized the importance of developing relationships and how they would impact the success of the 'critical hours' program. My original intent was to develop and implement an after school program but because my knowledge of PAR was

limited at the time I had not considered the importance of building relationships and the impact it could have on the research process.

By focusing on developing relationships initially I was able to begin the research process while staying true to graduate program protocol. This is consistent with the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (*Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, 2010), which recognizes that researchers need to have the opportunity to engage in preliminary visits and dialogue to explore possible relationships and to define research collaborations. These preliminary visits may result in activities to determine research questions, methods, targeted sample and sample size and address participant concerns in the project design and data collection. Research ethics boards should therefore be aware that dialogue between researchers and communities at the outset, and prior to formal Research Ethics Board review, is an integral component of the research design (Tri-Council Policy Statement). It is this practice that allowed me to stay within graduate protocol, acknowledge the restrictive timelines of a Master's degree and still act within the defining principles of PAR. As a result I now not only realize the importance of relationship building within PAR but also suggest it as the first step for Master's students conducting a PAR study.

When building relationships with participants, graduate student researchers must be conscious of the numerous roles that will influence those relationships. As graduate students involved in PAR we are learners, educators,

researchers, and practitioners (Burgess, 2006). As learners we get to see the world from various perspectives learning from academics within our chosen discipline. As educators we share our knowledge with students and those we work with. As researchers we develop innovative partnerships, use previous experience, and access new knowledge, all influencing the academic community. As practitioners we advance practice within our chosen professions, strengthening disciplinary relations. Our numerous roles as graduate student PAR researchers necessitate clarity, which in turn raises critical consciousness (Heen, 2005).

In order to be true to the principles of PAR we must be willing to embrace and examine the multiple identities that shape and inform engagement with community members, peers, and the academic community (Brydon-Miller et al., 2011). Reflexivity helps to separate and integrate these various roles and ensure congruence in the research process (Burgess, 2006) by identifying the biases, values, and experiences that we bring to the process (Creswell, 2007). Having questioned the various roles that existed for me throughout the development, implementation, and evaluation of the 'critical hours' program reflection about my role as a student, a coordinator, a facilitator, and a researcher has been a critical part of the research process. As Burgess (2006) describes it, the roles of student, leader, educator, researcher, scholar, participant, and community member come together in a balancing act, staying true to the nature of PAR.

PAR has a contribution to make in reconnecting universities and communities in co-generation and co-ownership of knowledge (Levin & Greenwood, 2001). The above challenges and considerations are therefore

presented in an attempt to highlight some of the issues associated with conducting PAR. However, every participant, school, and community in which a researcher works is unique. To think that a single approach will work for all PAR projects is unrealistic (McHugh, 2008). Additionally, because most research methodologies have inherent challenges and considerations, the above are presented to simply acknowledge the constraints experienced during the development, implementation, and evaluation of the 'critical hours' program within a PAR framework.

In terms of physical activity programs, the after school period is increasingly being viewed as a window of opportunity for physical activity and, as a result, is receiving more attention in the literature (Lytle, Murray, Evenson, Moody, Pratt, Metcalfe, et al., 2009). The benefits of youth sport programs include physical, social, and psychological development and have been well documented in the literature (e.g., Fraser-Thomas, Cote, & Deakin, 2005; Mahoney, Lord, & Carryl, 2005). Additionally, there are a number of studies that identify important features of quality after school programs (e.g. Halpern, 2000; Lerner & Galambos, 1998; Stiehl & Galvin, 2005; Witt 2004). While evidence surrounding program components and outcomes associated with successful programming has been well documented, the need to investigate the lived experiences of the participants and the processes that occur in the programs has not been reported (Carruthers, 2006). Few studies have examined children's perceptions of after school programs (Halpern, Baker, & Mollard, 2000) and, to date, none have examined the experiences of program participants, community

stakeholders, school stakeholders, and coaches. The 'critical hours' program therefore provides a unique investigation and a holistic picture of the experiences during the development, implementation, and evaluation from multiple stakeholders and participants.

The findings of this study add to the emerging after school literature. Specifically, the 'critical hours' program provides a practical example of how after school programs have the potential to increase physical activity opportunities, which is consistent with the work of Kahan (2008). Furthermore, this program supported teaching fundamental movement skills in an after school environment (Foweather et al., 2008), the need for school-based programming that is not focused on physical education (McKenzie, 1999), the importance of programming in low-income neighbourhoods (Shann, 2001), and the need to develop inclusive, engaging and theoretically driven approaches to promote physical activity (Lubans & Morgan, 2008).

This research also has the potential to add to literature that examines cognitive evaluation theory. The 'critical hours' program provides a practical example of cognitive evaluation theory through its application in an after school setting. By creating opportunities that optimize choice and control, enhance perceived competence, and stress the importance of personal improvement, cognitive evaluation theory provided a framework for delivering child-centered programming. This theory provides a pedagogical framework and an instructive strategy for supporting competence, autonomy, and relatedness that may be beneficial for future research projects.

**For us.** The ‘critical hours’ program also resulted in action for *us* (e.g. community organizations, schools, and program participants), in that the ‘critical hours’ program was practical, effective, and useful. Using the outcomes from the KidSport Summer Camps, the ‘critical hours’ program was developed, implemented, and evaluated; thus, the ‘critical hours’ program created action *for us* by improving practice for the program participants, the school, and community organizations. In addition, the experiences and knowledge that have emerged from this program also have the potential to enhance or change practices surrounding future ‘critical hours’ programs. For example, the ability of organizations to work collaboratively throughout the development, implementation, and evaluation of such programs could enhance sustainability and effectiveness of future ‘critical hours’ programs.

The resulting experiences and outcomes are consistent with the Action phase of PAR, which applies practical applications, based on the knowledge and understandings that emerge from the research (Stringer & Genat, 2004). In building a shared picture of the problem and working together to develop these practical solutions, partnerships were developed that resulted in action at various levels. It is this action that, in my opinion, is the most important contribution of this study. Using the outcomes from the KidSport Summer Camps, the ‘critical hours’ program was developed, implemented, and evaluated providing suggestions for the development of future programs. It was because of this process that the ‘critical hours’ program has created action *for us* making an impact at an individual, school, and community level.

**The Relevance of Action**

Given these various levels of action we must ask whether or not this action was relevant to the stakeholders and program participants. As suggested by McHugh and Kowalski (2011), the most straightforward answer to this question is to say that PAR projects are relevant to the participants because all of the action initiatives emerged from the suggestions or support of the participants. While I believe this to also be true for the 'critical hours' program, the levels of support and suggestions for action that each participant had varied throughout the process. Therefore, I return to the words of the stakeholders and program participants to determine the success and relevance of this PAR project.

Lincoln (1995) has highlighted the role of "voice" and the importance of identifying who is speaking in an attempt to support the honesty and authenticity of the research process. She highlights the need to pay attention to "who speaks, for whom, to whom, and for was purposes" (p. 282). Therefore, "voice" is not only a characteristic of interpretive research it is also a criterion used to judge openness, engagement, and nature of qualitative text (Lincoln). Similarly, McHugh and Kowalski (2011) highlight the importance of "voice" and demonstrate the success of their research using the words of the participants. In using the words of students and staff who were involved in the research and by highlighting a number of instances whereby students and staff verbally recognized the success of the various initiatives, the engagement of participants and nature of the research becomes clear to the reader. Similar to this, the experiences and individual voices of stakeholders and program participants have been highlighted

throughout this document, subsequently providing an accurate representation of the relevance of the program.

Based on the data collected in this study, the 'critical hours' program was relevant to the stakeholders and program participants and each benefited in a number of ways. Benefits to the individual program participants, the participating schools, organizations and coaches were reported during formal data collection and informal conversations during the implementation and evaluation of the program. Stakeholders and program participants described a variety of benefits for program participants including exposure to program opportunities, sports and physical activity, learning intra- and interpersonal skills and concepts, and being exposed to positive role models in a safe, supervised environment. Stakeholders articulated relevant benefits, which included working with and learning about other organizations, increased scope and awareness, and opportunities to make a difference and teach.

In addition to the benefits reported during the implementation and evaluation of the 'critical hours' program, I received emails after the completion of the program supporting its relevance and the stakeholders' and program participants' appreciation. The first of these emails was from a staff member at Oak Creek School. In her email she had sent a document summarizing a project that she had her students, who were involved in the 'critical hours' program, complete (See Appendix J). This document highlighted the students' favourite parts of the program along with what they were doing with the equipment that they had received at the completion of the program. The student comments

included: “My favourite part is when I was spending time with you guys”, “I really like trying new things and games and everything was fun”, “My favourite part was when we had circle time and everyone got to tell what they liked at the end of the program”, and “With my basketball I go to the park with my big brother and we shoot hoops.” The words of the students following the completion of the program suggest that it was meaningful to the program participants for a number of different reasons.

The second email supporting the relevance of the program was from the principal at Cedar Heights (see Appendix K). It was in response to me being unable to continue the ‘critical hours’ program the following year and reinforced the intra- and interpersonal skills learned during the program. It read:

> What sad news for us. The program was so awesome - kids and parents are asking already about it (and I think that a big part of the awesomeness was you).
> Without mentioning names, there was one student you may remember that you worked with quite a bit - and he made some really good progress with you in terms of following directions etc. - we see this consistently in the classroom - he has become an extremely positive "force" in his class.

The relevance of this project was reflected in the words of participants and stakeholders during and after the development, implementation, and evaluation of the ‘critical hours’ program. As previously mentioned, evaluation of the ‘critical hours’ program consisted of examining the participants’ experiences, opinions, and feelings about the ‘critical hours’ program along with detailed descriptions for activities and actions. Despite the reported relevance and positive evaluation of the ‘critical hours’ program, questions do remain surrounding the relevance and the evaluation of the study as a whole. In addressing these questions I turned to

Green et al.'s (1995) framework for evaluating participatory research. This framework provides guidelines for examining participatory research within six categories. These six categories include: 1) Participants and the nature of their involvement, 2) Origin of the research question, 3) Purpose of the research, 4) Process and context-methodological implications, 5) Opportunities to address the issue of interest, and 6) Nature of the research outcomes.

The framework by Green et al. (1995) provided a supplementary tool to assess the extent to which the project was considered participatory. This tool can be viewed in Appendix L. Using this supplementary tool I was able to reflect on the research process within the categories suggested, examining the research process as well as the 'goodness criteria' adhered to throughout the research process (e.g., prolonged engagement, critical reflexivity, and technique triangulation). As a result, the 'critical hours' program provides an example of how PAR was used in the development, implementation, and evaluation of a 'critical hours' program.

**Physical Activity Opportunities**

Exposure to physical activity opportunities was a major benefit of program participation. School employees (principals, teachers, school health facilitators) as well as other stakeholders discussed the benefits in relation to increased physical activity opportunities for program participants. This increase in physical activity opportunities is currently of significant value as only 7% of Canadian children and youth are meeting the new Canadian Physical Activity Guidelines of at least 60 minutes of MVPA per day (Canadian Society for Exercise Physiology, 2011).

More specifically this increase in physical activity opportunities during the 'critical hours' after school was beneficial for program participants due to the fact that, on average, Canadian children and youth are only getting 14 minutes of MVPA during these after school hours (Active Healthy Kids Canada, 2011).

In addition to increased physical activity opportunities, stakeholders and program participants reported the exposure to the variety of sports offered over the course of the program to be a benefit. Whether the activities were something that program participants had not experienced before or something that they loved to play, exposure to a variety of sports and activities was reported as a strength of the program. Focusing on fundamental movement skills, numerous activities and sports were introduced by the qualified instructors and various sport coaches. Students were therefore able to experience and sample various sports over the course of the program rather than specializing in one specific sport. This sampling approach is consistent with the recommendations of Canadian Sport for Life (2008). They suggest that skill development for this age is best achieved through a combination of structured and unstructured play in a safe and challenging environment. Additionally they state that quality instruction from knowledgeable leaders and coaches during this stage is critical for the development of physical literacy.

The levels of MVPA and the physical literacy of Canadian children are currently of significant interest (Active Healthy Kids Canada, 2011; Canadian Sport for Life, 2008). Based on the outcomes of this study it can be said that the 'critical hours' program provides evidence that after school programs have the

ability to increase physical activity opportunities and the potential to influence the levels of MVPA. The 'critical hours' program provided an opportunity for program participants "to be physically active for a good hour and a half at least twice a week when otherwise they probably would not have been" (S1). This is consistent with Strong et al. (2005) who state that when delivered during the hours after school these programs provide additional physical activity opportunities for elementary and middle school students, helping them attain the recommended amount of daily MVPA. Additionally because the 'critical hours' program was designed for students with a wide range of abilities, and focused on fundamental movement skills, there was potential for improving the physical literacy of each program participant. This provides support for after school programs targeting children who may not have participated in much physical activity and lack the skills to participate in competitive sports (Wechsler et al., 2000). Therefore the 'critical hours' program is a practical example of how after school programs have the potential to promote physical activity by providing structured and unstructured physical activity opportunities that teach fundamental movement skills.

**School-based programs.** Various programs have provided support for the effectiveness of school-based physical activity interventions (e.g. Ernst & Pangrazi, 1999; Nader et al., 2009; Sallis et al., 1997) In acknowledging the need to create physical activity opportunities outside of physical education (McKenzie, 2001) and the lack of time and lack of facilities reported by Alberta schools (Alberta Education, 2008) the 'critical hours' program was developed knowing

that comprehensive interventions in most elementary schools may not be a realistic goal (Boccaro, Kanters, Casper, & Forrester, 2008). As a result, the 'critical hours' program provides an example of a community-run school-based program that was delivered during the hours after school, taking the sole responsibility off school staff. It demonstrates how multiple stakeholders can work collaboratively to develop a sports-based after school program directly in identified schools. The reported activities and experiences of the 'critical hours' program provide a framework for school-based programs wanting to increase physical activity opportunities for students after school.

Jago and Baranowski (2004) have highlighted the need for accessible physical activity opportunities before or after regular school hours. They further stated that these after school opportunities should not focus on modifications to school physical education. The 'critical hours' program was designed to supplement physical education and provide accessible opportunities for students to participate in a variety of activities, thus supporting Jago and Baranowski's recommendations. Consistent with this need for accessible opportunities the program was developed for students who may otherwise not have the opportunity to participate in extracurricular programs. In providing the 'critical hours' program directly in the school, barriers to participation were reduced, increasing the accessibility of the program. Accessibility, as reported by stakeholders, was a direct result of the location of the program, providing support for the delivery of 'critical hours' programs directly in schools.

The need to provide after school programming directly in the school is consistent with a recent report by Alberta Recreation and Parks Association (2010) titled, *Stone Soup: The Recipe for an After School Recreation Strategy in Alberta*. This report states that there is significant evidence to suggest that school-based after school programs are the most effective and are greatly preferred by parents, children and youth. School-based programs are said to eliminate the critical concerns of parents about safety and responsibility of travel, costs associated with transportation, and the quality of programs and staff in alternative locations. By providing a program directly in the school, the 'critical hours program was able to eliminate many of the above critical concerns highlighting that "these kind of programs are very important for kids who don't have opportunities to go into actual programs" (C8).

