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Extracurricular Activity Participation in Early Adolescence: Relationships with Social  
Determinants of Health and Health Outcomes, and Facilitators and Barriers to  
Participation

by



Tanis Nicole Outhet Hampe

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

in

Medical Sciences – Public Health Sciences

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## ABSTRACT

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Extracurricular activities are an important part of growing up. They are enjoyed by children, and researchers have reported beneficial effects of activity involvement.

Secondary analysis of data from the National Longitudinal Survey of Children and Youth showed that, for children aged 10-11, participation in organized sports, arts, music and drama activities, and clubs ranged from 23% - 72% and differed by gender and activity type. Social determinants of health explained over 30% of the variance in emotional well-being and only 3% of the variance in physical health. The role of activity participation in the relationship between social determinants of health and health outcomes is presented for mediator, moderator, and independent-effects models (analyzed by gender and activity type).

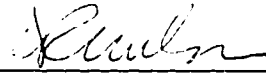
Focus group interviews with grade 6 and 8 students (age 11-14) explored reasons for participation or nonparticipation. Ten themes emerged from the qualitative analysis and will be useful for extracurricular activity program planners.



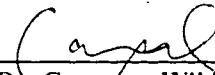
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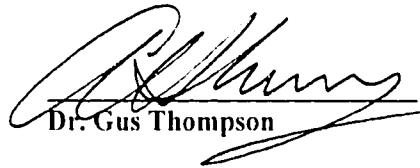
The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *Extracurricular Activity Participation in Early Adolescence: Relationships with Social Determinants of Health and Health Outcomes, and Facilitators and Barriers to Participation* submitted by Tanis Nicole Outhet Hampe in partial fulfillment of the requirements for the degree of Master of Science in Medical Sciences – Public Health Sciences.



**Dr. Doug Wilson**



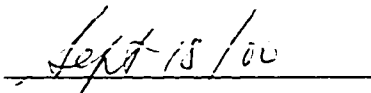
**Dr. Cameron Wild**



**Dr. Gus Thompson**



**Dr. John Spence**



I would like to dedicate this work  
To Keith.

Thank you for your love, support, patience and understanding.

And to my parents,  
John and Marilyn Outhet

Thank you for opening so many doors for me.

## ACKNOWLEDGEMENT

---

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Statistics Canada and Human Resources Development Canada have created a valuable database in the National Longitudinal Survey of Children and Youth. I would like to thank them for allowing researchers to access and explore the data.

Thank you to Laurie McCaffrey for facilitating the focus group discussions. Your openness and enthusiasm with the students enriched this study and made the research an enjoyable experience for the participants.

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## LIST OF ABBREVIATIONS

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Arts	Arts, drama or music groups, clubs or lessons outside of class
CGame	Computer or video games
CIAR	Canadian Institute for Advanced Research
Clubs	Clubs or groups such as Guide or Scouts, 4-H club, community, church or other religious groups
DOH	Social determinants of health
NLSCY	National Longitudinal Survey of Children and Youth
NoCoach	Sports or physical activities without a coach or instructor (biking, skateboarding, etc.)
PMK	Person most knowledgeable
SES	Socioeconomic status
SWC	Sports with a coach or an instructor, other than in gym class (school teams, swimming lessons, etc.)
WHO	World Health Organization

## CHAPTER 1

### INTRODUCTION

---

Canadian youth participate in many activities in their leisure time, including athletics, watching TV, playing computer or video games, reading, playing musical instruments, involving themselves in after school clubs, or just hanging around with friends. Extracurricular activities are one of the ways that many students use their leisure time. Extracurricular activities are structured school- or community-based activities that occur outside of school hours and involve an adult. Examples of these activities are sports teams, music lessons, or clubs such as Girl Guides or Boy Scouts.

Is participation in extracurricular activities beneficial to students? Factors such as good academic performance, positive family and peer relationships, and healthy lifestyles have been linked to extracurricular activity participation. Activity involvement has been claimed to provide students with life skills such as discipline, time management and leadership, protect them from behavioural and emotional disorders, and instill them with self-confidence through their adolescent years and into later life. They provide socialization opportunities for students and are often the reason why youth stay in school (Hall, Hord, Rutherford, & Huling, 1984; Holland & Andre, 1987). Activity participation in childhood has beneficial effects later in life, as behaviours started at an early age carry over into adulthood. Extracurricular activity participation in youth can develop healthy physical activity patterns as well as interests in music, academic or leadership activities. Not only are activities important to students, but parents, school staff and community organizations also recognize their value and the impact that they can have on a student's life.

Much of the literature on this topic is based in the United States and focuses on older adolescents. There is a paucity of studies examining early adolescence, a time when children are making the transition from elementary to junior high school, and are starting to undergo physical, emotional and social changes. Coincidentally, this is a time when health risk behaviours such as smoking or alcohol use are initiated. Extracurricular activity participation has been negatively associated with health-risk behaviours in older adolescents (Escobedo, Marsuc, Holtzman, & Giovino, 1993; Gibbons, Wylie, Echterling, & French, 1986; Shilts, 1991; Thorlindsson & Vilhjalmsson, 1991), but what is happening at an earlier stage of development when these behaviours are commonly believed to originate? Whether or not

extracurricular activity participation in early adolescence affects physical health or emotional well-being has received relatively little attention from researchers.

Social determinants of health such as income level, supportive relationships with family members and friends, and a feeling of belonging and success in the school environment are pertinent to the health of early adolescents. The literature contains some information about the relationships between activity participation and these social factors, but the effect that activity participation has (if any) on the health of students once these factors are considered has not been studied.

If activity participation is as beneficial as believed, why have we not examined what facilitates activity involvement for students? What is motivating students to be involved, or stopping them from participating? Very few studies have examined reasons for participation or nonparticipation.

Based on the importance of extracurricular activity participation and the existing gaps in the literature, the present study was conducted in order to examine the role of extracurricular activities in the relationship between social determinants of health and the well-being of early adolescents, and to understand what factors affect their participation in these activities.

## CHAPTER 2

### LITERATURE REVIEW

---

#### Introduction

The literature review is organized into two major sections. First, population health determinants literature will be reviewed, including the presentation of a broad framework within which this study is structured. The focus is on social determinants of health relevant to youth. The second section examines extracurricular activity involvement, specifically definitions used in existing literature, participation levels, the importance of activities, and reasons for and barriers to activity involvement. Relationships between activity participation and social determinants of health are reviewed. Finally, relationships between activity involvement and health outcomes are discussed.

Following the section on extracurricular activity literature is an explanation of why early adolescents were selected as the focus for this project and a summary of limitations in the current body of literature. The chapter concludes with the presentation of the research questions.

#### Population Health Determinants

It is now widely accepted that factors beyond health services affect our health. The World Health Organization (WHO)'s definition of health ("a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity") suggests that health is more than a physical condition. In this sense, being healthy involves biological factors, one's lifestyle, and the context surrounding the individual (i.e., social and economic conditions and the physical environment where one lives and works).