***Low-income neighbourhoods.*** The need to offer school-based programming is even more necessary in low-income areas where there are a lack of accessible opportunities and facilities and where the barriers to program participation are high (City of Calgary, 2008). This is consistent with the outcomes of the 'critical hours' program, which suggest that the delivery of programs in low-income neighbourhoods should be a priority. The lack of facilities and opportunities reported by stakeholders highlight the need for programs in low-income neighbourhoods. This is consistent with Shann (2001) who, according to school personnel, reported that programs in low-income areas are simply not available to the students. Extracurricular programs offered during these 'critical hours' can provide children from low-income families and youth

with experiences similar to their middle-class peers (Posner & Vandell, 1999), providing enormous potential for desirable outcomes (Witt & Baker, 1997). It was reported that the schools that the 'critical hours' program targeted were "right on" (S4), because the 'critical hours' program was delivered in two low-income neighbourhoods. Based on these results the 'critical hours' program provides additional support for the provision of programs in areas where there are high levels of low-income is especially necessary.

In addition to limited facilities and opportunities reported in low-income neighbourhoods, being new to Canada and the resulting impact on physical activity participation was discussed. Stakeholders highlighted minimal participation by new Canadians due to a lack of information about accessible programs and opportunities in addition to other cultural barriers. Additionally it was highlighted that many new Canadian families are "single parent families, and they have multiple kids, and they have other kids at home" (S3). Therefore, due to the fact that social and environmental variables are associated with children's physical activity levels (Sallis, et al., 2000) and because appropriate community infrastructure and parental support are not equally available to all children (Kahan, 2008), additional efforts by schools and community organizations must be made to increase physical activity opportunities in low-income neighbourhoods.

The 'critical hours' program provides an account of the unique barriers faced by new Canadians living in low-income neighbourhoods. By addressing these barriers as identified by stakeholders, it is assumed that the accessibility of

physical activity programs can be increased. In addition to acknowledging that children who reside in low-income neighbourhoods typically have less access to parks, playgrounds, and recreational facilities (Cohen et al., 2007), attention must be given to the cultural and language barriers that often exist in these same communities. The findings from the 'critical hours' program suggest that additional barriers exist for new Canadians living in low-income neighbourhoods. As a result, the 'critical hours' program supports the need to conduct community needs assessments prior to the development and implementation of 'critical hours' programs, increasing the accessibility of programs for families that are new to Canada.

Other benefits of providing accessible 'critical hours' programs in low-income neighbhourhoods include psychosocial development of participants in a child-centered environment. While the 'critical hours' program provides support for psychosocial development of program participants, past studies have examined such programs and their contributions to psychosocial development of urban children from low-income neighbhourhoods (Bruening et al., 2009; Carruthers, 2006; Daud & Carruthers, 2008). Therefore the various intra and interpersonal skills and concepts (e.g., increased self-confidence, team work) that were reported as a result of program participation provide additional support highlighting the ability of after-school programs to contribute to the psychosocial development of children from low-income neighbhourhoods.

**The Role of Theory**

Lubans and Morgan (2008) have discussed the need for research focusing on the design and evaluation of innovative extracurricular school sport interventions that incorporate inclusive, engaging and theoretically driven approaches to promote physical activity. Having already highlighted the effectiveness and outcomes of the program along with the relevance of the action during the development, implementation, and evaluation of the 'critical hours' program, the role of theory throughout this PAR research project must also be highlighted. As previously discussed one of the primary attributes of PAR is that it is research that has an orientation towards action (Kemmis & McTaggart, 2000). More specifically, Wadsworth (1998) described PAR as a methodology where researchers seek to develop deeper understandings and theory about particular phenomena, with the intent of generating new knowledge and informing action. Theory and practice are therefore interconnected and it is important to highlight the relationship between action and theory throughout the 'critical hours' program.

According to Dick, Stringer and Huxham (2009) when PAR researchers act they intend for their action to have outcomes. Additionally they believe that these researchers choose the actions that they think will produce the outcomes they want. Researchers therefore have a theory, informed by knowledge or understanding, that connects their chosen actions to the desired outcomes. Friedlander (2001) explained how actions must be driven by theory because theory helps people understand *why* a phenomenon occurs. He further explained

that there should not be action without theory because without theoretical reasoning, there is no rationale to either exclude or include actions. Similarly Brydon-Miller, Kral, Maguire, Noffke, and Sabhlok (2011) state that in PAR the distinction between theory and action is challenged by the assumption that theory is informed by practice and practice is a reflection of theory.

When the 'critical hours' program was originally proposed, CET was going to provide the theoretical framework for the project. As a result a secondary objective was proposed that would provide a preliminary assessment of children's motivational experiences associated with physical activity and participation in the program. By examining the activation and intention of participants' behaviours it was assumed that we would gain a better understanding of their motives for participating in the program. Ultimately the findings would explore experiences in an extracurricular setting, providing information that would enable facilitators to develop and implement 'critical hours' sports-based programs supporting competence, autonomy and relatedness.

The 'critical hours' program was therefore implemented using the propositions outlined in CET. Using these principles as the underlying theoretical framework, it was assumed the secondary objective would provide a preliminary assessment of children's motivational experiences associated with participation in the program. It was further assumed that future research could answer questions such as: What behaviours can educators use to increase enjoyment of physical activity? Or, what can educators do to change an external orientation of an activity to an internal one?" (Frederick & Ryan, 1995). However, given the

emergent nature of PAR, the role of CET within the 'critical hours' program was quite different from what was originally intended. While CET was still used to guide the implementation of the 'critical hours' program and the activities were delivered using autonomy-supportive behaviours, CET became a pedagogical framework providing an instructive strategy for supporting competence, autonomy, and relatedness, rather than providing a theoretical framework for the entire study as originally intended.

This shift in how CET was used throughout the development, implementation, and evaluation of the program supports the idea that developing theoretical implications is an important component of the research process, but should not be regarded as a condition (Wolcott, 2001). Therefore rather than trying to find a place for theory in their research, researchers should keep theory in its place (Wolcott). Although the secondary objective was intended to provide a preliminary assessment of children's motivational experiences associated with participation in the program, the way the program emerged and the outcomes of the study did not allow for the questions surrounding CET to be answered. Rather as previously mentioned, CET provided an instructive strategy for supporting competence, relatedness, and autonomy in day-to-day activities and games.

Theory can inform and also arise from our actions (Frisby, Reid, Miller & Hoeber, 2005). Despite this connection between theory and action researchers often fail to clarify the nature of theory and its relationship to the research process (Dick, Stringer, & Huxham, 2009). In discussing the shift from CET providing a theoretical framework for the study to creating a pedagogical instructive strategy

for program delivery, the relationship between theory and the research process has been clearly outlined. Despite the original intent of using CET, the results of this study did not answer the above-mentioned questions outlined by Frederick and Ryan (1995). Rather the 'critical hours' program provides an example of how theory was used to guide program activities using autonomy-supportive behaviours. It further supports the need to create opportunities where the program content and instructional processes are both theory-based and child-centered.

**A Collaborative Process**

It takes a combination of school personnel, community volunteers, and neighbourhood youth leaders working together to devise, develop, and maintain successful after-school programs (Witt, 2004). In choosing a PAR methodology and by examining the multiple experiences of stakeholders and participants, the findings of this study support the need for collaborative after school programs, shifting the responsibility from school staff. The participatory partnerships created as a result of the 'critical hours' program provide a practical example of how to successfully develop, implement, and evaluate physical activity programs during the critical hours after school. This is consistent with Witt (2004) who states that partnerships among various stakeholders are needed to provide the differing views of how the development, implementation and evaluation of after school programs can be accomplished. Because PAR creates an environment that allows for the emergence of views and experiences (McIntyre, 2000), it has the potential to examine how physical activity and sport systems at a local level can provide greater access to individuals living in low-income neighbourhoods (Frisby et al.,

1997). In choosing a PAR methodology, the 'critical hours' program demonstrated and addressed the complexities of developing, implementing, and evaluating a physical activity after school program with participation from multiple stakeholders.

Various community partnerships were developed resulting in the 'critical hours' program. These partnerships allowed for community linkages supporting the 'critical hours' program as well as the potential for on-going partnerships. This is similar to a study conducted by Felton, et al. (2005) where community linkages resulted in school-based programs and ongoing partnerships. As with the 'critical hours' program, community agencies brought programs to the site at no cost, instructional changes were basic to the curriculum, and promotional and environmental changes were within the position descriptions of school personnel. Effective partnerships between school administrators and those who offer sport and recreation have also been suggested by Active Healthy Kids Canada (2011) to facilitate the engagement of students in after school programs. The partnerships that were developed as a result of the 'critical hours' program created a shared responsibility of the program, allowing for the resources and expertise of each stakeholder to be maximized. The 'critical hours' program therefore demonstrates that by jointly developing programs, all stakeholders and program participants can benefit.

In addition to creating community partnerships the results of the 'critical hours' program highlight the process in which partnerships were developed between community organizations and academic institutions. The development of

such partnerships have been encouraged by organizations such as Alberta Parks and Recreation (ARPA) (2010), which stated that currently there is a unique opportunity to link with the academic and research communities to ensure rigorous evaluation is included in 'critical hours' programs. The 'critical hours' program provides evidence that collaboration between community organizations, schools, and an academic institution can result in the successful development, implementation, and evaluation of sports-based programs during the 'critical hours' after school.

Partnerships between school staff, community members and universities have been suggested as avenues capable of building the capacity of schools surrounding child development (Dowrick et al., 2001). Additionally community health promotion can be successfully implemented when equal partnerships between community stakeholders and university researchers are established (Potvin et al., 2003). The 'critical hours' program contributes to the PAR literature by highlighting the experiences of stakeholders and program participants throughout the entire research process. The outcomes provide evidence that support the need for school-based 'critical hours' programs in low-income neighbourhoods and how PAR can provide a framework for the development, implementation, and evaluation of such programs.

**A Cyclical Process**

PAR is founded on the belief that people are knowledgeable about their intentions and actions, and are able to create change in their own lives (Kemmis & McTaggart, 2000). It is action-oriented research in which people address common

needs and, in the process, generate knowledge (Park, 2001). Kemmis and McTaggart describe the process for generating knowledge through PAR as a spiral of self-reflective cycles of planning, acting, observing and reflecting. It is through collective efforts that the planning, acting, observing, and reflecting occur. Problems are identified at the local level and solutions are sought in ways that link the process to the larger structural issues (Hall, 1981). The researcher is therefore a catalyst whom, through active participation with participants, facilitates the co-construction of knowledge resulting in the promotion of awareness that leads to change (McIntrye, 2008).

During the research process active participation resulting in the co-construction of knowledge was achieved using Stringer and Genat's (2004) five-phase model (see Figure 1). While action research is meant to be a cyclical reiterative process (Stringer & Genat) this five-phase model provided a linear framework clearly representing the entire research process. Although the cyclical nature of the framework became clearer as the program progressed, it was too challenging to represent this PAR research in this format as the written document became too repetitive and unclear. Stringer and Genat's five-phase model was used as a linear framework to describe the program. However, it should be envisioned as a cyclical process of planning, acting, observing, and reflecting, as outlined by Kemmis and McTaggart (2000).

Almost all writers regard action research as a cycle or a spiral either explicitly or implicitly (Dick, 1993). The cyclical reiterative process of action research therefore consists of intention or planning before action, and review or

evaluation after (Dick). Stringer and Genat (2004) describe this cyclical reiterative process using the *look-think-act* research cycle. 'Look' entails building a picture of the situation, enabling the researcher to describe who is involved and what is happening. 'Think' requires researchers to reflect on the emerging picture of the situation, enabling them to develop an understanding of what is happening and how the issue affects the stakeholders. Lastly, 'Act' requires people to plan their next steps and decide on appropriate actions. It is the evaluation of this action that therefore begins the next cycle of the *look-think-act* process. The *look-think-act* cycle allows research participants to use new understandings to enhance or change their work practices by taking the appropriate action (Stringer & Genat, 2004).

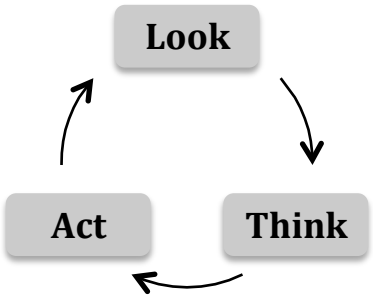


Figure 2. Look-Think-Act Research Cycle Adapted from Stringer and Genat (2004).

During the development, implementation, and evaluation of the 'critical hours' program three *look-think-act* cycles have occurred, guiding the actions of program participants, stakeholders, and myself as a researcher (see Figure 3). The first cycle represents the picture that was developed, resulting in the KidSport Summer Camps. The need for physical activity programs in North East Edmonton drove the collaboration between myself, KidSport and the Edmonton Public School Board. It was during the implementation and evaluation of the KidSport

Camps (See Appendix M) that the actions and resultant effects of the camps allowed new objectives to be identified. This began the second *look-think-act* cycle, representing the 'critical hours' program.

The second cycle, the 'critical hours' program, was based on the need for physical activity programming during the school year. It was through an evaluation of the KidSport Summer camps and numerous conversations with stakeholders that the 'critical hours' program was developed, and implemented. Overall, the partnerships and resources available because of the KidSport Summer Camps resulted in the activities that led to the 'critical hours' program. This is consistent with how Stringer and Genat (2004) describe implementation and how, through implementation, you are able to then engage the act phase of the research cycle.

The third and last *look-think-act* cycle is a direct result of the evaluation of the 'critical hours' program. In outlining what worked well, identifying changes, and providing suggestions for future programs the evaluation of the 'critical hours' program and the experiences of the stakeholders and program participants engages the next cycle of the action research process (Stringer & Genat, 2004). The reported outcomes of the 'critical hours' program have therefore provided recommendations for future 'critical hours' programs.

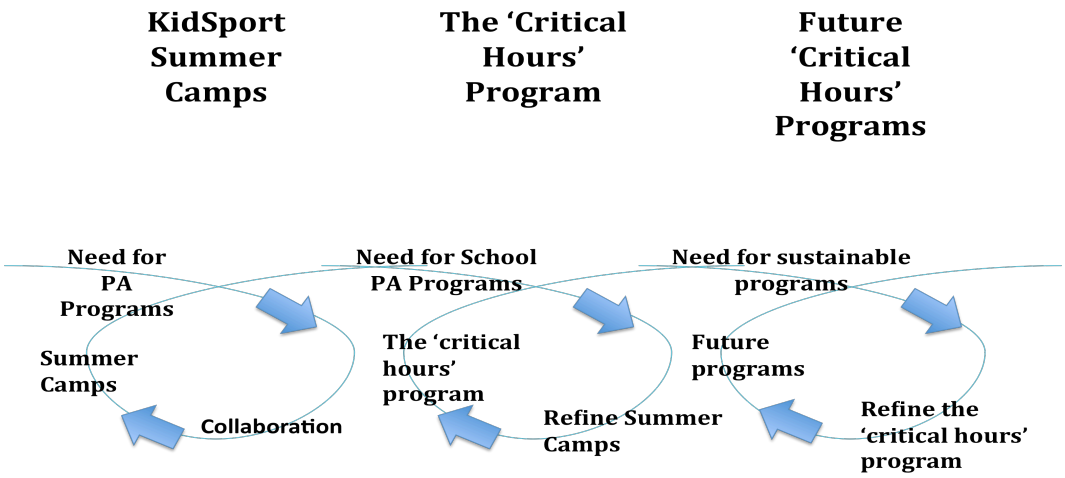


Figure 3. Various Look-Think-Act Cycles of the 'Critical Hours' Program.