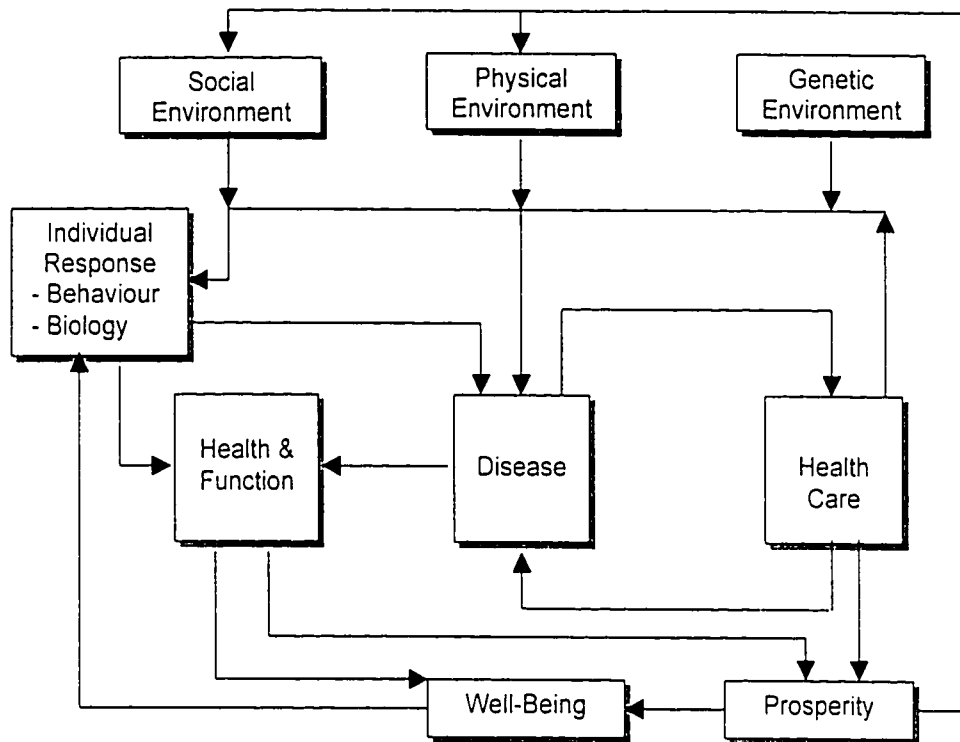
The concept of population health was derived from the work of the Canadian Institute for Advanced Research (CIAR). The Population Health Program of the CIAR was created in 1987, and has since developed a conceptual framework for population health. The Federal, Provincial and Territorial Advisory Committee on Population Health (1994) describes the approach as follows:

“A population health strategy focuses on factors that enhance the health and well-being of the overall population. It views health as an asset that is a resource for everyday living, not simply the absence of disease. Population health concerns itself with the living and working environments that affect people’s health, the conditions that enable and support people in making healthy choices, and the services that promote and maintain health.” (p. 9)

The population health approach has brought factors such as income or socioeconomic status (SES), age, gender, social support (i.e., family, friends, community), education and ethnicity into discussions about health and well-being (Evans, Barer & Marmor, 1994; Mustard & Frank, 1991). The CIAR has explored many of these determinants of health (see Federal, Provincial & Territorial Advisory Committee on Population Health, 1994; Mustard & Frank, 1991; Stoddart, 1996). The determinants of health are those factors in our personal, social and economic environments that underlie, mediate or influence the health of populations (Edwards, 1999). The National Forum on Health’s Determinants of Health Working Group (1997) stated in their final report that “we are now certain that there are social, economic and cultural determinants of health, just as genetics and health services are determinants” (p. 5). This more extensive view of the factors that contribute to a person’s health was outlined in Evans and Stoddart’s (1990) “Conceptual Framework for the Determinants of Health” (see Figure 1).

Figure 1

Conceptual Framework for the Determinants of Health



Source: R.G. Evans and G.L. Stoddart, 1990

An historical precedent for the Evans and Stoddart model was *A New Perspective on the Health of Canadians* (popularly known as the Lalonde Report) (Canada, 1974), which drew attention to factors beyond the health care system that could contribute to the improvement of human health. Lalonde presented four headings for categorizing determinants of health: lifestyles, environment, human biology, and health care organization. Evans and Stoddart's model is an extension of Lalonde's 'Four Field' framework. They make a distinction between disease (as recognized and treated by the health care system), health and function (as perceived and experienced by the individual), and well-being (as understood by the broad WHO definition of health). Evans and Stoddart also note the existence of a host response that includes lifestyle behaviours and human biology. The inclusion of this component in the model distinguishes between environmental factors (social, physical and genetic) and individual factors (host response). Their framework suggests that factors in the social, physical and genetic environments interact to condition individual responses, which can be unconscious (e.g., immune system) or overt (e.g., smoking or exercise). Together, they influence the

individual's ability to withstand disease, affect his or her perception of health, and determine an individual's overall sense of well-being.

Stoddart (1996) points out that "there is no single most important factor responsible for the health of populations" (p. 12). Rather, it is the interaction of determinants that is crucial (Edwards, 1999; Stoddart, 1996). As well, determinants have varied impact on individuals based on their life stage. For example, the school environment will affect the health of children, the work environment will impact the health of young adults and the middle aged, and the home environment will affect the health of the elderly.

### Social Determinants of Health

Social factors account for the majority of variation in most studies of child and adult health in the United States (Schor & Menaghan, 1995). In their report on trends in the health of Canadian youth, Health Canada (1999) illustrated the importance of positive relationships in the home and school environments and with peer groups in determining both the physical and mental health of youth. Social factors that affect health outcomes in children include household income level (or socioeconomic status), social support (i.e., friends and family), school-related variables such as achievement and satisfaction (or sense of belonging), and gender.

### Income

Income or social status is considered extremely important and is the most studied of the determinants of health (Evans & Stoddart, 1990; Federal, Provincial & Territorial Advisory Committee on Population Health, 1996).

Poverty has devastating effects on the health of children and youth (National Forum on Health, 1997). Studies have demonstrated that health and socioeconomic status (SES) are very closely linked (Evans et al., 1994; National Forum on Health, 1997) because the resource position of a person (i.e., their material means) affects their health, and inadequate resources can be detrimental to a person's well-being. Specifically, poverty is associated with poor health outcomes (Miller, 1995).

Montgomery, Kiely, and Pappas (1996) looked at the effects of poverty, family structure and race on child health. They found that poverty had the strongest effect on child health, independent of the other two factors. For Ontario students, higher income was related to a higher self-rating of health (Vingilis, Wade & Adlaf, 1998). Finally, Flisher and



colleagues (Flisher et al., 1997) found that the unmet need for mental health services in children and adolescents was significantly associated with indicators of economic disadvantage.

Evans and Stoddart (1990) discussed the importance of prosperity to health. However, Poland, Coburn, Robertson, & Eakin (1998) argued that it is income equity rather than wealth that improves the health of populations. They believe that Evans and Stoddart oversimplified the link between wealth and health without giving adequate attention to the social forces that produce and affect the distribution of poverty (and result in inequality).

Hertzman, Frank and Evans (1994) summarized the general findings in this area by saying "higher socioeconomic status, however measured, seems to be associated with better health, however measured" (p. 79).

### Social Support

The Determinants of Health Working Group of the National Forum on Health (1997) stated that "key factors in youth health include a caring family, other supportive people outside the family unit, personal skills and a sense of purpose and meaning" (p. 29). If social support mechanisms can provide children with regular, positive experiences and stable, socially rewarded roles, children are likely to derive a clear and positive sense of personal identity and self-efficacy from them (Schor & Menaghan, 1995).

### Family.

Relationships within the family have an impact on a child's health and well-being (Resnick, Harris, & Blum, 1993; Rutter, Cox, Tupling, Berger, & Yule, 1975). Besides peers, the family is the microsystem that is of particular importance in an adolescent's social world. A study looking at correlates of physical and emotional health among Native American adolescents found that the connection to the family is a consistently powerful factor in their lives (Cummins, Ireland, Resnick, & Blum, 1999). As well, good child-parent relations were associated with higher self-ratings of health by Ontario students (Vingilis et al., 1998).

One note is that the quality of the support given by the family is much more critical than the family structure (Schor & Menaghan, 1995). However, Montgomery et al. (1996) did find that children in families headed by single mothers were much more likely to be in poor or fair health than children in two-parent families.

### Friends/Peers.

Many attitudes and behaviours are formed in early adolescence, as peers start to become a more dominant influence in a child's life (Jessor & Jessor, 1977; Perry, Kelder, & Komro, 1993). Therefore, when looking at social support in this age group it is important to examine a child's relationship with friends as well as family. When families fail to provide children with the support they require, they tend to seek alternative sources of cognitive and social stimulation and "often adopt social norms of subgroups such as cliques, gangs or cults whose beliefs and behaviours can jeopardize the child's health and well-being" (Schor & Menaghan, 1995, p.36). House, Landis, and Umberson (1988) found strong associations between mortality and social support networks; in other words, "friends and family keep you alive" (p.22).