Despite cycling through the three *look-think-act* cycles it wasn't until well into the KidSport Summer Camps that I realized that this PAR project would consist of more than one cycle. This realization allowed me to examine each cycle or phase of the research process in detail using Stinger and Genat's (2004) five-phase model. However, despite the collective and continuous efforts of planning, acting, observing, and reflecting, the vision remained the same throughout each *look-think-act* cycle. This shared vision, to increase physical activity opportunities in low-income neighborhoods of Edmonton, acted as a thread throughout the research process. It was this vision and the active participation of participants, that allowed for the co-construction of knowledge, resulting in the KidSport Summer Camps, the 'critical hours' program, and suggestions for future 'critical hours' programs. It must be noted, however, that although action occurred at varying levels throughout the three cycles, the third stage of action has not yet been completed. The completion of the third cycle will rely on the shared knowledge

and understandings from this study shaping the development and implementation of future ‘critical hours’ sports-based programs.

## Summary

The aim of participatory research is to integrate knowledge with action to address `real-world´ needs (Israel Schulz, Parker, & Becker, 2001; Cargo & Mercer, 2008). Providing after school physical activity programs for low-income children was identified as a `real world´ need by the multiple stakeholders in this study. As a result a co-learning process between stakeholders and the researcher enabled a form of action that was both coordinated and collaborative (Cargo & Mercer, 2008). The result was the development, implementation, and evaluation of an after-school 'critical hours' program for children in two low-income communities in Edmonton, Alberta.

The findings of this study revealed the multiple experiences during the development, implementation, and evaluation of a 'critical hours' sports-based program. The program participants and stakeholders described how the 'critical hours' program provided increased opportunities to be physically active; exposed students to a variety of sports and activities, increasing their confidence and self-esteem; and provided an environment with qualified coaches that was conducive to teaching physical literacy. In addition the 'critical hours' program provides an example of how to develop, implement and evaluate accessible school-based programming, and provides a means by which other community organizations, schools, and universities can work together to develop, implement, and evaluate after school programs.

The process and resulting outcomes inspired me as a researcher, created action at an individual, school, and community level, and contributes to academic

literature by providing practical and effective information that may be useful in guiding future action and research surrounding children's physical activity levels during the 'critical hours' after school. The research addresses the relationship between theory and action, and provides relevant information for others conducting PAR, specifically at a Master's level.

**Considerations**

Despite the successes of this PAR project, it is important to highlight some of the methodological challenges and considerations that were associated with the development, implementation, and evaluation of the 'critical hours' program. Specifically, I will outline the varying levels of expertise between the program participants and the stakeholders and the influence each had on the research process, the challenges surrounding the sustained and continued involvement of stakeholders throughout the entire research process, examine my involvement as a researcher, and the quality of this PAR study and it's ability to be transferred to other settings.

PAR, as described by Burgess (2006), is a collective dynamic process that encourages a high degree of participation, during which community members become co-learners, co-researchers, and change agents focusing on a common concern. Partnerships can therefore include academics, professionals, and community members. It is through these partnerships that the co-construction of knowledge occurs, reaffirming the collective efforts of all participants involved (Reason & Bradbury, 2001). Given this collective dynamic process, challenges begin when trying to define the 'community' and appropriate community

representatives (Gosin, Dustman, Drapeau, & Harthun, 2003, White, et al., 2004). Despite this being a common challenge when conducting PAR, determining the community and the participants was not difficult given my initial involvement in the KidSport Summer Camps.

During the KidSport Summer Camps, I developed relationships with individuals who shared a similar vision about the need for physical activity opportunities and who, throughout the summer camps, developed recognition of each other's experience and knowledge. Despite these relationships and the shared vision, I began to experience challenges surrounding the varying levels of expertise between the program participants and the stakeholders and the influence each had on the research process. This is consistent with an inherent challenge of PAR as described by Burgess (2006), who stated that despite the common identity developed, group members have varying degrees of expertise and experiences. The common language and understanding inherent to PAR are meant to utilize the levels of expertise and contribute to mutual decision-making and power sharing (Friedman, 2001). While I believe this to have been true given the nature of my relationship with the stakeholders, I question the nature of participation when examining the level of influence that the program participants had throughout the project.

I recognize that PAR does not assume that full collaboration is always possible, but rather that the aim is to develop non-hierarchical partnerships that acknowledge the unique strengths and shared responsibilities of all parties involved (Green et al. 1995). However, given that hierarchies naturally exist

among adults and children, developing non-hierarchical relationships during the program would not have been a realistic goal. In acknowledging that there are several ways for adults to work with children within a PAR context (Langhout & Thomas, 2010) the program participants, using cognitive evaluation theory, were given plenty of opportunities for choice throughout the program as possible. Additionally, the program participants voice is represented throughout the document providing a combined understanding of the experiences of the 'critical hours' program.

Despite the program participants being active participants throughout the research process the level of participation in the research process may be questioned. However, having negotiated the entire research process with stakeholders and program participants the 'critical hours' program provides an example of how both adult and children stakeholders contributed to a PAR project. In saying this I do believe that the level of participation for the program participants could have been increased and future research projects should negotiate this early on. PAR is a collective dynamic process that encourages a high degree of involvement by all participants (Burgess, 2006); therefore future PAR studies involving both children and adults should ask: How involved can children be? Are the levels of involvement different for children and adults? Is the level of involvement consistent with the benefits? What are the resulting ethical implications?

Having highlighted the various degrees of participation some may question the extent to which this project was participatory. Therefore in

examining the nature of this PAR study I turn to Boog (2003) who said that although we value all research partners' (e.g. program participants, stakeholders, researcher) contributions equally, it must be acknowledged that each have expertise in different domains. Given that I worked with a variety of individuals, from different organizations, with different backgrounds, and of different ages I believe this to be the case for the 'critical hours' program. Each participant brought something to the program that contributed to its reported success. I also believe this to be the case for myself as the researcher. My past experience as a coach and instructor in addition to experience and expertise surrounding the research process allowed me to equally contribute to the research process. This is consistent with how Boog describes the varying degrees of participation stating that the researcher has expertise in research methods, while each participant is "an expert in the matters of his or her everyday life" (p. 435).

Past PAR researchers have questioned this level of participation and the degree to which participants should be involved for it to be a true PAR study (e.g. Gosin et al., 2003; McHugh, 2008). In examining this issue they argue that total participation is not what is important; rather what is important is that all partners benefit and in the process the skills of the partners are maximized. Therefore given that all stakeholders and program participants reported benefits from the 'critical hours' program, that the skills of each participant were essential to the development, implementation and evaluation of the program, and due to the fact that participation is more important at certain stages of the research process, this project should be considered a PAR project.

In addition to the questions surrounding participation, the need for sustained and continued involvement of stakeholders throughout the entire research process was a challenge. In theory, when learning and knowledge development take place, so must agreements on dissemination and knowledge translation (Hills, 2001). While agreements surrounding the presentation of the outcomes of the 'critical hours' program were negotiated prior to the development, implementation, and evaluation of the program, no specific timelines were discussed. This has been challenging given that presentation of the outcomes and knowledge translation have taken longer than originally anticipated. The delay in the completion of the project has been due partly to the nature of graduate programs, the need for graduate students to provide evidence of their work through academic publishing, conference presentations, and dissertations (Burgess, 2006), along with ensuring that the understandings and experiences resulting from the 'critical hours' program were accurately represented.

Acknowledging that a long-term commitment is often difficult for participants (Minkler & Hancock, 2003), closure of this lengthy process is also an essential element of the process (Burgess, 2006). As a result, continued involvement with stakeholders and program participants in deciding on how the data is used is recommended. This is consistent with Straus, Tetroe, and Graham (2009) who state that we must work with stakeholders to establish an explicit process for prioritizing activities related to knowledge translation. Additionally, Green et al. (1995) suggest having detailed guidelines, allowing partnerships to decide in advance how issues concerning the sharing and release of findings will

be addressed. This is a crucial step as returning data to the community and enabling community leaders and participants to have an authentic role in deciding how that data will be used is central to participatory research (Minkler, 2005).

Consistent with Minkler (2005) stakeholders have been involved in deciding how the data will be used. However, despite the continued involvement it has been difficult at times to connect with stakeholders and further discuss the release of the findings. I can speculate that for some this has been because they are currently working in new positions and at new organizations, while for others it is because the 'critical hours' program was delivered over a year ago and is no longer a priority. Whatever the reason, continued communication with stakeholders was an issue that surfaced towards the end of the research process. Comstock and Fox (1993) acknowledged this is a barrier of PAR, reminding PAR researchers to be aware of competing interests and activities that can affect the degree and type of participation. Therefore, I recommend that researchers question what it is they expect from the participants, highlighting the time commitment for each stakeholder, negotiating reasonable timelines, and discussing how the data will be used at the beginning of the research process.

PAR is a spiral of self-reflective cycles of planning, acting, observing and reflecting (Kemmis & McTaggart, 2000). Problems are identified at the local level and solutions are sought in ways that link the process to the larger structural issues (Hall, 1981). The researcher is therefore a catalyst whom, through active participation with participants, facilitates the co-construction of knowledge resulting in the promotion of awareness that leads to change (McIntrye, 2008).

Despite these clear definitions of what PAR is I am left wondering when the co-construction of knowledge is enough and when the self-reflective cycles end.

Having discussed the three *look-think-act* cycles as a result of the 'critical hours' program I am left questioning whether my involvement was enough and if the amount of time I spent during the research process was sufficient. Despite the research process spanning nearly 3 years, the 'critical hours' program only ran for a total of 6 months, running for three months in each school (September-December at Cedar Heights and January-April at Oak Creek). While I recognize that I am doing a Master's degree and the amount of time I have invested in my thesis is substantial, I am still left wondering whether the resultant action was enough and question what could have been possible with continued involvement.

Having done a doctoral dissertation using PAR, McHugh (2008) also viewed the amount of time she had invested as a strength and a weakness. Questioning the potential outcomes if she had been able to commit to a multi-year project she asks "would the benefits be more substantial or make an impact at more levels?" (p. 170) With no specific answer to this question McHugh simply states "I am doubtful that I will ever be provided with another time in my research career to focus solely on research without other academic time commitments (e.g., university committee work, teaching). Thus, I am grateful that I had the opportunity to engage in this PAR project as part of my doctoral program" (p. 170). Similar to McHugh I agree that there is no easy answer to this and despite not being able to continue providing 'critical hours' programming, I too am grateful that I was able to complete a PAR project for my Master's thesis.

Given the specific context that the 'critical hours' program was implemented (two low-income neighbourhoods in North East Edmonton), the issue of transferability could be questioned. When conducting qualitative research, researchers often discuss the possibility of the results being transferred to similar settings (Stringer & Genat, 2004). Despite this Frisby, Crawford, and Dorer, (1997) have questioned if it is possible or even desirable to transfer findings within PAR. Further Greenwood and Levin (1994) go on to say that rather than judging the quality of research on criteria that devalue lived experiences, researchers should carefully document the entire research process and let readers decide the degree to which patterns uncovered are transferable to other settings. Similarly Ellis (1995) states that the ability to transfer findings to new contexts is best judged by the ability of the reader to relate to the experiences and the outcomes.

The readers' ability to examine outcomes based on their own experiences is due to the fact that the constructed and contextual nature of human experience allows for shared realities (Thorne, Reimer Kirkham, & MacDonald-Emes, 1997). Therefore, while the experiences of the 'critical hours' program are unique to the individuals involved, other schools, communities and researchers can potentially benefit from the outcomes of the study. A thick detailed account of the research process, highlighting the nature of the context and the participants' involvement has been clearly outlined. By providing a thick detailed description of the study (Stringer & Genat, 2004) it is assumed that future studies will find these outcomes

useful in developing a study that is specific to the community, school, and participants.

**Future Directions**

The outcomes and experiences resulting from the 'critical hours' program have highlighted areas of research for future studies. The first of which is for future researchers to examine the possibility of collaborations between universities, schools, and community organizations in sustaining and evaluating future 'critical hours' programs. With the development and implementation of after school programs there is an opportunity to link academic and research communities resulting in a rigorous and long-term evaluation (ARPA, 2010). In addition to the 'critical hours' program, other researchers have provided examples highlighting partnerships between school staff, community members and university-based researchers (e.g. Dowrick, et al., 2001, Leff, 2004, Nastasi et al, 2000). Despite this, Levin and Greenwood (2011) are calling for the relationships between researchers, universities and society to change, suggesting that teaching and research be based on the principles of action research. Therefore researchers are currently in an ideal situation to explore participatory and community-based research methods. Additional PAR research during the 'critical hours' after school in low-income communities will deepen our understanding of 'critical hours' programs and further advance the collaboration between universities, community organizations, schools, and families.

In addition to examining the potential of collaborations and partnerships it is recommended that researchers further examine the role of theory in PAR

studies examining the development, implementation, and evaluation of after school programs. The distinction between theory and practice is challenged by the assumption that theory is informed by practice and practice is a reflection of theory when choosing a PAR methodology. Therefore given that action research "rejects the theory/practice dichotomy on which most conventional social research relies" (Levin & Greenwood, 2011, p. 29) future research should attempt to develop deeper understandings and theory about after school programs, with the intent of generating new knowledge to inform future action.

The outcomes and experiences of the 'critical hours' program also provide suggestions surrounding the responsibilities and development of future 'critical hours' programs. Having discussed a sustainability strategy for future physical activity programs, stakeholders highlighted the responsibilities of various levels of government, community organizations, universities, and schools in the provision of 'critical hours' programs. Examining the role of government, stakeholders discussed the need for municipal, provincial, and federal funding. This is consistent with the Federal/Provincial/Territorial (F/P/T) Physical Activity and Recreation Committee who, in 2008, asked officials to explore the after school period as a key opportunity for physical activity promotion (F/P/T Physical Activity and Recreation Committee, 2010). Despite this commitment to the after school period the provincial and territorial government received a 'C-' in the 2011 Active Healthy Kids Canada Report Card (Active Healthy Kids Canada, 2011). Future research should therefore examine the municipal, provincial, and federal government's commitment to the after school hours, highlighting the role these

various levels should have and providing recommendations for the sustainability of future programs.

When examining the role of municipal and provincial governments, access to school space during the after school hours is something that should be examined. Based on the reported need for accessible 'critical hours' programs, schools are the ideal location for future 'critical hours' programs. This is consistent with one of the emergent themes of the *After School Initiatives Executive Summary* (Alberta Recreation and Parks Association, 2009). The Summary identifies a need for schools to become hubs for community services, including after school programs. This is based on the fact that despite the numerous dedicated agencies in the education, social services and non-profit sectors providing afterschool programs, Alberta is still unable to meet the need for after school programs, leaving unserved children and youth in many communities. Future research should therefore examine the restrictions surrounding school use and access to gym space during the 'critical hours' should be examined at both a local and provincial level.

After school programs have been suggested as an environment capable of providing additional opportunities for the development of fundamental movement skills (Foweather, et al., 2008) if qualified coaches are available to assist with the planning and delivery (Raudsepp & Pall, 2006). Although the acquisition of fundamental movement skills was not measured, it is assumed that the 'critical hours' program supported the development of program participants' physical literacy using fundamental movement skills. This is based on the reported

increases in participation in new activities and sports, and increases in confidence and self-esteem in a sport and physical activity setting. Future 'critical hours' programs should therefore consider a similar curriculum using the FUNdamental phase of the Long Term Athlete Development Plan delivered by qualified coaches and instructors.