### School Environment

The school is an environment in which children and youth spend a great deal of their developing years. As such, it plays an important role in the social, mental and physical health of youth. The creation of the WHO Global School Health Initiative, recognition from the National Forum on Health and the attention given to health promoting schools by Canadian and American governments is evidence of the importance of the school environment to child and youth health. Bennett and Offord (1996) stated that "school attendance is a social policy that affects every child and child's family" (p. 80).

School achievement is related to other aspects of satisfaction with school (e.g., liking school, good relationships with teachers) and is also associated with many positive factors such as general health and well-being, confidence, an absence of stress, and success in school (King, Word, Tudor-Smith, & Harel, 1996). For all gender and age groups, a general feeling of well-being or happiness was associated with school satisfaction (King et al., 1996). In the students' minds as well, health was related to academic achievement – doing well in school was positively linked to feeling healthy (King et al., 1996). Bennett and Offord (1996) found that "school problems, failure and dropping out were associated with maladaptive behaviours, emotional and social functioning and psychiatric disorders such as conduct disorder and substance use." (p. 80).

Vingilis et al. (1998) summarized studies where school achievement and competencies were positively associated with self-rated physical health and negatively related to health risk behaviours such as smoking and drug use.

Kids Count reports in the United States examine statewide traits in the well-being of children. Some of the indicators of child well-being are related to education (specifically reading and math achievement/scores, high school dropout rate, graduation rate, or school enrollment) (e.g., Washington University (Seattle Institute for Public Policy and Management), Children First for Oregon, Advocates for Children and Youth Baltimore, Rhode Island Kids Count, Kansas Action for Children Inc.).

### Gender

Gender differences in morbidity and mortality have prompted discussions about the role of gender as a determinant of health. There are different socialization processes for boys and for girls that are associated with the social roles, values and expectations associated with each gender (Corin, 1995, p. 277). As well, each of the determinants of health can themselves influence the lives of women differently than men. Gender can be considered both a genetic and a social determinant of health in Evans and Stoddart's model.

### Extracurricular Activity Involvement

The factor of particular interest in this study is extracurricular activity participation. In Evans and Stoddart's determinants of health model, activity participation would be classified as an individual behaviour that could be affected by social factors and could contribute to overall well-being.

The importance of extracurricular activities has been discussed by researchers, community organizations, school administrators, teachers, parents, and children. They question whether these activities are beneficial to a child's personal, social and physical growth or whether they have no effect, or even a negative impact on a child's development.

The earliest relevant literature on extracurricular activities was written by James Coleman (1961). He investigated adolescent values and behaviors in American high schools and theorized that adolescents participate in social activities and athletics to enhance their peer status. Those students who are involved are most likely to be members of the "leading crowd" and they tend to include those in the middle-class who have aspirations to attend college. Coleman also believed that these activities were incompatible with the academic orientation of schools. He presented a zero-sum argument, in which adolescent society is viewed as a finite system wherein academic, athletic, and social values are in competition.

Many of the researchers in the 1960's, 1970's, and even into the 1980's challenged Coleman's work. They found that extracurricular activity participation was not necessarily detrimental to academic achievement or educational aspirations (Feltz & Weiss, 1984; Hanks & Eckland, 1976; Otto & Alwin, 1977; Snyder, 1969), and may even have a positive effect (Spady, 1970; Spreitzer & Pugh, 1973). Many believe that involvement in athletics and other extracurricular activities can develop or enhance skills such as leadership, hard work, mastery of the environment, persistence and competitiveness, that are beneficial in the academic arena as well (Cooper, 1969; Haensly, Lupkowski & Edlind, 1986; Hanks & Eckland, 1976; Holland & Andre, 1987; Hultsman, 1992).

### Definitions of Extracurricular Activities

Extracurricular activities have been defined in research in a variety of ways. Often, the student is forced to define the variable him or herself when the researcher asks "are you involved in any extracurricular activity?" (e.g., Burbach, 1972; Jenkins, 1996; Shilts, 1991). More frequently, researchers will list categories under which the student will record his or her involvement. The categories are defined by the author and have typically been extremely broad and incomplete. For example, Feltz and Weiss (1984), Landers and Landers (1978), and Spady (1970) measured a student's participation in "athletics only", "service activities only", "both" or "neither". They did not include social activities such as activity clubs or cheerleading (which was not considered an athletic activity), or participation in the arts (music, drama, fine arts). There is also a belief that different activities within such broad categories as "athletics" or "service activities" attract different students and have varying effects on those who participate (Hanks & Eckland, 1976). Offord, Lipman, and Duku (1998) noted that a limitation in their research on activity participation levels was the lack of specificity of activities (in sports, arts and community programs) in the research.

For the purpose of this study, extracurricular activities were defined as *structured school- or community-based activities occurring outside of school hours (including weekends) that involve an adult and in which children voluntarily participate.*

### Participation in Extracurricular Activities

Reports of the level of participation in extracurricular activities by school aged children and adolescents have covered a wide range. A study of Alberta high school students found that 53% of all students reported participating in school-based sports (Poon & Spence,

1997). The 1997 U.S. Youth Risk Behaviour Surveillance study (Kann, Kinchen, Willimans, Ross, Lowry, Hill, Grunbaum, Blumson, Collins, & Kolbe, 1997) reported a similar figure (49.5%). Almost 3 in 4 American high school students described themselves as “active” or “very active” in extracurricular programs in Gholson’s study (1979).

Using data from the National Longitudinal Survey of Children and Youth (NLSCY), Offord et al. (1998) reported that an astoundingly high 63% of children aged 9-11 “*almost never*” participated in arts and community programs. The non-involvement rate was lower in supervised sports (44%), and even lower in unsupervised sports (15%). Similarly, Mahoney and Cairns (1997) noted a “striking finding” was that an average of 59% of girls and 68% of boys (grades 7-12) participated in one or no school activities.

Part of the reason for the large discrepancy in reported involvement may be the age groups studied. Both Offord et al. (1998) and Mahoney and Cairns (1997) found low participation rates in younger children. Higher rates were reported in studies with high school students. Perhaps this is due to the increased opportunity for involvement at the high school level.

#### Importance of Extracurricular Activities

Extracurricular activities are considered very important to students (Eder & Kinney, 1995). The extracurricular program is well known as the reason that many students stay in school (Hall et al., 1984). When activities are successful, they can outperform the traditional curriculum in terms of motivating students and teaching life skills (Vornberg, 1980). They can help students to acquire new skills, develop or strengthen attitudes (e.g., discipline, motivation), or improve socialization (Holland & Andre, 1987). Extracurricular activities have “long been identified as being central to adolescents’ social concerns” (Eder & Kinney, 1999, p. 298). Benefits of extracurricular activities reported by students include: meeting other people, making school more enjoyable, increasing responsibility, developing leadership abilities, developing self-confidence, preparing for a career, developing a greater involvement in school, enhancing time management, and maintaining physical condition or health (Haensly et al., 1986). In the same study, very few students reported that extracurricular activities were a hindrance, but the problems that they expressed were that involvement was too time consuming, competitions were exhausting, and it was difficult to make up work that was missed. When Snyder (1969) asked high school students what they would like to be remembered as, the majority of them selected “star athlete” (boys) or “leaders in activities”

(girls) over “brilliant student” or “most popular”. Students who were asked by Eitzen (1975) the one thing they would most like to be remembered as in school reported the athlete (56%) over the ladies man (24%) or the scholar (19%). Almost one third of 2500 American secondary school students surveyed considered activity programs to be more important than their coursework (Gholson, 1979). They considered participation in these activities to be the best way to establish status and acceptance among peers in their school. Finally, an article in the Toronto Sun (Davis, 1998) addressed the potential effects of cuts to the education budget. Many extracurricular activities were considered “in danger” because of diminishing funds and higher demand on teachers’ time. The reaction from one grade 12 student was: “if there isn’t any high school sports, I don’t know what I’ll do.” He stated that there would be many unhappy students with a lot of free time on their hands if extracurricular activities were cancelled.

Schools also recognize the value of extracurricular activity programs. They often play a comprehensive role and define their goals broadly, to include such ends as: citizenship and civic responsibility, competence in human and social relations, and self-realization and mental and physical health (Sizer, 1984). Of course, these are in addition to academic goals, which top the list. One West Virginia judge concluded that a “thorough and efficient system of education” should include “recreational pursuits” and “interests in all creative arts such as music, theatre, literature and the visual arts” (Sizer, 1984, p.78). Many schools have created web sites which contain detailed information promoting their extracurricular activity programs. Another benefit to schools is that through extracurricular activities, teachers have an opportunity for positive, informal interactions with children outside of the structured classroom environment and can therefore have a bigger impact on the child’s life and education (Thomas & Moran, 1991).

Activity participation in childhood and adolescence has shown effects on lifestyle and occupational choices later in life (Centers for Disease Control and Prevention, 1997; Barnekow-Bergkvist, Hedbeig, Janiert & Jansson, 1996; Dovey, Relder & Chalmers, 1998; Gibbons et al., 1997). Experimentation with activities during youth and early adolescence “helps to shape the behavior and attitudes that lead to more permanent patterns in later adolescence and adulthood” (Hultsman, 1993a, p. 151). The importance of activity involvement at this age is shown by Kelly (1974, cited in Hultsman, 1992), who reported that half of adults’ 10 most important recreation activities were begun in childhood. Finally, based on evidence from other studies, Otto (1982) stated that participation in extracurricular activities

contributed to “a number of important and desirable social and behavioral outcomes measured as late as fifteen years after high school” (p. 224). While the effect of activity participation was modest in magnitude, the breadth of the effect on later life outcomes was remarkable.

The literature reviewed above strongly suggests that extracurricular activities are positive experiences, contribute to a student’s development, and help schools to achieve some of their nonacademic goals. However, others, such as Coleman, view these activities with a skeptical eye and feel that they use time and energy that could better be spent in academic pursuits. As well, despite general support from students, parents and administrators (Gholson, 1979; Hall et al., 1984), when educational cutbacks are made, extracurricular activities are the first thing to be removed (Davis, 1998; McNeal, 1998; Swift, 1991)

Extracurricular activities do consume a significant amount of staff and student resources (time and attention) (Hall et al., 1984), but they offer a rich array of opportunities and experiences for students. They should be considered an “additional learning experience” (Otto, 1982), outside the context of the school classroom.

#### Reasons for Participation

There has been very little research on the reasons why adolescents participate in extracurricular activities. At one American high school, students considered the following reasons for participating in the extracurricular activity program to be “important” (Gholson, 1979):

- personal achievement (97%)
- fun and personal enjoyment (95%)
- outlet for individual needs and interests (95%)
- experiences not available in regular school program (92%)
- broaden personal and social contacts (91%)
- develop leadership activities (90%)
- earn letters, awards, and prizes (90%)

In Alberta, high school students were questioned about their reasons for participation in school-based sports (Alberta Schools’ Athletic Association, 1997). The top three reasons were:

- I enjoy athletics/sports (18%)
- To become more involved in physical activity (16%)
- Athletics/sports make me feel good about myself (14%)

### Barriers to Participation

A sparse body of leisure constraint research does exist. Hultsman (1992) found that early adolescents perceived barriers to participation in organized recreational activities to be parental influence (not to join), perceived inadequate skill level and a perceived lack of time (due to commitment to other activities). Hultsman (1993a) also noted that perceived constraints varied at different life stages. Adults tended to perceive family commitments, lack of a partner, work commitments, overcrowded facilities, and cost of equipment as constraints. Alternatively, early adolescents cited parental influence, lack of transportation, cost of activity, not liking the leader, meeting time and poor skills as reasons not to join an activity. Finally, Hultsman (1993b) wrote that males felt parents and peers played a major role in the decision not to join an activity, while females felt the activity leader was more of a constraint. Among all early adolescents, parental influence was apparent in the decision not to join activities, but this influence decreased as the students moved into late adolescence.

Quiroz, Gonzales, and Frank (1996) examined formal and informal constraints for extracurricular activity participation in high school students. Constraints included selection criteria (e.g., required GPAs, "tryouts", peer or teacher recruitment), school attendance, gender, popularity, grade level, skill level, and class schedule (i.e., sponsors schedule meetings in their free period when not all students are available). They conducted a network analysis to determine who was involved in activities. They arrived at six different subgroups based on interest (type of activity), ability, gender and ethnicity. Overall, they concluded that a small segment of the total student population was involved in activities. They were selected out through formal and informal mechanisms within the high school. Therefore, while some students are pulled into extracurricular activity participation, others are excluded.

McMeeking and Purkayastha (1995) examined the meaning of leisure and access to activities in students aged 13-16. They found that "leisure" primarily meant "hanging out" and socializing with friends, especially among the older age group. Common themes in their research were the adolescents' feelings that there was "nowhere to go, nothing to do", and their frustration with their lack of independent transportation (ideally, a car).

A more popular research topic than extracurricular activities in general is physical activity. Allison (1996) used data from the Ontario Health study to determine predictors of inactivity among young people aged 12 and over. People who were inactive were more likely



to be in one or more of the following groups: female, older, low-income, poor health status, and/or had few or no friends who participated in physical activities.

Kirshnit, Ham and Richards (1989) claim there are two major reasons that youth quit athletic activities:

- 1) they conflict with other, more preferable uses of leisure time;
- 2) the “negative and overly professionalized qualities of organized youth sports programs” (p. 602) (i.e., high pressure to perform, lack of success, lack of playing time, little skill improvement, or a dislike of the coach).

### Relationships Between Activity Participation and Other Variables

Activity participation in children and youth has been studied using many different variables. Mahoney and Cairns (1997) stated that extracurricular activities were expected to be related to a network of factors. Otto (1982) reported that overall, extracurricular activity participation had a modest magnitude of effect, but remarkable breadth of effect on later life outcomes. Important to this study were the relationships with social determinants of health and health outcomes relevant to early adolescents. Relationships in these areas are reviewed below.

### Relationships Between Activity Participation and Social Determinants of Health

In the early adolescent’s world, important social determinants of health are household income/SES, relationships with friends and family, and a feeling of success and/or belonging in the school environment.

### Income and Extracurricular Activity Participation

The research on the relationship between socioeconomic status and extracurricular activity participation has produced mixed results. Much of the discrepancy in findings can be attributed to differing definitions or categorizations of extracurricular activities.

Offord et al. (1998) hypothesized that income would be a strong predictor of participation in Canadian children. They found that the odds of a child from a low income family “almost never” having participated in organized sports (in the last 12 months) was 3.94 times that of a child from a non-poor family. As well, poor children were 1.97 times more likely to have “almost never” participated in arts activities. Ross and Roberts (1999) reported that about 75% of children in low income families rarely participated in organized sports.

compared to 25% of high income children. Socioeconomic status has been found to be a determinant of physical activity participation in Albertans (Spence & Poon, 1997, cited in Poon & Spence, 1997). Mahoney and Cairns (1997) noted that extracurricular activity participation was closely associated with socioeconomic status, with the exception of athletics.

Alternatively, LeGault (1985) found no significant relationship between socioeconomic status and extracurricular activity participation. Parents in low and middle income families in Offord, Last, & Barette's (1985) study reported no difference in participation rates. Middle class male high school students were no less or only slightly less likely than lower class males to participate in sports (Hanks & Eckland, 1976). Overman and Prakasa Rao (1981) found that socioeconomic status had no influence on sport involvement or motivations for high school seniors. Parental socioeconomic status was also not related to athletic participation in Spreitzer and Pugh's study (1973). Rae-Grant, Thomas, Offord & Boyle (1989) found that parents from low and middle income families reported no differences in children's participation (in athletic activities).

In their review on extracurricular activities in secondary schools, Holland and Andre (1997) reported that the reasons for the discrepancies between studies with regard to socioeconomic status are not clear.

Often, extracurricular activities cost money and therefore socioeconomic status may be a determining factor in participation. As well, lower income children may work or have more responsibilities at home, which prevents them from getting involved due to time constraints. They may also be part of an after school care program which takes away from their opportunity to participate in school-based activities. Posner and Vandell (1994) stated that unless they were participating in an after school program which involved activities, "enrichment lessons (i.e., music, dance) were not part of the lives of low income kids, nor did they engage in team sports to any significant extent" (p. 454). Finally, working parents may not have the time or resources to support the child's involvement (e.g., providing transportation, watching performances).