Future researchers should also consider examining the difference in 'critical hours' programming for both children and youth. The 'critical hours' program was developed, implemented, and evaluated for students in grades two and three. Therefore the activities, approach to delivery, and level of involvement throughout the research process was likely different than if the program participants were in later elementary grades, junior high, or high school. Future researchers should examine the differences between these ages, acknowledging that age-appropriate programming is critical and youth input should increase steadily with the age of participants during the development, implementation and evaluation of PAR studies. Examining these different experiences would provide relevant information surrounding local priorities, community capacity, and potentially fill gaps in services for older youth (ARPA, 2010).

In addition to examining different ages, future researchers should also consider including the parents of program participants and examining their experiences associated with their children's after school experiences. A key challenge to community development is to involve hard-to-reach populations in decision-making (Frisby & Miller, 2002). The experiences of parents are especially important when examining the development, implementation, and

evaluation of after school programs for elementary students. Parents are still very involved in their children's after school activities at this age and therefore PAR studies hoping to influence policy or community development would benefit from conversations with parents. Because PAR researchers seek to understand the lived experience of those involved or affected by various forms of sport and physical activity (Frisby, Crawford, & Dorer, 1997), future researchers should not overlook parents when examining after school programming.

The last recommendation is to consider using different data collection methods with the program participants. While interviews are the most popular qualitative method for gathering views of older children and adults, some concerns have been expressed surrounding their appropriateness as a tool when working with young children (Clark, 2005). We experienced some difficulties conducting the interviews with seven, eight, and nine year olds (e.g. students not staying focused, not being able to articulate what it is they want to say). As qualitative researchers our goal is to produce a document which represents the world experienced by our participants; thus if we are working with children, we need to capture the meaning that they attach to certain experiences (Baumann, 1997). I therefore recommend that future research explore other data collection methods, capable of capturing this meaning with young participants.

## Conclusion

Participatory Action Research was a logical and appropriate methodology for me as a researcher, student, instructor, coach, volunteer and community partner. It provided a methodological framework allowing me to follow my passion, give my thesis a personal sense of meaning, and develop relationships. The development, implementation, and evaluation of the 'critical hours' program has been a learning experience as a student within the world of academics. It has also allowed me to foster skills that are and will continue to be useful outside the academic community.

Choosing to do a PAR project for some students at a Master's level may not seem realistic given time constraints, various degree requirements, experience, and expertise. While these are all issues that should be discussed prior to undergoing a PAR project, the 'critical hours' program confirms that it is possible at a Master's level. I know that had I not been invested in my research, developed relationships with my participants, and valued the outcomes of this research the entire process would have been more difficult. It is the relationships that I have developed and the connections that I have made that have been driving the completion of this project. Mostly, it is the words of the program participants that remind me how valuable PAR can be.

"I play those games nowhere else" (P2).
"I'm excited about having fun with you and Lisa" (P11).
"I liked everything. Hockey, soccer, basketball, tennis." (P28).
"I've never been in a program after school" (P3).

**References**

Active Healthy Kids Canada. (2011). *Report card on physical activity for children and youth: Overview*. Retrieved June 4, 2011, from http:// www.activehealthykids.ca

Alberta Education. (2005). *Daily Physical Activity*. Retrieved March 26, 2009, from http://www.education.alberta.ca/media/756341/dpasurveyreport.pdf

Alberta Education (2008). *Daily physical activity survey report.* Retrieved March 28, 2009 from http://education.alberta.ca/media/756345/dpaexesum.pdf

Alberta Recreation and Parks Association (2009). *After School Initiatives Executive Summary*. Edmonton, AB.

Alberta Recreation and Parks Association (2010). *Stone Soup: The Recipe for an After School Recreation Strategy in Alberta*. Edmonton, AB.

Altheide, D. L., & Johnson, J. M. (2011). Reflections on interpretive adequacy in qualitative research. In N. Denzin & Y. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 581-594). Thousand Oaks, CA: Sage.

American Psychological Association, Task Force on Socioeconomic Status. (2007). *Report of the APA Task Force on Socioeconomic Status.* Washington, DC: American Psychological Association.

Atkin, A. J., Gorely, T., Biddle, S. J. H., Marshall, S. J., & Cameron, N. (2008). Critical hours: Physical activity and sedentary behaviour of adolescents after school. *Pediatric Exercise Science, 20*, 446-456.

Baker, D. A., & Witt, P. A. (2000). Multiple stakeholders' views of the goals and content of two after-school enrichment programs. *Journal of Park and Recreation Administration, 18,* 68-86.

Baumann, S. L. (1997). Qualitative research with children as participants. *Nursing Science Quarterly, 10,* 68-69.

Beets, M. W., Beighle, A., Erwin, H., & Huberty, J. (2009). After-school program impact on physical activity and fitness; a meta analysis. *American Journal of Preventive Medicine, 36,* 527-537.

Biddle, S. J. H., Gorely, T., & Stensel, D. J. (2004). Health-enhancing physical activity and sedentary behaviour in children and adolescents. *Journal of Sports Sciences, 22*, 679-701.

Black, A. E., & Deci, E. L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. *Science Education, 84*, 740-756.

Bocarro, J., Kanters, M. A., Casper, J., & Forrester, S. (2008). School physical education, extracurricular sports, and lifelong active living. *Journal of Teaching in Physical Education, 27,* 155-166.

Boog, B. W. M. (2003). The emancipatory character of action research, its history and the present state of the art. *Journal of Community & Applied Social Psychology, 13,* 426-438.

Bradley, R. H. & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology, 53*, 371-399.

Bradley, R. H., Corwyn, R. F., Burchinal, M., McAdoo, H. P., & Garcia Coll, C. (2001). The home environments of children in the United States. Part II: Relations with behavioral development through age thirteen. *Child Development, 72,* 1868-1886.

Bransford, J. D., Brown, A. L., & Cocking, R.R. (1999). *How people learn*. Washington, DC: National Academy Press.

Brooks-Gunn, J. & Duncan, G. J. (1997). The effects of poverty on children. *The Future of Children, 7*, 55-71.

Brooks-Gunn, J., Klebanov, P. K., & Liaw, F. (1995). The learning, physical, and emotional environment of the home in the context of poverty: The infant health and development program. *Children and Youth Services Review, 17*, 251-276.

Bruening, J. E., Dover, K. M., & Clark, B. S. (2009). Preadolescent female development through sport and physical activity: A case study of an urban after-school program. *Research Quarterly for Exercise and Sport, 80,* 87-101.

Brydon-Miller, M., Greenwood, D., Maguire, P., & Members of the Editorial Board of Action Research (2003). Why action research? *Action Research, 1*, 9-28.

Brydon-Miller, M., Kral, M., Maguire, P., Noffke, S., & Sabhlok, A. (2011). Jazz and the banyan tree: Roots and riffs on participatory action research In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research* (pp. 387-400). Thousand Oaks, CA: Sage.

Burgess, J. (2006). Participatory action research: First-person perspectives of a graduate student. *Action Research, 4,* 419- 437.

Cale, L., & Harris, J. (2006). Interventions to promote young people's physical activity: Issues, implications and recommendations for practice. *Health Education Journal, 65*, 320-337.

Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada (2010). *Tri-council policy statement: Ethical conduct for research involving humans*. Retrieved June 18, 2011, from http://www.pre.ethics.gc.ca/pdf/eng/tcps2/TCPS_2_FINAL_Web.pdf

Canadian Society for Exercise Physiology. (2011). Canadian physical activity guidelines. Retrieved May 15, 2011, from www.csep.ca/guidelines

Canadian Sport for Life. (2008). *Fundamental Skills.* Retrieved June 4, 2011, http://www.canadiansportforlife.ca/

Cargo, M., & Mercer, S. L. (2008). The value and challenges of participatory research: Strengthening it's practice. *Annual Review of Public Health, 29*, 325-350.

Carruthers, C. (2006). Processes and outcomes of an after-school program for adolescent girls. *Journal of Park and Recreation Administration, 24,* 127-152.

City of Calgary. (2008). *Critical Hours: A Plan to Invest in Calgary's Children.* Calgary, AB: Community and Neighbourhood Services.

Clark, A. (2005). Listening to and involving young children: A review of research and practice. *Early Child Development and Care, 175*, 489-505.

Clark, W. (2008). *Kid's sports. Component of Statistics Canada Catalogue.* Retrieved March 28, 2009 from http://education.alberta.ca/media/756345/dpaexesum.pdf

Coatsworth, J. D., & Conray, D. E. (2007). Youth sport as a component of afterschool programs. *New Directions for Youth Development, 115*, 57-74.

Cohen, D. A., McKenzie, T. L., Segal, A., Williamson, S., Golineli, D., & Lurie, N. (2007). How do public parks contribute to physical activity? *American Journal of Public Health, 9*, 509-514.

Comstock, D. E., & Fox, R. (1993). Participatory research as critical theory: The North Bonneville, U.S.A. experience. In P. Park, M. Brydon-Miller, B. Hall, E. Jackson (Eds.), *Voices of Change: Participatory Research in the United States*. (pp. 103-124) Toronto, ON: OISE Press.

Craig, K. V. (2009). *Action research essentials*. San Francisco: Wiley & Sons Inc.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Daud, R., & Carruthers, C. (2008). Outcome study of an after-school program for youth in a high-risk environment. *Journal of Park and Recreation Administration, 26*, 95-114.

de Lone, R. (1979). *Small futures: Children, inequality, and the limits of liberal reform*. New York: Harcourt Brace Jovanovich.

Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behaviour.* New York: Plenum Press.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behaviour. *Psychological Inquiry, 11,* 227-268.

Deci, E. L., & Ryan. R. M. (2002). *Handbook of self-determination research*. Rochester, NY: University of Rochester Press.

De Meester, F., Van Lenthe, F. J., Spittaels, H., Lien, N., & Bourdeaudhuij, I. D. (2009). Interventions for promoting physical activity among European teenagers: a systematic review. *International Journal of Behavioral Nutrition and Physical Activity, 6,* 82-93.

Denzin, N., & Lincoln, Y. (1994). Introduction. In N. Denzin & Y. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1-17). Thousand Oaks, CA: Sage.

Dick, B. (1993). *Thesis resource paper: You want to do an action research thesis.* Retrieved April 12, 2008, from http://www.scu.edu.au/schools/gcm/ar/art/arthesis.html

Dick, B., Stringer, E., & Huxham, C. (2009). Theory in Action Research. *Action Research, 7*, 5-12.

Dockett, S. & Perry, B. (2007). Trusting children's accounts in research. *Journal of Early Childhood Research, 5*, 47-62.

Dowrick, P. W., Power, T. J., Manz, P. H., Ginsburg-Block, M., Leff, S. S., & Kim-Rupnow, S. (2001). Community responsiveness: Examples from under-

resourced urban schools. *Journal of Prevention and Intervention in the Community, 21*, 71-90.

Ellis, C. (1995). *Final negotiations*. Philadelphia, NJ: Temple University Press.

Emerson, R. M., Fretz, R. I., & Shaw, L. L. (1995). *Writing ethnography field notes.* Chicago: University of Chicago Press.

Ernst, M. P., & Pangrazi, R. P. (1999). Effects of a physical activity program on children's activity levels and attraction to physical activity. *Pediatric Exercise Science, 11,* 393-405.

F/P/T Physical Activity and Recreation Committee. (2010). *F/P/T after-school time period physical activity workshops; post-workshop report*. Retrieved May 16, 2011, from http://www.prontario.org/index.php?ci_id=6386

Felton, G., Saunders, R. P., Ward, D. S., Dishman, R. K., Dowda, M., Pate, R. R. (2005). Promoting physical activity in girls: A case study of one school's success. *Journal of School Health, 75*, 57-62.

Foweather, L., McWhannell, N., Henaghan, J., Lees, A., Stratton, G., & Batterham, A. M. (2008). Effect of a 9 wk after-school multi-skills club on fundamental movement skill proficiency in 8 to 9 yr old children: An exploratory trial. *Perceptual and Motor Skills, 106*, 745-754.

Fraser-Thomas, J. L., Cote, J., & Deakin, J. (2005). Youth sport programs: An avenue to foster positive youth development. *Physical Education & Sport Pedagogy*, 10, 19- 40.

Frederick, C. M., & Ryan, R. (1995). Self-determination in sport: A review using cognitive evaluation theory. *International Journal of Sport Psychology, 25*, 5-23.

Friedlander, F. (2001, July 23-24). *Participatory action research as a means of integrating theory and practice.* Paper presented at the Fielding Graduate Institute Action Research Symposium. Retrieved March 28, 2006, from www.fielding.edu/research /ar_papers/ friedlander.pdf

Friedman, V. (2001). Action science: Creating communities of inquiry in communities of practice. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 159–170). London: Sage.

Frisby, W., Crawford, S., & Dorer, T. (1997). Reflections of participatory action research: The case for low-income women assessing local physical activity services. *Journal of Sport Management, 11*, 8-28.

Frisby, W., & Millar, S. (2002). The actualities of doing community development to promote the inclusion of low income populations in local sport and recreation. *European Sport Management Quarterly, 2*, 209-233.

Frisby, W., Reid, C. J., Millar, S., & Hoeber, L. (2005). Putting 'participatory' into participatory forms of action research. *Journal of Sport Management, 19*, 367-386.

Gallahue, D. L., & Ozmun, J. C. (2002). *Understanding motor development: Infants, children, adolescents, adults* (5th ed.). Boston: McGraw-Hill.

Gallahue, D. L., & Ozmun, J. C. (2006). *Understanding motor development: Infants, children, adolescents, adults* (6th ed.). Boston, MA: McGraw-Hill.

Gibbon, M. (2002). Doing a doctorate using a participatory action research framework in the context of community health. *Qualitative Health Research, 12,* 546-558.

Glesne, C., & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction.* NY: Longman.

Gollop, M. (2000). Interviewing children: A research perspective. In A. Smith, N. J. Taylor, & M. Gallop (Eds.), *Children's voices: research, policy and practice* (pp. 18-36). Auckland, NZ: Pearson Education.

Gordon-Larsen, P., McMurray, R. G., & Popkin, B. M. (2000). Determinants of adolescent physical activity and inactivity patterns. *Pediatrics, 105*, 2-8.

Gosin, M. N., Dustman, P. A., Drapeau, A. E., & Harthun, M. L. (2003). Participatory action research: Creating an effective prevention curriculum for adolescents in the Southwestern US. *Health Education Research, 18,* 363-379.

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.* University of British Columbia: Institute of Health Promotion Research.

Greenwood, D. J., & Levin, M. (1994). Reconstructing the relationships between universities and society through action research. In N. Denzin & Y.

Lincoln (Eds.), *Handbook of qualitative research* (pp. 1-17). Thousand Oaks, CA: Sage.

Greenwood, D. J., Whyte, W. F., & Harkavy, I. (1993). Participatory action research as a process and as a goal. *Human Relations, 46*, 175-193.

Hall, B. (1981). Participatory research, popular knowledge, and power: A personal reflection. *Convergence, 14*, 6–9.

Halpern, R., Barker, G., Mollard, W. (2000). Youth programs as alternative spaces to be: A study of neighbourhood youth programs in Chicago's West Town. *Youth Society, 31*, 469-506.