## Social Support and Extracurricular Activity Participation

### Family.

Studies have found a relationship between family structure and extracurricular activity participation, but it has generally been a weak one (LeGault, 1985; Offord et al., 1998). Some researchers claim that children from two parent households are more likely to participate in extracurricular activities (LeGault, 1985). Others, including an analysis of data from the Canadian National Longitudinal Survey of Children and Youth (Offord et al., 1998) have found few noticeable differences between children with one parent and other children with respect to participation in activities. Relationships within the family have an impact on a child's health and well-being. Resnick et al. (1993) claim that family relations affect adolescent health more than actual family composition.

The family environment has a large influence on children. Besides peers, the family is the microsystem that is of particular importance in an adolescent's social world (Perry et al., 1993). Parents have considerable influence over the child's activity involvement (Hultsman, 1992, 1993a; Overman & Prakasa Rao, 1981). Generally, students whose parents are involved in school-related activities do better in school and are more active in extracurricular activities (Crain et al., 1982; Marsh, 1992; Overman & Prakasa Rao, 1981). Overman and Prakasa Rao (1981) found that parental influence and personal attributes of students accounted for more of the variance in sport involvement and motivations toward sport and recreation than other traits of the family as a socializing institution. Gregson and Colley (1986) determined that parents may serve as role models for sport participation in females. Parents themselves feel that extracurricular activities are important for children (Gholson, 1979).

Parental involvement in physical activity instruction and extracurricular and community physical activity programs is one recommendation for school and community programs to promote lifelong physical activity among youth (Centers for Disease Control and Prevention, 1997). Parental involvement and encouragement is key in the development of a psychosocial environment that promotes physical activity in youth (Centers for Disease Control and Prevention, 1997).

### Friends/Peers.

The peer group is important to young people. Health Canada (1999) found that about 25% of grade 6, 8, and 10 students spend five or more evenings per week with their friends

Some of this time is spent in organized clubs and teams. However, much of this time is unsupervised by adults (i.e., just “hanging around”), which is when health risk behaviours tend to occur.

Quiroz et al. (1996), in their study on activity participation in one high school, determined that “students often associate their sense of belonging and their friendships with their participation in activities” (p. 114). Students who are not involved do not feel associated with the school and often do not feel they are included in a peer network.

Buhrman (1977) reported that in high school girls in a rural setting, friends of athletes were more interested in school, studied more, had higher educational aspirations and participated more often in school athletics and activities as compared to non-athletes. Buhrman and Bratton (1978) found similar friendship patterns – athletes had friends who also participated in school activities and athletics.

Eccles and Barber (1999) found that a peer culture and shared values existed within groups of adolescents who dominated certain activity settings (i.e., team sports, prosocial activities, performing arts, school involvement and academic clubs). Students were likely to have the same self-reported identities and behaviours as their friends.

Eder and Kinney (1995) looked at the effect of extracurricular activity participation on students’ popularity and peer status in middle school. They found that popularity and peer status were differentially influenced by different activities and that males showed consistent gains in status, while females did not. Activities, especially athletics (for males) and cheerleading (for females) are very visible in the school. Visibility enhances popularity in middle school. This enhanced status in middle school has “long-term and pervasive effects on adolescents’ status levels and social concerns” (p. 315).

However, the Eder and Kinney study was conducted in the United States. Some activities (i.e., athletics) may hold a more prominent position in American schools than in Canadian schools (Burhmann & Bratton, 1978).

### School and Extracurricular Activity Participation

#### School connectedness.

Students who participate in school activities tend to be more involved in school in general, and feel a higher level of commitment, loyalty and school pride (Alberta Schools’ Athletic Association, 1997; Rutterworth, 1977; Holland & Andre, 1988; Landers & Landers,

1978; LeGault, 1985; Marsh, 1992, Rees et al., 1990). Most of the research in this area has been done with sports participation. The Manitoba High School Athletics Association (1994) found that students who participated in both school and non-school athletics were most likely to have positive attitudes and be engaged in the life of the school. In the Alberta School Survey (Poon & Spence, 1997), athletics participants had school pride, felt they belonged at their school and found school an enjoyable place. Landers and Landers (1978) also claim that athletics is a source of satisfaction in the school. Rees et al. (1990) found that involvement in sports consistently and significantly increased positive attitudes toward school and Eccles and Barber (1999) found that involvement in high school team sports increased school attachment. LeGault (1985) stated that one of the major purposes of extracurricular activities was the establishment and development of school spirit. Phillips and Schafer (1971) claimed that an athletic subculture exists, wherein athletes share norms that exert a strong pro-school influence on them.

The impact of extracurricular activities on students is partially dependent on the school's or community's value system. Firstly, the activities that are offered through a school or in a community, while often influenced by the enthusiasm of children, are inevitably controlled by adults (Hanks & Eckland, 1976). Adults are typically the ones who structure and supervise activities. Secondly, some activities are considered more prestigious than others within a school or community. For example, if basketball is considered to be an important part of school, then successful members of the team are likely to be more popular and have higher self-esteem (Coleman, 1961) which may benefit other areas of the students' lives (e.g., academics). In Canada, athletic participation does not receive the same status and esteem as in the United States (Phillips & Schafer, 1971). Since most of the literature is American, the differences between athletes and nonathletes may be less pronounced in Canada. Holland and Andre (1987) discussed how schools have either a developmental or academic perspective. The value system of the school dictates the position taken on extracurricular activities.

#### School type.

Elementary schools usually offer fewer structured activities than either junior high or high schools. At such a young age, children engage in more spontaneous, unstructured play. The range of school-based activities tends to increase as students move into high school.

As well, if the child is attending a public, private or Catholic school may affect participation rates. Different school systems may place a different priority on, and dedicate more or less of their budgets to extracurricular activity programs.

#### Academic achievement.

Academic achievement, school dropout and educational aspirations have been frequently studied with extracurricular activity involvement. The main argument for or against the existence of activity programs is often its effect on student academic performance.

Coleman's (1961) claim that extracurricular activities are in competition with curricular pursuits for a student's time and energy and are therefore detrimental to academic performance has been supported by other authors. Sport is often perceived as an alternative rather than a complementary channel to academic experiences (Overman and Prakasa Rao., 1981; Spady, 1970). Hall et al. (1984) questioned high school students and staff about the place of extracurricular programs. They found that these activities were frequently perceived as "on the side" and were not taken seriously as functions of the school, yet they were in major competition with the academic curriculum. Holland and Andre (1988) discussed the importance of whether the school values were developmentally or academically focussed in determining the support for and attitude toward extracurricular activity programs.

Some studies have found that extracurricular activity participation (specifically athletics) neither helps nor hurts academic performance (Hanks and Eckland, 1976; Otto, 1982). In their review, Holland and Andre (1988) reported mixed findings with respect to academic achievement. They said there was generally a positive relationship between extracurricular activity participation and educational aspirations and attainments, but it was moderated by the type of activity. Social activities were more consistently related to positive academic outcomes than athletic activities (Hanks & Eckland, 1976). Cooper (1969) found no clear IQ differences between athletes and non-athletes, but did find that athletes tended to be more achievement-oriented.

There is a large body of literature refuting Coleman's theory of competition between academic and extracurricular pursuits. Snyder (1969) concluded that academics and athletics were mutually supportive, and Haensly et al. (1986) found a consistent, moderately positive relationship between achievement and participation. The Alberta Schools' Athletic Association (Poon & Spence, 1997) found that students involved in school-based sports reported better grades than students who did not participate. In their review of the consequences of

participation in interschool sports, Phillips & Schafer (1971) stated evidence that athletes receive slightly better grades and are more likely to aspire to and attain more education than comparable nonathletes. This effect was especially marked among athletes from blue collar homes. Other authors have also found that athletics has a positive effect on educational aspirations (Otto & Alwin, 1977; Spreitzer & Pugh, 1973). Spreitzer and Pugh (1973) offer potential reasons why athletics are not detrimental to education:

1. athletes may receive special academic encouragement and assistance from teachers, counselors, coaches and peers
2. physical conditioning and discipline might transfer to academics
3. eligibility requirements may exist for participation
4. prestige improves self-concept and aspirations
5. membership in the "leading crowd"

Marsh (1992) suggested that academic self-concept was a mediator between extracurricular activity participation and academic achievement. Extracurricular activity participation increases academic self-concept, which improves educational outcomes.

Positive educational trajectories were related to involvement in prosocial activities (i.e., church, volunteer) and team sports in an extensive longitudinal study (Eccles and Barber, 1999). Participation in these activities, or performing arts, academic clubs, or school involvement, all predicted better than expected high school GPAs.

Other authors claim that it is the *type* or *extent* of involvement, not just participation itself that predicts the achievement level of students. LeGault (1985) noted that low achievement students participated in athletic-related activities more than in subject-related activities. Spady (1970) reported that students who were active in both athletics and service-leadership activities had higher aspirations than those who participated in just athletics or neither. Feltz and Weiss (1984) found that extent of involvement was a major predictor of ACT scores (even more than just participation vs. nonparticipation) in American high school girls.

Extracurricular activities are a popular reason why children stay in school (Haensly et al., 1986; Hall et al., 1984). Mahoney and Cairns (1997) arrived at the conclusion that extracurricular activity participation protects against school dropout. As well, McCarty Smith (1988) was a proponent of the involvement theory and stated that the more ways that schools involve students in the "life and environment of the institution", the more likely they are to persist to graduation.

### Relationships Between Activity Participation and Health Outcomes

The literature examining extracurricular activity participation and health outcomes focuses primarily on physical activity.

#### Physical Activity and Physical Health Outcomes

The positive health outcomes of regular exercise are well documented. Health benefits include improved cardiorespiratory endurance, muscular strength and endurance, and lower rates of diseases and conditions such as coronary heart disease, stroke, diabetes, certain cancers, hypertension, and obesity (see Allison, 1996; Centers for Disease Control and Prevention, 1997; Dovey et al., 1997). All-cause mortality rates are lower among physically active than sedentary people (Centers for Disease Control and Prevention, 1997, p. 3; Allison, 1996).

Common forms of physical activity for youth are physical education classes and extracurricular sports. Physical activity during childhood and adolescence has an effect on health and lifestyle in later life (Barnekow-Bergkist et al., 1996). Not only is involvement in sports activities associated with better overall health for children, but it is also related to greater involvement in organized activities in adulthood (Dovey et al., 1998).

#### Health-risk Behaviours and Extracurricular Activity Participation

There is a general assumption that extracurricular activities have a protective effect on health risk behaviours, specifically, the use of tobacco, alcohol and drugs. However, there have been mixed findings in the literature.

In their study of psychosocial correlates of health-compromising behaviours, Neumark-Sztainer, Story, French, and Resnick (1997) found a very weak link between extracurricular activities and health-compromising behaviours in adolescents. Alternatively, Benson, Blyth and Roehlkepartain (1995, cited in Neumark-Sztainer et al., 1997) noted that the structured use of time in activities is a protective factor against involvement in health-compromising behaviours. Richardson, Dwyer, McGuigan et al. (1989) stated that the risk of substance use occurs in those who are active in sports as well as those who are not.



### Drug and alcohol use.

Researchers have observed a negative relationship between involvement in extracurricular activities and drug and alcohol use in adolescents (Gibbons et al., 1986; Jenkins, 1997; Shilts, 1991; Terre, Drabman, & Meydrech, 1990; Thorlindsson & Vilhjalmsson, 1991). Others have found no association between these behaviours (Bush & Iannotti, 1992; Carlini-Cotrim & Aparecida de Corvalho, 1993). A survey by Poon and Spence (1997) found that students involved in school-based sports were less likely to abuse substances like cigarettes and drugs. However, a greater percentage of students in sports had ever consumed alcohol. Similarly, participation in high school team sports was related to increases in alcohol use in Eccles and Barber's study (1999).

### Tobacco use.

The relationship between smoking and extracurricular activity participation is generally negative (Aarnio, Kujala, & Kaprio, 1997; Escobedo et al., 1993; Krohn, Naughton, Becker & Lauer, 1986; Reimers, Pomrehn, Becker & Lauer, 1990). Escobedo et al. (1993) offered possible explanations for the inverse relationship between smoking initiation and sports participation in high school students: increased self-confidence, additional counseling, decreased peer influence, awareness of health risks, or perceptions about decreased sports performance. As well, many schools have substance use policies in which students caught using tobacco, alcohol or drugs will not be allowed to participate in activities.

Pederson, Koval, & O'Connor (1997) did not support this negative relationship. They found that "ever smoking" in grade 6 students was not related to the number of group activities, team sport activities or individual sport activities.

Many researchers have highlighted the existence of a co-occurrence between tobacco, alcohol and drug use in students (Coogan, Adams, Geller, Brooks, Miller, Lew, & Koh, 1998; Terre et al., 1990; Thorlindsson & Vilhjalmsson, 1991). This has been theorized to be because youth tend to select peer groups that share the same values, interests and behaviours, which suggests the existence of a "deviant subculture" (Krohn et al., 1986; Thorlindsson & Vilhjalmsson, 1991).

Youth involvement in health-compromising activities is complex (Neumark-Sztainer et al., 1997), but overall these behaviours appear to have a relationship with participation in extracurricular activities.

### Physical Inactivity and Obesity

Obesity and physical inactivity have been recognized as risk factors which have a great impact on the health of our youth (Kann et al., 1997; Wolford Symons, Cinelli, James, & Groff, 1997). The prevalence of obesity is increasing in North America. Over 25% of children are overweight (Goran & Sun, 1998; Harsha, 1995). The incidence of obesity-related diseases is on the rise in children (Goran & Sun, 1998). Children are spending more time in sedentary pursuits such as watching TV or playing computer games. Gupta, Saini, Acharya, and Miglani (1994) showed that TV viewing of children aged 3-10 may predispose them to childhood obesity. Higher amounts of sedentary behaviours and heavier children result in a higher risk of cardiovascular disease in adulthood (Aarnio et al., 1997).

The benefits of physical activity are widely known. However, as children enter adolescence there is a marked decline in their physical activity level (Aarnio et al., 1997; Harsha, 1995; Wolford-Symons et al. 1997). Spontaneous physical activity declines by about 50% between the ages of 10 and 18 (Heckinger, 1992). Some of the reasons for this reduced fitness level include: increased TV/video game/computer use, parental concerns for child safety, and lack of interest in physical activity as a priority of parents and school staff (Harsha, 1995).

### Self-esteem and Extracurricular Activity Participation

Self-esteem is the "value or sense of worth one perceives about oneself" (Holland & Andre, 1987, p. 439). A number of studies have examined the relationship between student self-esteem and activity participation. (Leonardson, 1986; Marsh, 1992; Yiasworth & Gauthier, 1978).

Gary Leonardson (1986) found that high school students who were actively involved in extracurricular activities had higher levels of self-concept. In their review of participation in extracurricular activities in secondary school, Holland and Andre (1987) reported positive relationships between activity involvement and self esteem. Some of this self-esteem may stem from involvement in peer-valued activities and those that lead to publicity. Yiasworth and Gauthier (1978, cited in Haensly et al., 1986) found that involvement in school activities were positively related to self-concept. As well, Marsh (1992) discovered that extracurricular activity participation during the last two years of high school was positively associated with both social and academic self-concept. His study supported the commitment-to-school

hypothesis, which predicts that activity participation enhances academic self-concept, which in turn positively affects other educationally relevant outcomes.

Finally, Grabe (1981) noted that activity involvement was not always positively associated with self-esteem. In small schools, pressure to participate due to the limited number of students in the school and failure in activities led to reduced self-esteem and increased alienation.

### Behavioral and Emotional Disorders and Extracurricular Activity Participation

Rae-Grant et al. (1989) found that participation was significantly but weakly associated with absence of disorder (i.e., conduct disorder, emotional disorders, hyperactivity and somatization). Participation had a protective effect if the child was involved in two or more activities. Otto (1982) reported that the level of participation was related to higher levels of adolescent personal adjustment. As well, Offord et al., (1998) found that participation in arts activities contributed to reducing the rates of children with one or more emotional or behavioural problem.