Heilman, E. E. (1998). The struggle for self: Power and identity in adolescent girls. *Youth & Society, 30,* 182-208.

Heen, H. (2005). About feelings in action research. *Action Research, 3*(3), 263–278.

Hills, M. (2001). Using cooperative inquiry to transform evaluation of nursing students' clinical practice. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 340–347). London: Sage.

Holloway, I. (1997). *Basic concepts for qualitative research*. Oxford, UK: Blackwell Science.

Holt, N. L., Cunningham, C. T., Sehn, Z. L., Spence, J. C., Newton, A. S., & Ball, G. D. C. (2009). Neighborhood physical activity opportunities for inner city children and youth. *Health & Place*, 15, 1022-1028.

Huberty, J., Balluff, M., Beighle, A., Berg, K., & Sun, J. (2009). Club possible: Feasibility of a community collaborative after-school physical activity program for children ages 5-12 years. *Journal of Park and Recreation Administration, 27*, 97-111.

Israel, B. A., Schulz, A. J., Parker, E. A., & Becker, A. B. (2001). Community-based participatory research: Policy recommendations for promoting a partnership approach in health research. *Education for Health, 14,* 182-197.

Jago, R., & Baranowski, T. (2004). Non-curricular approaches for increasing physical activity in youth: a review. *Preventive Medicine, 39,* 157-163.

Jencks, C., & Mayer, S. (1990). The social consequences of growing up in a poor neighbourhood: A review. In M. McGeary & L. Lynn (Eds.), *Inner city poverty in the United States*. Washington, DC: National Academy Press.

Kahan, D. (2008). Recess, extracurricular activities, and active classrooms: Means for increasing elementary school students' physical activity. *Journal of Physical Education, Recreation & Dance, 79(2),* 26-39.

Kemmis, S., & McTaggart, R. (2000). Participatory action research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 567-605). Thousand Oaks, CA: Sage.

KidSport Alberta. (2009). *KidSport Alberta: Mission & Vision.* Retrieved October 2, 2009, from http://www.kidsport.ab.ca/index.php?page=mission_vision

Klerman, L. V. (1991). *Alive and well?* New York: National Centre for Children in Poverty, Columbia University School of Public Health.

Krane, V., & Baird, S. M. (2005). Using ethnography in applied sport psychology. *Applied Sport Psychology, 17*(2), 87-107.

Langhout, R. D., & Thomas, E. (2010). Imagining Participatory Action Research in Collaboration with Children: an Introduction. *American Journal of Community Psychology, 46*, 60-66.

Leff, S. S., Costigan, T., & Power, T. J. (2004). Using participatory research to develop a playground-based prevention program. *Journal of School Psychology, 42*, 3-21.

Lerner, R. M., & Galambos, N. L. (1998). Adolescent development: Challenges and opportunities for research, programs, and policies. *Annual Review of Psychology, 49,* 413-46.

Levin, M., & Greenwood, D. (2001). Pragmatic action research and the struggle to transform universities into learning communities. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 103–113). London: Sage.

Levin, M., & Greenwood, D. (2011). Revitalizing universities by reinventing the social sciences. In N. Denzin & Y. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 27-42). Thousand Oaks, CA: Sage.

Lincoln, Y. S. (1995). Emerging criteria for quality in qualitative and interpretive research. *Qualitative Inquiry, 1,* 275-289.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

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,* 519-529.

Lubans, D. R., Morgan, P. J., Cliff, D. P., Barnett, L. M., & Okely, A. D. (2010). Fundamental movement skills in children and adolescents. *Sports Medicine, 40,* 1019-1035.

Lytle, L. A., Murray, D. M., Evenson, K.R., Moody, J., Pratt, C. A., Metcalfe, L., & Parra-Medina, D. (2009). Mediators affecting girls' levels of physical activity outside of school: findings from the trial of activity in adolescent girls. *Annual Behavioural Medicine, 38*, 124-136.

Mageau, G. A., & Vallerand, R. J. (2003). The coach-athlete relationship: a motivational model. *Journal of Sports Sciences, 21*, 883-904.

Mahoney, J. L., Lord, H., & Carryl, E. (2005). An ecological analysis of after-school program participation and the development of academic performance and motivation attributes for disadvantaged children. *Child Development, 76*, 811-825.

Mandigo, J. L., & Holt, N. L. (2000). Putting theory into practice: How cognitive evaluation theory can help us motivate children in physical activity environments. *Journal of Physical Education, Recreation, and Dance, 71*(1), 44-49.

McHugh, T-L. C. (2008). *"A new view of body image": A school-based participatory action research project with young aboriginal women*

(Doctoral dissertation). Available from Electronic Thesis & Dissertation Project. (URN etd-11032008-080446).

McHugh, T-L. F. & Kowalski, K. C. (2011). *"A new view of body image": A school-based participatory action research project with young aboriginal women*. *Action Research, 9,* 220-241.

McIntyre, A. (2000). Constructing meaning about violence, school, and community: Participatory action research with urban youth. *The Urban Review, 32,* 123-154.

McIntyre, A. (2008). *Participatory action research*. Los Angeles: Sage.

McKenzie, T. L. (1999). School health-related physical activity programs: What do the data say? *Journal of Physical Education, Recreation & Dance, 70(1),* 16-22.

McKenzie, T. L. (2001). Promoting physical activity in youth: Focus on middle school environments. *Quest, 53*, 326-334.

McKenzie, T. L., Nader, P. R., Strikmiller, P. K., Yang, M., Stone, E. J., Perry, C. L., …Kelder, S. H. (1996). School Physical Education: Effect of the child and adolescent trial for cardiovascular health. *Preventive Medicine*, *25,* 423-431.

McLaughlin, M.W. (2000). *Community counts: How youth organizations matter for youth development*. Washington, DC: Public Education Network.

McLoyd, V. C. (1998). Socioeconomic disadvantage and child development. *American Psychologist, 53,* 185-204.

Metz, R. A., Goldsmith, J. G., & Arbreton, A. J. A. (2008). *Putting it all together: Guiding principles for quality after-school programs serving preteens:* Retrieved November 2, 2009, from http://ppv.org/ppv/publications/assets/234_publication.pdf

Minkler, M. (2005). Community-based research partnerships: Challenges and opportunities. *Journal of Urban Health, 82 (Supplement 2),* ii3-ii12.

Minkler, M., & Hancock, T. (2003). Community-driven asset identification and issue selection. In M. Minkler & N. Wallerstein (Eds.), *Community based participatory research for health* (pp. 135–152). San Francisco: Jossey-Bass.

Nader, P. R., Stone, E. J., Lytle, L. A., Perry, C. L., Osganian, S. K., Kelder, S., …Luepker, R. V. (1999). Three-year maintenance of improved diet and physical activity: The CATCH cohort. *Archives of Pediatric and Adolescent Medicine, 153*, 695-704.

Nastasi, B. K., Varjas, K., Schensul, S. L., Silva, K. T., Schensul, J. J., & Ratnayake, P. (2000). The participatory intervention model: A framework for conceptualizing and promoting intervention acceptability. *School Psychology Quarterly, 15*, 207-232.

National Association for Sport and Physical Education (2009). *Active start :a statement of physical activity guidelines for children birth to five years.* Reston, VA: NASPE Publications.

Park, P. (2001). Knowledge and participatory research. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 81-90). London: Sage.

Pate, B. R. & O'Neil, J. R. (2009). After-school interventions to increase physical activity among youth. *British Journal of Sports Medicine, 43(1),* 14-18.

Pate, R. R., Saunders, R., Dishman, R. K., Addy, C., Dowda, M., & Ward, D. S. (2007). Long-term effects of a physical activity intervention in high school girls. *American Journal of Preventive Medicine, 33*, 276-280.

Patton, M. Q. (1987). *How to use qualitative methods in evaluation.* Newbury Park, CA: Sage.

Perry, C. L., Sellers, C. J., Johnson, C., Pedersen, S., Bachman, K. J., Parcel, G. S., …Cook, K. (1997). The child and adolescent trial for cardiovascular health (CATCH): Intervention, implementation, and feasibility for elementary schools in the United States. *Health Education Behaviour, 24*, 716- 735.

Perry, C. L., Stone, E. J., Parcel, G. S., Ellison, C., Nader, P. R., Webber, L. S., & Luepker, R.V. (1997). School-based cardiovascular health promotion: The child and adolescent trial for cardiovascular health (CATCH). *Journal of School Health 60*, 406-413.

Physical and Health Education Canada. (2008). *Fundamental movement skills: Active start & FUNdamentals stage*. Ottawa, ON: PHE Canada.

Posner, J. K., & Vandell, D. L. (1994). Low-income children's after-school care: Are there beneficial effects of after-school programs? *Child Development, 65*, 440-456.

Posner, J. K., & Vandell, D. L. (1999). After-school activities and the development of low-income urban children: A longitudinal study. *Developmental Psychology, 35*, 868-879.

Potvin, L., Cargo, M., McComber, A. M., Delormier, T., & Macaulay, A. C. (2003). Implementing participatory intervention and research in communities: Lessons from the Kahnawake Schools Diabetes Project in Canada. *Social Science & Medicine, 56*, 1295-1305.

Powers, H. S., Conway, T. L., McKenzie, T. L., Sallis, J. F., & Marshall, S. J. (2002). Participation in extracurricular physical activity programs at middle schools. *Research Quarterly for Exercise and Sport, 73*, 187-192.

Raudsepp, L., & Pall, P. (2006). The relationship between fundamental motor skills and outside-school physical activity of elementary school children. *Pediatric Exercise Science, 18*, 426-435.

Reason, P., & Bradbury, H. (2001). Introduction: Inquiry and participation in search of world worthy of human aspiration. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 1–14). London: Sage.

Reason, P., & Marshall, J. (1987). Research as a Personal Process. In D. Boud & V. Griffin (Eds.), *Appreciating adults learning from a learners perspective* (pp. 112–124). London: Kogan Page.

Reid, C., Frisby, W., & Ponic, P. (2002). Confronting two-tiered community recreation and poor women's exclusion: Promoting inclusion, health and social justice. *Canadian Women's Studies, 21(3),* 88-94.

Reid, C., Tom, A., & Frisby, W. (2006). Finding the 'action' in feminist participatory action research. *Action Research, 4,* 315-332.

Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist, 55*(1), 68-78.

Ryan, R. M., & Deci, E. L. (2002). An overview of self-determination theory: An organismic-dialetical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3-33) Rochester, NY: University of Rochester Press.

Sallis, J. F., McKenzie, T. L., Alcaraz, J. E., Kolody, B., Faucette, N., & Hovell, M.F. (1997). The effects of a 2-year physical education program (SPARK) on physical activity and fitness in elementary school students. *American Journal of Public Health, 87*, 1328-1334.

Sallis, J. F., Prochaska, J. J, & Taylor, W.C. (2000). A review of correlates of physical activity of children and adolescents. *Medicine & Science in Sports & Exercise, 32*, 963-975.

Sands, R. R. & Schwandt, T. A. (1996). Farewell to criteriology. *Qualitative Inquiry*, *2*, 58-72.

Shann, M. H. (2001). Students' use of time outside of school: A case for after-school programs for urban middle school youth. *The Urban Review, 33*, 339-356.

Sparkes, A. (1998). Validity in qualitative inquiry and problems of criteria: Implications for sport psychology. *The Sport Psychologist, 12,* 363-386.

Sparkes, A. (2002). *Telling tales in sport and physical activity: A qualitative journey.* Champaign, IL: Human Kinetics.

Stiehl, J., & Galvan, C. (2005). School-based physical activity programs. *Journal of Physical Education, Recreation & Dance, 76(9),* 25-31.

Stone, E. J., Mckenzie, T. L., Welk, G. J., & Booth, M. L. (1998). Effects of physical activity interventions in youth: Review and synthesis. *American Journal of Preventative Medicine, 15*, 298-315.

Straus, S. E., Tetroe, J., & Graham, I. (2009). Defining knowledge translation. *Canadian Medical Association Journal, 181*, 165-168.

Stringer, E. T., & Genat, W. J. (2004). *Action research in health*. Upper Saddle River, NJ: Pearson Education Inc.

Strong, W., Malina, R., Blimkie, S., Daniels, R., Dishman, B., Gutin, A., …Trudeau, F. (2005). Evidence based physical activity for school-aged youth. *The Journal of Pediatrics, 146*, 732-737.

Thompson, W. R. (2009). After-school all-stars: Providing structured health and physical activity programs in urban environments. *Journal of Physical Education, Recreation, and Dance, 80(8),* 32-34.

Thorne, S., Reimer Kirkham, S., & MacDonald-Emes, J. (1997). Interpretive description: A noncategorical qualitative alternative for developing nursing knowledge. *Research in Nursing and Health, 20,* 169-177.

Tom, A., & Herbert, C. (2002). The 'near miss': A story of relationship. *Qualitative Inquiry, 8,* 591-607.

Trost, S. G., Rosenkranz, R. R., & Dzewaltowski, D. (2008). Physical activity levels among children attending after-school programs. *Medicine & Science in Sports & Exercise, 14,* 622-629.

Trudeau, F., & Shephard, R. J. (2005). Contribution of school programmes to physical activity levels and attitudes in children and adults. *Sports Medicine, 35*, 89-105.

Van Maanen, J. (1988). *Tales of the field: On writing ethnography.* Chicago: University of Chicago Press.

Vecchiarelli, S., Prelip, M., Slusser, W., & Weightman, H. (2005). Using participatory action research to develop a school-based environmental intervention to support healthy eating and physical activity. *Journal of Health Education, 36,* 35-42.

Wadsworth, Y. (1998). What is participatory Action Research? *Action Research International, Paper 2.* Retrieved June 14, 2008, from http://www.scu.edu.au/schools/gcm/ar/ari/p-ywadsworth98.html

Weber, R.P. (1990). *Basic content analysis* (2nd Ed.). Newbury Park, CA: Sage.

Wechsler, H., Devereaux, R. S., Davis, M., & Collins, J. (2000). Using the school environment to promote physical activity and healthy eating. *Preventive*

*Medicine, 31*, 121-137.

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*, 683-698.

White, G. W., Suchowierska, M., & Campbell, M. (2004). Developing and systematically implementing participatory action research. *Archive of Physical Medical and Rehabilitation, 85*, S3–S12.

Whitehead, J. (1993). Physical activity and intrinsic motivation. *Presidents Council on Physical Fitness and Sports Research Digest, 1*, 1-9.

Witt, P. A. (2004). Programs that work: Developing quality after-school programs. *Journal of Park and Recreation Administration, 22(4).* 103-126.

Witt, P., & Baker, D. (1997). Developing after-school programs for youth in high risk environments. *Journal of Physical Education, Recreation & Dance, 68(9),* 18-20.

Wolcott, H. F. (1990). *Writing up qualitative research.* Newbury Park, CA: Sage.

Wolcott, H. F. (1994). *Transforming qualitative data.* Thousand Oaks, CA: Sage Publications.

Wolcott, H. F. (1995). *The art of fieldwork.* Walnut Creek, CA: AltaMira Press.

Wolcott, H. F. (2001). *Writing up: Qualitative research* (2nd ed.). Thousand Oaks, CA: Sage.

# Appendices

# Appendix A

## PROGRAM PARTICIPANT INFORMATION LETTER


| **Principal Investigator**: | **Supervisor** |
|---|---|
| Lisa N. Tink, MA Student<br>Child & Adolescent Sport & Activity Lab<br>Van Vliet Centre<br>Faculty of Physical Education and Recreation<br>University of Alberta<br><br>T: 780 492-9296<br>E: ltink@ualberta.ca | Dr. Nicholas L. Holt, Associate Professor<br>Child & Adolescent Sport & Activity Lab<br>Van Vliet Centre<br>Faculty of Physical Education and Recreation<br>University of Alberta<br><br>T: 780 492-7386<br>E: nick.holt@ualberta.ca |


## A "Critical Hours" Sports-Based Program for Elementary School Aged Children

June, 2009

Dear Students and Parents:

My name is Lisa and I am a graduate student at the University of Alberta. I would like to invite your child to take part in a sports-based after-school program. The program aims to develop the basic skills needed for sport and physical activity. These skills include running, kicking, throwing, catching and jumping. All skills will be taught using sport activities and games. We are testing whether or not such programs would work in schools. The program is part of a research study. Your child will only be included with your permission.

**The purpose is to provide an after-school sports-based program for students who attend (name of school).** The program will provide activities for your child on Tuesdays and Thursdays from 3:30 to 5:30. There is no cost for the program and it is completely voluntary. The program will run from (dates) and will take place at (name of school). We are unable to provide transportation home for your child at 5.30. Please be aware of this when considering if you wish your child to participate.

If you child participates I would like to get her/his feedback about the program. During the last week of the program your child will be asked to participate in an interview. The interview will last about 30 minutes. Your child will be asked about things she/he liked, did not like, and ways the program could be improved. I will also make notes about how much your child appeared to enjoy the different activities.

Interviews will be audio-recorded, typed and stored in a locked file cabinet (in a locked office). Your child will be assigned a false name in the text to ensure confidentiality. Only the research team will have access to this information. The information is kept for five years, after which it will be destroyed.

Participating in the program is voluntary. Your child can withdraw from the program at any time, for any reason. Withdrawing from the program will not influence any other school activities. There are no negative consequences for not participating. The risks involved with the program are similar to those in gym class. The instructor has first aid training and can provide care for any minor injuries that may occur.

**If you would like your child to participate in this study, please complete and sign the informed consent form and return it to the school office as soon as possible. There are only 15 places available. <u>We will accept children on a first-come, first-served basis.</u>**

If you have any questions about the program or study, please contact me (Lisa) by phone or e-mail. If you have more general concerns about this research, you may contact Dr. Wendy Rodgers, who is the chair of the Research Ethics Board for the Faculty of Physical Education and Recreation at the University of Alberta (Tel: (780) 492-8126; email: wendy.rodgers@ualberta.ca). Dr. Wendy Rodgers has no direct involvement in the study.

Thank you,

Lisa Tink

## Appendix B

## PROGRAM PARTICIPANT INFORMED CONSENT FORM

| | |
|---|---|
| **Title of Project:** | **A "Critical Hours" Sports-Based Program for Elementary School Aged Children** |
| **Principal Investigator:** | Lisa N. Tink<br>MA Student, Child & Adolescent Sport & Activity Lab<br>Van Vliet Centre, Faculty of Physical Education and Recreation, University of Alberta<br>Tel: 780 492-9296, Email: ltink@ualberta.ca |
| **Supervisor:** | Nicholas L. Holt<br>Associate Professor, Child & Adolescent Sport & Activity Lab<br>Van Vliet Centre, Faculty of Physical Education and Recreation, University of Alberta<br>Tel: 780 492-7386, Email: nick.holt@ualberta.ca |

| | | |
|---|---|---|
| Do you understand that your child has been asked to take part in a research study? | Yes | No |
| Have you received and read a copy of the attached information letter? | Yes | No |
| Do you understand the benefits and risks involved in taking part in this research study? | Yes | No |
| Have you had the opportunity to ask questions and discuss this study? (If you have any questions please contact Lisa Tink) | Yes | No |
| Do you understand that your child is free to refuse participation, or to withdraw from the study at any time, without consequence? | Yes | No |
| Do you understand the issues of confidentiality? Do you understand who will have access to your information? (see information sheet) | Yes | No |

I would like my child to take part in this study: ☐ Yes ☐ No

Your Child's Name:

Your Name (please print): Your Signature:

Today's Date:

If you would like to receive a one-page summary of the initial findings from this study, please provide your contact details (either mailing address or e-mail) below:

# Appendix C

## SCHOOL INFORMATION LETTER


| **Principal Investigator**: | **Supervisor** |
|---|---|
| Lisa N. Tink, MA Student<br>Child & Adolescent Sport & Activity Lab<br>Van Vliet Centre<br>Faculty of Physical Education and Recreation<br>University of Alberta<br><br>T: 780 492-9296<br>E: ltink@ualberta.ca | Dr. Nicholas L. Holt, Associate Professor<br>Child & Adolescent Sport & Activity Lab<br>Van Vliet Centre<br>Faculty of Physical Education and Recreation<br>University of Alberta<br><br>T: 780 492-7386<br>E: nick.holt@ualberta.ca |


## A "Critical Hours" Sports-Based Program for Elementary School Aged Children

May, 2009

Dear Teachers/Principals:

I am a graduate student in the Faculty of Physical Education and Recreation at the University of Alberta. I would like to invite you to take part in a research study. The study is based on the after-school program being run in (name of school).

**The purpose is to examine the challenges and opportunities in providing an after-school sports-based program for students who attend (name of school).** By taking part in this study you will help to further our knowledge about delivering after-school programs. The findings of this study will help develop future 'critical hours' programs.

Participation in the study will be voluntary. Agreeing to participate will mean committing to an interview of approximately one hour in length. During the interview you will be asked to provide your opinion of the program, and its challenges, barriers, and successes. Interviews will be conducted at a time and location convenient for you.

Interviews will be audio-recorded, typed and stored in a locked file cabinet (in a locked office). You and your school will be assigned false names. Only the research team will have access to this information. The information is kept for five years, after which it will be destroyed. There are no negative consequences for non-participation. There are no known risks to taking part in this study.

If you would like to participate in this study please contact Lisa Tink by phone (780 492-9296) or e-mail (ltink@ualberta.ca). I can also answer any questions you may have.

This study has been approved by the Research Ethics Board. Please contact Dr Wendy Rodgers, chair of the Research Ethics Board for the Faculty of Physical Education and Recreation at the University of Alberta, if you have any concerns. (Tel: (780) 492-2677 Email: wendy.rodgers@ualberta.ca). Dr Rogers has no direct involvement in the study.

Thank you,

Lisa Tink

# Appendix D

## COMMUNITY PARTNER INFORMATION LETTER


| **Principal Investigator**: | **Supervisor** |
|---|---|
| Lisa N. Tink, MA Student<br>Child & Adolescent Sport & Activity Lab<br>Van Vliet Centre<br>Faculty of Physical Education and Recreation<br>University of Alberta<br><br>T: 780 492-9296<br>E: ltink@ualberta.ca | Dr. Nicholas L. Holt, Associate Professor<br>Child & Adolescent Sport & Activity Lab<br>Van Vliet Centre<br>Faculty of Physical Education and Recreation<br>University of Alberta<br><br>T: 780 492-7386<br>E: nick.holt@ualberta.ca |


## A "Critical Hours" Sports-Based Program for Elementary School Aged Children

May, 2009

Dear Community Partners:

I am a graduate student in the Faculty of Physical Education and Recreation at the University of Alberta. I would like to invite you to take part in a research study. The study is based on the 'critical hours' programs being run in (name of schools).

**The purpose is to examine the challenges and opportunities in providing an after-school sports-based program for students who attend (name of school).** By taking part in this study you will help to further our knowledge about delivering after-school programs. The findings of this study will help develop future 'critical hours' programs.

Participation in the study will be voluntary. Agreeing to participate will mean committing to an interview of approximately one hour in length. During the interview you will be asked to provide your opinion of the program, and its challenges, barriers, and successes. Interviews will be conducted at a time and location convenient for you.

Interviews will be audio-recorded, typed and stored in a locked file cabinet (in a locked office). You and your school will be assigned false names. Only the research team will have access to this information. The information is kept for five years, after which it will be destroyed. There are no negative consequences for non-participation. There are no known risks to taking part in this study.

If you would like to participate in this study please contact Lisa Tink by phone (780 492-9296) or e-mail (ltink@ualberta.ca). I can also answer any questions you may have.

This study has been approved by the Research Ethics Board. Please contact Dr Wendy Rodgers, chair of the Research Ethics Board for the Faculty of Physical Education and Recreation at the University of Alberta, if you have any concerns. (Tel: (780) 492-2677 Email: wendy.rodgers@ualberta.ca). Dr Rogers has no direct involvement in the study.

Thank you,

Lisa Tink

## Appendix E

## STAKEHOLDER INFORMED CONSENT FORM

| **Title of Project:** | **A "Critical Hours" Sports-Based Program for Elementary School Aged Children** |
|---|---|
| **Principal Investigator:** | Lisa N. Tink<br>MA Student, Child & Adolescent Sport & Activity Lab<br>Van Vliet Centre, Faculty of Physical Education and Recreation, University of Alberta<br>Tel: 780 492-9296, Email: ltink@ualberta.ca |
| **Supervisor:** | Nicholas L. Holt<br>Associate Professor, Child & Adolescent Sport & Activity Lab<br>Van Vliet Centre, Faculty of Physical Education and Recreation, University of Alberta<br>Tel: 780 492-7386, Email: nick.holt@ualberta.ca |

| | | |
|---|---|---|
| Do you understand that you have been asked to take part in a research study? | Yes | No |
| Have you read and received a copy of the attached information letter? | Yes | No |
| Do you understand the benefits and risks involved in taking part in this research study? | Yes | No |
| Do you understand that you are free to contact the research team to ask questions and discuss this study? | Yes | No |
| Do you understand that you are free to refuse participation, or to withdraw from the study at any time, without consequence? | Yes | No |
| Do you understand the issues of confidentiality and do you understand who will have access to your information? | Yes | No |

I would like to take part in this study: ☐ Yes ☐ No

Printed Name: Signature:

Date:

If you would like to receive a one-page summary of the initial findings from this study, please provide your contact details (either mailing address or e-mail) below:

## Appendix F

## PROGRAM PARTICIPANT INTERVIEW GUIDE

I am interested in your opinions about the program. The things you liked and did not like. I am also interested in your sports participation. What sports you like to play and where you are able to play them. I would like you to answer the following questions. There are no right or wrong answers. I am only interested in your opinions and experiences. This interview is voluntary and you do not have to participate if you do not want to. You do not have to answer any question that you do not want to. Everything you say during the interview is confidential. Your answers will not be repeated to anyone. So, if you agree, we will start the interview.

*Program*

1. Can you tell me what you do in the program? What exactly do you do from the time you come to the gym until you leave?
2. Can you explain some of the activities you do to me?
3. What activities did you like most? Least?
4. What would you say the best things about the program were?
5. What were the worst things about the program?

*Learning*

6. What did the leaders teach during the program? How did they do this?
7. Did the leaders teach different things than the coaches (PSOs)? What kinds of things were different?
8. Did you learn anything from the leaders? Can you give me some examples?
9. Did you learn anything from the coaches? Can you give me some examples?
10. Will anything you learned help you in school, with friends, or other activities?

*Program Delivery*

11. Are you excited to come to program every day? Why? What excites you?
12. When are you most excited to participate in activities?
13. Did you feel that the leaders listened to you during the program?
14. Were there any times when were you allowed to make choices, letting the leaders know what you wanted during the program? Can you give me some examples?
15. How did you feel when you got to make choices?
16. How do the leaders give you feedback during the program? What kinds of things do they say to you to help you learn?
17. If you could change the program in any way what would you do?
18. Would you participate in this program again? Why or why not?
19. What would you be doing after school if you didn't come to program?

20. How do you think you will stay active after the program is over?
21. If you could design an after school sports program, that you and all your friends could be in, what would it look like?

## Appendix G

## SCHOOL STAFF INTERVIEW GUIDE

I am interested in your opinions of the sports-based 'critical hours' program. I am also interested in the opportunities, barriers, and challenges involved with the implementation of this program and other programs similar to it. I would like you to answer the following questions. There are no right or wrong answers. I am only interested in your opinions and experiences. This interview is voluntary and you do not have to participate if you do not want to. You do not have to answer any question that you do not want to. Everything you say during the interview is confidential.

*Program*

1. What did you feel the strengths of the program were?
2. Do you think there were any weaknesses of the program? Please explain and do not hold back.
3. What benefits do you feel the students received?
4. Were there any benefits to you as a staff member?

*Program Delivery*

5. How would you describe the program goals?
    a) How does it fit with the goals of your school?
6. How would you describe the program delivery?
7. Would you like to see any changes in regards to program delivery? Can you provide examples?

*Existing Programs*

8. What programs does your school currently offer?
9. What sports or activities are offered in the surrounding community?
10. Are the current programs reaching children who could most benefit from them? Can you provide examples?
11. In your opinion, what is the best way to get children involved in sports programs?
    a) What needs to happen for this to occur?

*Opportunities and Challenges*

12. How would you describe the outcomes of these sports programs?
13. What are the benefits of providing these sports programs in schools?
14. What was the biggest challenge, for you, with the implementation of this program?
15. How could the implementation of these sports programs be made easier in schools?
16. What challenges arise in connection with program access to school space?
17. Are there other resources that are limiting the delivery of similar programs?

18. What challenges arise in regard to program participation?
19. Where, in your opinion, do responsibilities lie in regards to such programs?
20. What roles should schools play in such programs? Community organizations? Universities? Families?

## Appendix H

## COMMUNITY PARTNER INTERVIEW GUIDE

I am interested in your opinions of the sports-based 'critical hours' program. I am also interested in the opportunities, barriers, and challenges involved with the implementation of this program and other programs similar to it. I would like you to answer the following questions. There are no right or wrong answers. I am only interested in your opinions and experiences. This interview is voluntary and you do not have to participate if you do not want to. You do not have to answer any question that you do not want to. Everything you say during the interview is confidential.

*Program*

1. What did you feel the strengths of the program were?
2. Do you think there were any weaknesses of the program? Please explain and do not hold back.
3. What benefits do you feel the students received?
4. Were there any benefits to you as a staff member?

*Program Delivery*

5. How would you describe the program goals?
    a) How does it fit with the goals of your agency?
6. Would you like to see any changes for future programs? Can you provide examples?
7. What, in your opinion needs to happen for the sustainability of these programs?

*Existing Programs*

8. In your opinion, are current sports programs reaching children who could most benefit from them? Can you provide examples?
9. In your opinion, what is the best way to get children involved in sports programs?
    a) What needs to happen for this to occur?

*Opportunities and Challenges*

10. How would you describe the outcomes of these sports programs in schools?
11. What are the benefits of providing these sports programs in schools?
12. What was the biggest challenge, for you, with the implementation of this program?
13. How could the implementation of these sports programs be made easier in schools?
14. What challenges arise in connection with program access to school space?
15. Are there other resources that are limiting the delivery of similar programs?

16. Where, in your opinion, do responsibilities lie in regards to such programs?
17. What roles should schools play in such programs? Community organizations? Universities? Families?

# Appendix I

## COACH INTERVIEW GUIDE

I am interested in your opinions of the sports-based 'critical hours' program. I am also interested in the opportunities, barriers, and challenges involved with the implementation of this program and other programs similar to it. I would like you to answer the following questions. There are no right or wrong answers. I am only interested in your opinions and experiences. This interview is voluntary and you do not have to participate if you do not want to. You do not have to answer any question that you do not want to. Everything you say during the interview is confidential.