In their study of high school males, Rees, Howell, and Miracle (1990) found that the overall effects of participation in sports on personality traits were small. However, irritability and aggressiveness were increased with participation. The authors suggest that this may be a result of a specific subcultural effect among athletes which is counter to prosocial personality (i.e., the “macho” or “manliness” subculture).

### Age Group

Children between the ages of 10 and 13 were the focus for this project. This age group was chosen because most of the activity participation literature focuses on older adolescents and it is believed that activity participation might be relevant to physical, emotional and social development at this earlier stage.

Early adolescence “represents a life stage when joining, belonging, and peer pressure are beginning to play an important role in the maturation process” (Hultsman, 1993a, p. 151). Early adolescence is represented by students in late elementary school and early junior high school. At this age, students are too young to drive or have easy access to transportation from peers and are typically not at an employable age.

This period also involves an important transition – the move from elementary school to junior high, where they are exposed to a broader social base and an entirely different school system that allows them more independence. Life transitions can provide opportunities for enhanced development, growth and coping skills, but they can also put youth at increased risk for psychological and other adaptive difficulties (Felner & Adan, 1988). The move from elementary to junior high or high school is often accompanied by “significant shifts in psychology and academic adjustment” (Felner & Adan, 1988, p. 112). Examples of these adjustments are decreases in academic performance, increases in absenteeism, increased potential for substance abuse or behaviour or social problems, and declines in psychological well-being (Felner & Adan, 1988).

Adolescence is a time when boys and girls experience many different social, emotional and physical changes (Pederson et al, 1997; Perry et al., 1993). As well, many attitudes and behaviours are formed at this age, as peers start to become a more dominant influence in their lives (Perry et al., 1993). Mahoney and Cairns (1997) stated that “extracurricular involvement, participation for persons at risk for dropout, may be one component of that transition [from middle school to high school] that could help shift the balance toward greater engagement in school” (p. 249). Hultsman (1992) noted that activities in middle school have to present opportunities and challenges that meet the student’s expectations of his or her new, “grown-up” role in the new environment, or else a decision may be made toward nonparticipation.

The literature demonstrates that this is the age of initiation of many health-risk behaviours. Many studies have shown that the age of experimentation/initiation of smoking is between 10 and 13 years (Escobedo et al., 1993; Glynn, 1993; Kann et al., 1998; Meijer, Branski, Knol, & Kerem, 1996; Stanton, Silva, & Oei, 1991). Similar evidence is offered for alcohol consumption (Kann et al., 1998). The risk of regular or heavy smoking in adolescence and adulthood greatly increases when the initiation and experimentation stages occur during childhood (Jackson, 1998). Therefore, by studying 10-13 year old children, we can examine their extracurricular activity involvement patterns before or in the early stages of initiation.

Extracurricular activity participation has typically been studied in high school, not with younger children. A child’s level of participation in activities has been recognized as an important variable to measure with respect to his or her development by the inclusion of this item on the National Longitudinal Survey of Children and Youth (which was utilized in this study).

A study on the 10-13 year age group would fill a gap that currently exists in the literature on extracurricular activities, and would add vital information on the relevance of these activities to child development.

### Limitations of Existing Research

There are a number of limitations associated with the literature on extracurricular activities reviewed above. First, "extracurricular activities" is rarely defined in a rigorous way, and there appears to be no consistent definition of extracurricular activities in the literature. Taylor and Chirgioji (1988) stress the importance of defining "extracurricular activities" and "participation", as parameters are essential for an effective and relevant study. Unfortunately, participation or involvement in activities has been measured in many different ways, including as a dichotomous variable (participated or not) (e.g., Jenkins, 1996; Kann et al., 1998; Marsh, 1992; Pederson et al., 1997; Poon & Spence, 1997), the level of participation (passive, active, leadership position or officer in the organization), or the extent of participation (number of activities in the past year or in the student's entire high school career; e.g., Gibbons et al., 1986; Lanese et al., 1972; Richardson et al., 1989; Thorlindsson & Vihjalmsson, 1991).

Typically, surveys or existing records (i.e., yearbooks, state recreation records) have been utilized to measure extracurricular activity participation. Some authors have suggested the usefulness of alternative methodologies such as interviews (Cooper, 1969). In a study measuring students' sense of obligation to school activities, Willems (1967) used interviews to discern students' "reasons for or pulls towards" attending selected nonclass activities. Chalip and Csikszentmihalyi (1984) used pagers and short self-report forms to measure students' self-consciousness, skills, challenges, mood, motivation, concentration, amount at stake in the activity, and sense of control at periodic times during the day to determine the effects of organized sports, informal sports and gym class.

A second problem in research on extracurricular activities is the choice of research participants. The literature is dominated by studies on whites, males, high school students, and athletes, and, as in most published literature, mainly the positive aspects of participation are reported.

The majority of research has been conducted with high school students. One reason for this is that structured extracurricular activities are more common in high school. Younger children typically spend more of their leisure time in unstructured play. As well, secondary

schools often have a larger student base and offer a wider range of activities for students. Many of these activities (e.g., vocational clubs, music, drama) prepare adolescents for the directions that they will take after high school. However, today, extracurricular activities are prevalent in elementary and middle schools, not just high schools. Many students also participate in activities that are not organized by the school (e.g., church groups, music lessons, Girl Guides/Boy Scouts), but can be considered extracurricular activities.

The existing literature on extracurricular activity participation is dominated by research on athletics. There is a large body of literature on physical activity and involvement in school athletics, which generally reports positive effects of participation. The amount of research involving other school-related activities is quite sparse, and papers on nonschool-related activities are almost non-existent.

Otto (1982) notes that "the literature is conspicuously silent about the costs of participation in extracurricular activities" (p. 225). Despite the positive nature of extracurricular activity participation that is reported in the bulk of the literature, negative aspects of involvement do exist. The availability of extracurricular activities doesn't necessarily ensure equal opportunities for participation; for example, certain expertise, a minimum grade point average, or nomination, selection or election may be required (Mahoney & Cairns, 1997). As well, socioeconomic status, though not generally a barrier to participation, may influence the types of activities students are involved in, as well as the attainment of status within those activities (Coleman, 1961; Mahoney & Cairns, 1997). Grabe (1981) found that students in smaller schools participate in more activities than those in larger schools; however, their involvement is often under stress. Greater stress and feelings of alienation were found in smaller schools (Barker, 1969). This is considered to be "unsuccessful participation" and may produce more negative self-regard and lower satisfaction with the total school experience (Grabe, 1981).

A third limitation is the lack of causality assigned to extracurricular activities. Because the majority of studies have used crosssectional data (i.e., self-reported activity involvement at a particular point in time), causal effects can not be determined. As a result, several important questions remain unanswered in the literature; for example, do traits develop because of participation in extracurricular activities, or do certain people select themselves into activities? (Hanks & Eckland, 1976; Holland & Andre, 1987; Landers & Landers, 1978). Are there pre-existing differences between participants and nonparticipants? Marsh (1992) stated that "simple relations between total extracurricular activity participation and outcome variables that

do not take into account the effects of preexisting differences are not interpreted as activity participation effects. Even after controlling for background variables (e.g., sex, SES, race), there is insufficient basis for interpreting such relations as activity participation effects” (p. 555). He also stated that “the problem with the interpretations of these findings is that there was typically no basis for determining whether extracurricular activity participation affects these personal-social characteristics or is merely correlated with them” (p. 554).

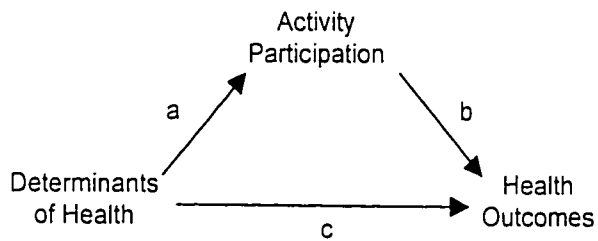
A final limitation in the literature is that very few studies have examined reasons for participation or nonparticipation in extracurricular activities. There is a call for research that investigates why some children participate in extracurricular activities and why some do not become involved (Holland and Andre, 1987; Landers & Landers, 1978; Mahoney & Cairns, 1997; Offord et al., 1998). Brown (1988) bluntly states that “investigators seem never to have bothered to ask students why they do or don’t participate” (p. 108).