*Program*

1. What did you feel the strengths of offering sessions run by PSOs in program were?
2. Do you think there were any barriers in offering sessions in these programs? Please explain and do not hold back.
3. What benefits do you feel the students received?
4. Were there any benefits to you as a Provincial sport coach?

*Program Delivery*

5. How would you describe your session goals?
    a) How does it fit with the goals of your provincial sport organization?
6. How would you describe the session delivery?
7. Would you like to see any changes in regards to the overall program delivery? Can you provide examples?

*Existing Programs*

8. What programs does your sport organization currently offer for children and youth?
9. Are there any sports or activities are offered in the surrounding community?
10. Are the current programs reaching children who could most benefit from them? Can you provide examples?
11. In your opinion, what is the best way to get children from these schools involved in sports programs?
    a) What needs to happen for this to occur?

*Opportunities and Challenges*

12. How would you describe the outcomes of these school sports programs?
13. What are the differences between these school programs and programs you traditionally offer?
14. What are the benefits of providing these sports programs in schools?

15. What was the biggest challenge, for you, with the implementation of this program?
16. How could the implementation of these sports programs be made easier for you?
17. Are there other resources that are limiting the delivery of similar programs in other schools?
18. Where, in your opinion, do responsibilities lie in regards to such programs?
19. What roles should schools play in such programs? Community organizations? Universities? Families?

**Appendix J**

# COMMENTS ON CRITICAL HOURS SPORTS PROGRAM FROM STUDENTS

Hi Lisa,

I thought I would pass along (sorry it took so long) some comments from the students their favourite parts and what they are doing with the equipment now. They really wanted to also pass along that they wished you were back.

I wish you all the best with this and hope all is going well.

## Comments on Critical Hours Sports Program from Students

### Favourite Parts

My favourite part is when I was spending time with you guys.

I like trying skipping. I am learning a little bit more about how to skip.

My favourite part was when we had circle time and everyone got to tell what they liked at the end of the program.

I liked when we all got awards and snack. My favourite snack was strawberries and cantaloupe.

I really liked trying new things and games and everything was fun.

I really liked when you were giving us healthy food like oranges, apples, chocolate milk, milk, bananas, and those healthy things you gave us.

My favourite part was eating the snacks and playing 3 goalie soccer.

### What I am doing with the new equipment

I'm playing basketball on a basketball team and I'm playing tennis with the tennis balls.

I am playing soccer with my family.

I am skipping with my friends.

With my basketball I go to the park with my big brother and we shoot hoops.

I play football with my whole family.

I play with my soccer ball every time I go outside.

## Appendix K

## EMAIL FROM SCHOOL STAFF

Hi Lisa,

What sad news for us. The program was so awesome - kids and parents are asking already about it (and I think that a big part of the awesomeness was you).

Without mentioning names, there was one student you may remember that you worked with quite a bit - and he made some really good progress with you in terms of following directions etc. - we see this consistently in the classroom - he has become an extremely positive "force" in his class.

Take Care Lisa -

# Appendix L

## GUIDELINES AND CATEGORIES FOR CLASSIFYING PARTICIPATORY RESEARCH PROJECTS

(Green, George, Daniel, Frankish, Herbert, Bowie, & O'Neill, 1995)

**1. Participants and the nature of their involvement:**

a. Is the community interest clearly described or defined?
b. Do members of the defined community participating have a concern or experience with the issue?
c. Are interested members of the defined community provided opportunities to participate in the research process?
d. Is attention given to the barriers to participation, with consideration of those who have been underrepresented in the past?
e. Has attention given to establishing within the community an understanding of the researchers' commitment to the issue?
f. Are community participants enabled to contribute their physical and/or intellectual resources to the research process?

**2. Origin of the research question:**

a. Did the impetus for the research come from the defined community?
b. Is an effort to research the issue supported by the members of the defined community?

**3. Purpose of the research:**

a. Can the research facilitate learning among community participants about individual and collective resources for self-determination?
b. Can the research facilitate collaboration between community participants and resources external to the community?
c. Is the purpose of the research to empower the community to address determinants of health?
d. Does the scope encompass some combination of political, social and economic determinants of health?

**4. Process and context-methodological implications:**

a. Does the research process apply the knowledge of community participants in the phases of planning, implementation, and evaluation?
b. For community participants, does the process allow for learning about research methods?
c. For researchers, does it allow for flexibility or change in research methods and focus as necessary?
d. Are procedures in place for appraising experiences during implementation of the research?
e. Are community participants involved in analytic issues: interpretations, synthesis, and verifications of conclusions

**5. Opportunities to address the issue of interest:**

a. Is the potential of the defined community for individual and collective learning reflected by the research process?
b. Is the potential of the defined community for action reflected by the research process?
c. Does the process reflect a commitment by researchers and community participants to social, individual, or cultural actions consequent to the learning acquired through research?

**6. Nature of the research outcomes:**

a. Do community participants benefit from the research outcomes?
b. Is there attention to or an explicit agreement for acknowledging and resolving in a fair and open way any differences between researchers and community participants?
c. Is there attention to or an explicit agreement between researchers and community participants with respect to the ownership of the research data?
d. Is there attention to or an explicit agreement between researchers and community participants with respect to the dissemination of research results?

**Appendix M**

# KidSport Summer Sport Camps

# 2009 Final Report

# August 31, 2009

**Lisa Tink**
**University of Alberta**

# 1. Introduction

KidSport Summer Sports Camp was a program providing mini-sports camps for children from low-income neighbourhoods in Edmonton, Alberta. The program was a pilot project initiated by Edmonton Public School Board (EPSB). Acknowledging the need for more physical activity programs in North East Edmonton, EPSB approached KidSport Alberta. KidSport's mission is to give all children the opportunity to experience the benefits of sports. They accomplish this mainly through individual funding and had not previously offered programming similar to this. KidSport viewed these summer sports camps as a new strategy to engage families and provide sporting opportunities to children facing financial barriers. The camps ran for four weeks in July, 2009. Each week the program ran out of a different school located in North East Edmonton. It was available to students for no cost.

This report summarizes the major findings of the KidSport Summer Sports Camps. An evaluation was conducted after the completion of the program examining the benefits, strengths, weaknesses, challenges and successes of the program. Sections to follow will provide a full overview of the program, methodology, analysis and results. Key themes that emerged during the evaluation will be discussed in detail providing some conclusions and recommendations for the next phase.

# 2. Overview of Program

**Project Description**

The aim of this project was to develop a new strategy for KidSport to engage young people and their families. Partnering with EPSB, four weeks of summer sports camps were delivered. Students participated in a variety of mini sport camps throughout the course of each week. Every sport session was led by Provincial Sport coaches to ensure the highest quality of coaching for all participants. School facilities were used to run all programs. The program ran weekdays from 10am to 3pm with the exception of Fridays.

Participating schools were identified through the Alberta Initiatives for School Improvement project (AISA). The goal of this project is to improve student learning through initiatives that enhance student engagement and performance and reflect the unique needs and circumstances of each school authority. These schools had already been assessed as 'high needs' schools that can benefit from collaborating with community partners like KidSport. School locations were also within a reasonable distance of a Food Bank depot to ensure that we were reaching out to families that may be accessing a Food Bank depot.

The project included four one-week camp programs at four different school locations (Belvedere Elementary School, Sifton Elementary School, Evansdale Elementary School, and Princeton Elementary School). Thirty participants were eligible to register each week. In the first phase of

recruitment principals and teachers handed out registration forms. The second phase of recruitment included school talks done by Lisa Tink. The last phase of recruitment included the promotion of the program at the Green Shack programs and City of Edmonton.

## Project Objectives

The three major project objectives of the program were to:

1. To promote KidSport's mission to other community agencies with a view to creating strategic partnerships throughout the City of Edmonton to promote children's sport participation and physical activity in the future.
2. To raise awareness of KidSport's mission among members of low-income families (e.g. Food Bank families) with a view to funding more children in the future.
3. To promote KidSport's mission to existing and potential funders with a view to obtain increased financial contributions in funding in the future.

### Project Staff

Paid staff were hired by both KidSport Alberta and EPSB. A Summer Project Coordinator was hired for a 12-week period by KidSport Alberta. They were responsible for organizing, implementing and evaluating the program. Two STEP students were also hired by EPSB. They were not hired as camp coaches because the Provincial Sport Organizations (PSOs) delivered the sport sessions. Their role was to support the PSOs and provide additional programming (team building activities, games).

PSOs provided coaches each day to facilitate a variety of sport sessions. These sessions were run by qualified coaches and were delivered for two hours each morning and afternoon. The PSO schedule varied each week depending on their availability. A total of thirteen PSOs took part in the program.

Other program partners included the University of Alberta Child and Adolescent Sport and Activity Lab (CASA), Edmonton Food Bank, APPLE Schools, City of Edmonton, Edmonton Police Service, and Above and Beyond Promotions.

### Number of Participants

The number of participants was consistent over the four weeks of programs. A total of 73 students participated in total. Below is a table outlining the number of participants each week.

**Table 1. The Number of Participants Each Week of KidSport Summer Sports Camps**

| Date | School Name | Number Participants |
|---|---|---|
| July 6 - 9 | Belvedere School | 17 |
| July 13 - 16 | Sifton School | 18 |
| July 20 -23 | Evansdale School | 19 |
| July 27 - 30 | Princeton School | 19 |

# 3. Data Collection / Analysis

The evaluator sent out email interviews following the completion of the camps. Email interviews offer an opportunity to access thoughts, ideas, and memories. They allow respondents to construct their own experiences enabling them to answer at their convenience and in any way they feel suitable (Bowker & Tuffin, 2004; Meho, 2005). An interview guide (see Appendix 1) examining the benefits, strengths, weaknesses, challenges and successes of the program was sent via email. The recipients were asked to respond to each question and send it back to the evaluator. Recipients of the interview guide included Provincial Sport Organization coaches, KidSport Alberta employees, EPSB employees, APPLE Schools facilitators, KidSport Summer Sport Camp employees, KidSport Board Members, and City of Edmonton employees.

Interviews were analyzed using content analysis. Content analysis is a technique that examines the words and concepts within a specific text. The evaluator determines the presence of themes within the text and examines their meanings. The themes that emerged from the analysis of the interviews are presented in the results below.

# 4. Results

The results of the interviews are presented under the following headings: Benefits, Strengths, Weaknesses, Challenges, and Successes. Within each of these headings the major themes have been identified and reported.

## a) Benefits

Benefits, for the purpose of this evaluation, were defined as anything that promoted or enhanced the well-being of those involved. Benefits to the students, the PSOs, KidSport and other community partners were reported in the data.

The benefits directly affecting the students were reported and themed as physical activity opportunities and positive role modeling.

### Physical Activity Opportunities

All respondents reported that the camps provided physical activity opportunities in low-income neighbourhoods. Providing camps in these neighbourhoods allowed more kids to be active over the month of July introducing them to a variety of new sports. In providing the camps at no cost the camps were

able to engage and involve kids that would otherwise not have the chance to participate in activities run by qualified provincial sport coaches.

*"The kids were given a chance to attend a summer camp which they more likely would not have been able to if this camp had not been offered for free. It gave them a chance to learn new sports, improve their skill in sports they had played before and to learn about sports offered in their community."*

**Positive Role Modeling**

Positive role modeling was reported as a benefit for the students. The roles models were indentified as the provincial sport coaches as well as the KidSport and EPSB staff who facilitated the camps.

*"I think they got to have fun, be more active than they would likely otherwise have been, discover and try new activities, develop their skills in the activities that were offered, develop relationships with their schoolmates, and be influenced by positive role models."*

Benefits to the individual agencies were also reported throughout the data. Direct benefits to both KidSport and PSOs were reported as well as overall benefits of collaborating with various community partners.

**Collaboration**

The partnerships and connections created as a result of the summer camps were seen as a major benefit for all organizations/agencies involved. It was reported that each organization/agency has something special to offer and if sustained these partnerships will benefit individual organizations long term. Through collaborating with numerous organizations/agencies we were able to achieve a goal that none of the partners would be able to achieve on their own.

*"These partnerships came together very smoothly as the main contacts from each of the partners were very supportive of what we were looking to do……especially the school administration for supporting the program at their school and the PSOs for donating their time."*

**Provincial Sport Organization Benefits**

The PSOs reported benefits in that they were able to introduce their sport to a new demographic. As a result, there was potential to increase their registration numbers. In addition to this the PSOs viewed this opportunity as a good learning experience for their coaches.

*"We are hoping that the camp will motivate more kids to get involved in our sport. Edmonton has some very good programs so we hope that some of the kids will utilize them. It was also a very good learning experience for our instructors as one of our instructors only recently certified as an instructor and the KidSport camps were a very good environment for them to learn."*

**KidSport Benefits**

Benefits directly affecting KidSport were also reported. The camps were seen as a new strategy to extend both reach and exposure of KidSport. In offering programs directly in the schools an increased awareness by both school staff and the families occurred. KidSport was also able to promote its mission to existing and potential partners and funders. Overall, because of the exposure from camps a better understanding and a raised awareness of the KidSport mission has been reported.

*"I gained a better understanding of KidSport and developed relationships with the staff that will be beneficial as the school works to get our students more active."*

# b) Strengths

Strengths for the purposes of this evaluation included anything that was seen to increase the success of the program. Strengths that were reported included partnerships, staff and program specifics.

**Collaboration**

A major strength of the program was reported to be the cooperation between all partners involved. Each partner provided something unique and without each organization/agency the camps would not have been the success that they were. The schools and the PSOs were key partners in making this camp a success. Without the support of the schools and PSOs the program would have been difficult as the funding wasn't available to rent facilities or pay coaches. Community organizations also played an important role in the success of the program providing various items including food, prizes, t-shirts, and recreation resources. Collaboration and cooperation was a major strength of the program.

*"I think it is important for all community members to take a roll in ensuring that programs such as these run smoothly for children. I was very impressed with the support from the school staff and the provincial sport organizations."*

**KidSport Staff**

It was reported that the KidSport staff made program delivery easy from both a school perspective and a Provincial Sport Organization perspective. The staff were described as supportive and well organized with strong project leadership. Both the schools and the PSOs also felt that requiring minimal resources from them and remaining flexible allowed for easier implementation and delivery of the program.

*"I appreciated that the program required minimal resources from the schools in terms of equipment, facilities, and staff, as I think this enables the program to be more easily implemented. The KidSport staff were also well organized, flexible and were very pleasant to work with."*

**Provincial Sport Organizations**

The PSOs were reported to be a major strength of the program. Coaches, from a variety of sports, were able to use their skills and provide children with an opportunity they may otherwise not get. In addition to introducing them to a variety of new sports, having certified coaches was viewed as being safer than if staff facilitated the sport sessions.

*"A major strength of the program was having Provincial Sport Organizations run each session. They received quality instruction and the kids were exposed to a variety of different sports as well as a lot of positive role models. I don't think the camps would have been as successful if the activities were run by staff."*

**Program Specifics**

Program specifics reported include the location of camps as well as the camps being offered at no cost to the participants. Running the camps in low-income neighbourhoods, where children are not readily receiving the benefits of sport and physical activity, was reported as a major strength. In accessing these neighbourhoods KidSport was able to reach children that would not normally get the chance to participate in similar programs. Using school sites that the children and the families were already familiar and comfortable with was also a strength of the program. The location of the programs was reported to have increased registration numbers. Offering the program at their school also reduced transportation issues for parents. Providing the program at no cost was also seen as strength given the neighbourhoods where the camps were being delivered.

*"Holding the camps at the schools that the kids attended prior to summer also helped the kids feel comfortable coming to camp because they were familiar with the facility and already knew many of the other campers who attended. It kept the camp close enough that the kids could attend camp without running into transportation difficulties or demanding extra time from the kids' parents to find a new location to bring the kids."*

## c) Weaknesses

For the purposes of this evaluation weaknesses were defined as anything that was viewed to limit or reduce the quality of the program. The themes reported in weaknesses include timelines, staff, other programs and food.

**Timelines**

Timelines were reported to be a weakness due to the short planning period that was available prior to the beginning of camps. Because funding wasn't secured until shortly before the program began there wasn't sufficient time to plan or promote the program which directly affected the registration numbers. Job descriptions for camp staff could also not be posted until late allowing little time for recruitment. As a result the candidates may not have been well suited for the position.

*"There was not much time to plan for this and kudos to those that quickly pulled it together, somehow the money for the coordinators worked out too at the last minute. There was not enough time for marketing so more spots might have been filled."*

**Staff**

The weaknesses reported regarding staff were based on the lack of staff available for specific jobs within the schools, the experience of the staff, as well as staff being hired by different agencies.

It was reported that there was not enough support in the schools to ensure registration and work with the families prior to camp. It was also reported that there was no follow-up process to ensure families were aware of the potential for KidSport funding after the completion of the camps. This was viewed as a staffing problem and it was reported that because of this camp registration numbers and the number of kids applying for KidSport funding after the completion of the program were less.

*"By having a direct contact within the schools the schools can become more involved in recruitment. Working directly with the students and families a staff member could ensure both participation in the summer camps as well as provide resources for other funding opportunities."*

Weaknesses reported in regards to staffing were also due to hiring staff late. Because of this staff members that were hired didn't have much experience with kids which proved to be a huge limitation when delivering the program. Staff members' conflicting views about how the program should run was also reported as a limitation in delivering the program. Staff were hired and paid by two separate agencies with different expectations creating miscommunication and confusion.

*"Having the project coordinator report to KidSport and the STEP students reporting to EPSB was sometimes confusing for the staff as they were unsure where to take their direction from."*

**Other Programs**

Programs that were being run at the same time and location were reported to reduce the quality of programming. During these instances there was often confusion, interruptions and rule differences making it difficult for both KidSport staff as well as staff from other programs. Other programs also reported concerns about KidSport camps potentially taking away from their programs.

*"Specific examples of weaknesses during the camp were that another camp was being run at the same location at the same time. This created confusion for the*

*kids as they did not know which camp they were to attend. It also caused issues with the two camps interrupting each other."*

**Food**

Although most food was donated by Edmonton's Food Bank there was often difficulty ensuring that all snacks were consistent with the Alberta Nutrition Guidelines. The lack of fresh fruit and vegetables available from the Food Bank was not consistent each week and was determined by whether or not they had received any fresh produce. Other snacks donated included yogurts and juices and were, however, gratefully received. KidSport purchased fresh produce each week to add to the Food Bank donation, but due to the limited funds available it was often not sufficient enough to ensure the nutritional quality of the snacks every day.

*"Since the program is promoting physical activity to students, I believe that a complementary focus on healthy eating and good nutrition for physical activity (fuelling the body) should be incorporated."*

## d) Challenges

Challenges for the purpose of this evaluation are defined as abilities or resources that made implementation or delivery difficult for staff and community partners. The two challenges that were reported were related to registration and the facilities.

**Registration**

Registration was reported as a challenge in that filling the camps was difficult. Despite three phases of recruitment, spots were still available each week. Potential reasons given for this were that this was the first year that program was offered and families were not familiar with the KidSport name. Another challenge that was reported was once kids had registered it was difficult to ensure that they came to the program. Language barriers were reported to often be the case as parents weren't aware of when the camps began.

*"Another challenge was trying to fill the camps. Because it was the first time the camp was offered I think that some parents were hesitant to send their kids to the camp. I also think that the language barrier for some of the parents made filling out the permission form for their child difficult."*

**Facilities**

In regards to the school facilities one challenge that both the PSOs as well as the KidSport camp staff reported was the size of the gyms. Often due to the number of coaches, participants and equipment the size of the gyms was too small. The size of the gyms also varied each week which was reported to be a challenge as activities were constantly having to be modified.

*"If we had a large gym for all sessions it would have been easier. The one week we had a very small gym, which made it much harder for our instructors to teach."*

## e) Successes

Successes for the purpose of this evaluation are defined as favourable outcomes. The two successes reported were related to the shift in the KidSport Model and the goals of the program.

**KidSport Model**

The shift in the KidSport model was reported as a major success. The camps were viewed as a new strategy for KidSport. Moving away from individual funding and alternatively providing a sports program KidSport was able to reach more children in need of sporting opportunities. This shift in the model allowed KidSport to become aware of the need to develop partnerships and connect with new contacts allowing them to move toward a referral system.

*"This was a major shift in funding one child in one program, KidSport shifted to providing a program and allowing as many kids as possible to attend. Children were recommended by the schools whereas in the past families had to provide documentation on income levels and need."*

**Goals**

The goal of the program as reported by respondents was to provide no-cost sporting opportunities to children living in low-income areas of Edmonton, giving all participants the opportunity to experience the benefits of sports. It was reported that the goals of the program were met and expectations exceeded. This pilot project was described as a great success with huge potential for growth and improvement.

*"I think the goals were met with the students who participated. In the future, hopefully more students will be reached."*

# 7. Participant Surveys

Participants of the program also filled out a survey (see Appendix 2) at the end of each week. Questions in the survey examined what they felt they had learned during the program, what they liked and did not like about the program, and how they felt participating in the program. Each question was answered on a scale of 1 to 4 (4 indicating *yes, definitely*, 3 indicating *quite a lot*, 2 indicating *a little* and 1 indicating *not at all*). The numerical values from each week were averaged providing a score for each question.

The survey results indicate the average response for each question after the completion of each week.. Each response is scored out of 4. Items with values between 3.00 and 4.00 ranged from *Quite a lot* to *Yes, definitely* and were considered to be high. Scores in this range confirmed the results above indicating

that the camp was successful for that particular measure. Responses below 3.00 have been identified in bold (see Table 2) and are discussed in detail below.

**Table 2. Average Results from The KidSport Participant Sport Camp Survey**

| Question | Average Week 1 | Average Week 2 | Average Week 3 | Average Week 4 | Average All weeks |
|---|---|---|---|---|---|
| 1. During this camp I tried doing new things | 3.71 | 3.94 | 3.57 | 3.56 | 3.70 |
| 2. During this camp I have done things I don't get to do anywhere else. | 3.43 | 3.17 | ***2.65** | 3.38 | 3.16 |
| 3. During this camp I learned about different sports I didn't know about | ***2.07** | 3.33 | ***2.35** | 3.69 | ***2.86** |
| 4. I put all my energy in the activities. | 3.64 | 3.72 | 3.59 | 3.81 | 3.69 |
| 5. I learned to push myself in the activities | 3.71 | 3.78 | 3.41 | 3.38 | 3.57 |
| 6. I made new friends during the camp | 3.64 | 3.56 | 3.59 | 3.63 | 3.61 |
| 7. I learned more about sports offered in my community | 3.43 | 3.44 | 3.18 | 3.69 | 3.44 |
| 8. I learned more about sports offered in Edmonton | 3.21 | 3.67 | 3.47 | 3.50 | 3.46 |
| 9. I was comfortable participating in each sport. | 3.71 | 3.78 | 3.65 | 3.69 | 3.71 |
| 10. I felt included by the group in each activity | 3.56 | 3.72 | 3.65 | 3.61 | 3.64 |
| 11. I learned from the coaches | 4.00 | 3.94 | 3.76 | 3.81 | 3.88 |
| 12. The coaches made the activities exciting | 3.86 | 4.00 | 3.76 | 3.63 | 3.81 |
| 13. I felt safe during the camp | 3.57 | 3.83 | 3.82 | 3.81 | 3.76 |
| 14. I had fun during the camp | 4.00 | 4.00 | 3.82 | 3.94 | 3.94 |
| 15. I would come back next year | 3.64 | 4.00 | 3.88 | 3.75 | 3.82 |

The responses of measure 2 *(During this camp I have done things I don't get to do anywhere else)* was comparatively low for the third week of camps (2.65) in relation to other weeks. The reason for this could be due to the PSO schedule for that particular week. Fewer PSOs participated during this week, compared to the other weeks, and many of the activities that were offered during this week were sports that are traditionally played in school. As a result of both the schedule and the types of sports that were offered many of the participants may have answered lower on this question than those participating in the other weeks. This could also explain why during the same week participants answered lower (2.35) for measure 3 *(During this camp I learned about different sports I didn't know about)*.

The responses to measure 3 *(During this camp I learned about different sports I didn't know about)* were also low in the first week of camp (2.07). Alternatively the responses to measure 2 (*During this camp I have done things I don't get to do anywhere else)* for the same week were considerably higher. This could be due to the fact that although students are participating in activities they don't normally get a chance to do, the students are still familiar with the activities.

# 8. Recommendations for Change

The above results allow for some insight into what needs to be done in order to sustain the camps over the longer term and improve them in ways that benefit both the participants and partners. The major recommendations for change include: changes to timelines, registration, staff, partnerships, research, and activities. Based on the above results eight recommendations for change are listed below.

1. Ensure that funding is in place earlier. This will allow for better promotion of the program, increased time and resources for recruiting, adequate time to hire qualified staff as well as more time to develop relationships with both new and old partners.

2. Have all paid staff from one organization. Having staff hired from different organizations created a difference in views on how the program should operate. By having all staff reporting to one agency it will limit the confusion and conflicting views as all staff will know where to take their direction from.

3. Hire a full time staff member. The role of this staff member will be to connect families to our program as well as other sporting opportunities. This will provide a long term support for families allowing their children to sustain sport involvement.

4. Continue to work with the service delivery model providing programs instead of just individual funding. KidSport should aim to clearly develop it's vision for service delivery, providing programs at no cost and continuing to move toward a

referral system. This could also allow for this model to be recreated in different communities.

5. Ensure the number of participants enrolled in each program is acceptable for the facilities available and the coaching staff. If continuing to work in elementary gyms and with 1 or 2 coaches the maximum number of participants each week should be 20.

6. Ensure that discussions with all partners are occurring well ahead of the start of the camps. This will ensure that all partners are aware of the direction of the camps and what they are capable of contributing. It was difficult to provide a clear direction to partners this year as the program was new and there was limited time to develop relationships. With year one complete it will be easier to provide direction when meeting with partners.

7. Ensure that data is collected and research done. Program delivery, although beneficial, provides temporary results. KidSport needs follow-up, tracking and evaluation with it's programs. The resources to do this in the past have been limited.

8. Ensure that a variety of activities are being offered each week. This can be accomplished by allotting only one two-hour session per week to each provincial sport organization. In doing so each week will experience the same number of sports providing them with a greater variety of activities.

# 9. Conclusion

The above results provide sufficient evidence supporting the success of the KidSport Summer Sports Camps. The camps were reported to exceed the expectations for a pilot project. KidSport was able to modify it's model providing sporting opportunities to children in low-income areas. The collaboration that occurred is an excellent example of what is possible when organizations/agencies work together toward a common goal.

Despite the success of the program, areas for improvement and recommendations for change have been noted. It is important that these issues are not overlooked as addressing them will allow for expansion, change and improvement of the KidSport Summer Sport Camps model. By clearly articulating it's model, sustaining old partnerships and creating new ones, KidSport will increase it's reach and exposure and continue to provide sporting opportunities "so all kids can play."

*"I want to say good job with everything cause I have to say that all of us had fun with this and that this is the best camp I've ever been at." (Girl, age 13)*

# KidSport Evaluation Appendix 1 – Interview Guide

## Program

1. Can you please describe your involvement in the first year of the KidSport™ Summer Sport Camp project?

2. When you first became aware of the pilot project involving the partnerships between KidSport™, Edmonton Public School Board, University of Alberta, and the City of Edmonton, what excited you most? That is, what did you see as the possibilities?

3. What did you feel the strengths of the program were?

4. Do you think there were any weaknesses of the program? Please explain and do not hold back.

5. What benefits do you feel the kids received from being involved in the program?

6. Were there any benefits to you?

## Program Delivery

**1.** How would you describe the program goals of the KidSport Summer Sport Camp pilot project?

   a) How does it fit with the goals of your agency?

   b) And from your knowledge of the pilot project to date, how successful has the KidSport™ Summer Sport Camp pilot project been?

2. Would you like to see any changes in regards to program delivery? Can you provide examples?

## Opportunities and Challenges

1. How would you describe the outcomes of the KidSport Summer Sport Camp pilot project?

2. Thinking back to that when you first became involved, what concerned you the most? That is, what did you see as the greatest challenge(s) facing the KidSport™ Summer Sport Camps?

3. What was the biggest challenge, for you, with the implementation of this program?

4. In your opinion how could the implementation of these sports programs be made easier?

5. In your opinion what challenges arise in regard to program participation?

6. In your opinion what roles should schools, community organizations, universities and families play in such programs?

**Looking to the Future**

1. Since the start of the project, are you aware of any changes to the KidSport™ model as a result of being involved in the project? That is, changes in the approach taken by KidSport™ to providing sport opportunities for children and youth in families in the served areas?

2. Looking ahead, what changes if any, are needed in the approaches taken by KidSport for the Summer Camp project to be successful over the longer term?

3. What changes if any, are needed in the approaches taken by all partners for the pilot to be successful over the longer term?

4. Knowing what you now know, are you still excited about the possibilities for success?

5. What final advice, if any, would you like to give to the KidSport™ and other partners involved?

**KidSport Evaluation Appendix 2 – Participant Survey**

| | | Yes, definitely | Quite a lot | A little | Not at all |
|---|---|---|---|---|---|
| 16. During this camp I tried doing new things | | 4 | 3 | 2 | 1 |
| 17. During this camp I have done things I don't get to do anywhere else. | | 4 | 3 | 2 | 1 |
| 18. During this camp I learned about different sports I didn't know about | | 4 | 3 | 2 | 1 |
| 19. I put all my energy in the activities. | | 4 | 3 | 2 | 1 |
| 20. I learned to push myself in the activities | | 4 | 3 | 2 | 1 |
| 21. I made new friends during the camp | | 4 | 3 | 2 | 1 |
| 22. I learned more about sports offered in my community | | 4 | 3 | 2 | 1 |
| 23. I learned more about sports offered in Edmonton | | 4 | 3 | 2 | 1 |
| 24. I was comfortable participating in each sport. | | 4 | 3 | 2 | 1 |
| 25. I felt included by the group in each activity | | 4 | 3 | 2 | 1 |
| 26. I learned from the coaches | | 4 | 3 | 2 | 1 |
| 27. The coaches made the activities exciting | | 4 | 3 | 2 | 1 |
| 28. I felt safe during the camp | | 4 | 3 | 2 | 1 |
| 29. I had fun during the camp | | 4 | 3 | 2 | 1 |
| 30. I would come back next year | | 4 | 3 | 2 | 1 |