#### Relationships Between Social Determinants of Health, Extracurricular Activity Participation and Health Outcomes

The literature on the relationships between social determinants of health, extracurricular activity participation, and health outcomes has been reviewed above. However, the nature, or structure of these relationships has not been discussed in existing research. How do determinants of health, activity participation and health outcomes interact?

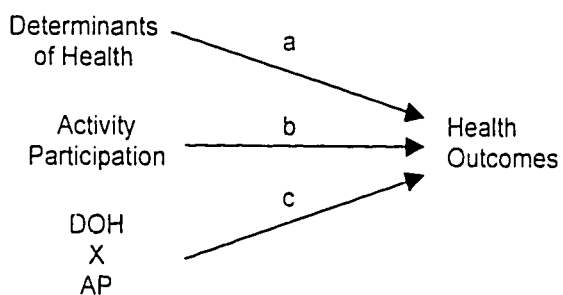
Baron and Kenny (1986) described two models for determining causal effects of independent variables when predicting an outcome measure: mediator and moderator. Figure 2 shows one potential way that activity participation may affect the relationship between social determinants of health and health outcomes. Activity participation may mediate this relationship; that is, activity participation is the strongest path between determinants of health and health outcomes.

Figure 2  
Mediator Model



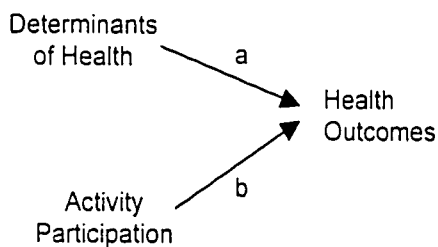
A moderator model is presented in Figure 3. This implies that activity participation interacts with the social determinants of health in some way to predict health outcomes.

Figure 3  
Moderator Model



A third possible relationship between determinants of health, activity participation, and health outcomes is shown in Figure 4. This model suggests that determinants of health and activity participation have effects on health outcomes that are independent of one another.

Figure 4  
Independent-effects Model





## Research Questions

The purpose of this study was to examine the role of extracurricular activities in the relationship between social determinants of health and the well-being of early adolescents, and to understand factors affecting their participation in these activities.

This study will address the following research questions:

1. What are the patterns of extracurricular activity involvement in 10 and 11 year old Canadian children?

### *Rationale.*

While the literature does present rates of activity participation in youth, most of the information is American and reports the involvement of older adolescents. The National Longitudinal Survey of Children and Youth contains data on a representative sample of Canadian children that allows for examination of their activity patterns and will contribute to an existing gap in the current literature.

2. What is the role of extracurricular activity participation in the relationship between social determinants of health and health outcomes in 10 and 11 year old Canadian children?
  - 2(a) Do social determinants of health predict physical health and emotional well-being?
  - 2(b) Do social determinants of health predict extracurricular activity participation?
  - 2(c) Does extracurricular activity participation predict physical health and emotional well-being?

### *Rationale.*

Activity participation in youth has been studied in the context of social determinants of health (i.e., SES, relationships with family and peers, gender, educational achievement), and also with health outcomes such as self-esteem and health risk behaviours like low physical activity and substance use. However, if and how activity participation has a role in the relationship between social determinants of health and physical health and/or emotional well-

being has not received much attention from researchers. In order to explore these relationships and the role of extracurricular activity participation, mediator, moderator and independent-effects models will be tested.

3. What are the perceptions of children in grade 6 and 8 about facilitators and barriers to participation in extracurricular activities?

#### *Rationale.*

One of the limitations in the existing body of literature is the dearth of studies that examine reasons for participation or nonparticipation as reported by the children themselves.

#### Definitions

Children participate in many activities in their leisure time, including athletics, playing computer or video games, watching TV, reading, playing a musical instrument, involving themselves in school clubs, or just hanging around with friends. This study examined the impact of *structured* school- or community-based activities occurring outside of school hours (including weekends) in which children voluntarily participate. An activity becomes structured when an adult is involved. The presence of an adult changes the nature of the activity. It becomes an organized use of time which involves supervision by an older individual.

Specifically, the activities that will be used to answer the first two research questions are whether the child participated in:

- sports with a coach or instructor
- art, drama or music groups, clubs or lessons
- clubs or group such as Guides or Scouts, 4-H club, community, church or other religious groups

The level of involvement in these three activity categories was reported by 10 and 11 year old children in the National Longitudinal Survey of Children and Youth.

Extracurricular activities are defined as structured school- or community-based activities occurring outside of school hours (including weekends) in which children voluntarily participate. These can include activities in the areas of athletics (e.g., interscholastic sports), arts (e.g., choir, music lessons), or clubs (e.g., Guides, Scouts, math club).

School-based activities are defined as activities that are sponsored by, or offered through, a school, to students who attend that school.

Community-based activities are defined as activities offered by community organizations, or any institution other than the school that the student is attending.

Participation is defined in two ways, based on the phase of the project:

1. Part 1 – Quantitative analysis. The National Longitudinal Survey on Children and Youth asked children their frequency of involvement in activities in the last twelve months (never, less than once a week, 1-3 times a week, 4 or more times a week). For a portion of the analysis, the response categories were collapsed to form a dichotomous “never” and “participate” variable.
2. Part 2 - Qualitative study. Participation will be measured as a dichotomous variable. Since it is a self-reported measure, if the student feels that he or she was involved in the activity, then a positive answer will be recorded. The extent of participation will not be measured, just whether or not the student was involved.

The qualitative study explored the perceived reasons for activity participation or nonparticipation by grade 6 and grade 8 students. Responses were considered to be either facilitators, barriers, motivators, or demotivators to activity involvement.

Facilitator: A logistical factor that makes it easy or possible to participate in an extracurricular activity (e.g., the activity is available in the community and easily accessible to participants)

Barrier: A logistical factor that makes it difficult or impossible to participate in an extracurricular activity (e.g., the activity is too expensive, the student does not have time available to become involved).

Motivator: A factor that, in the student’s opinion, makes it more desirable to participate in an extracurricular activity (e.g., his or her friends are involved, the activity is fun).

Demotivator: A factor that, in the student's opinion, makes it less desirable to participate in an extracurricular activity (e.g., the activity is not enjoyable, the coach is "mean").

## CHAPTER 3

### METHODS

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#### Introduction

This research project involved two parts: a quantitative study and a qualitative study. The first part (quantitative study) consisted of a secondary analysis of an existing national database. This analysis took advantage of the availability of a comprehensive set of Canadian data which focuses on an extensive number of factors in a child's environment. It includes questions on activity participation, which were described and then used to examine the role that activity involvement plays in the relationship between social determinants of health and physical and emotional well-being in children. In the second part (the qualitative study), focus groups and open-ended survey questions were used to explore the reasons for activity participation or nonparticipation.

In this chapter, methods used to conduct the quantitative and qualitative studies are explained, including sampling techniques, variables used in the project and data collection procedures. The chapter concludes with an overview of the ethical considerations.

#### Part I: Quantitative Study

The purpose of this analysis was to examine children's activity participation using a comprehensive national database and then to explore the role of activity participation in the relationship between social determinants of health and physical and emotional health outcomes.

#### Sample

The National Longitudinal Survey of Children and Youth (NLSCY) is a comprehensive survey designed to track child development in Canada from infancy through adulthood. Beyond demographics and personal information, the study includes an extensive number of factors in the child's environment to help us understand how they influence the child's development.

The NLSCY follows a representative sample of children from across Canada. Surveys were conducted in the household (the "person-most-knowledgeable" (PMK) about the child

was interviewed), and in the school (with teachers and principals). As well, 10 and 11 year old children were asked to complete a questionnaire. This latter instrument provided the most data for analysis in the present study.

Three thousand, four hundred and thirty four (3,434) 10 and 11 year old children were included in the national sample. The sample was designed to be representative of this population in children in Canada. The unit of analysis for the NLSCY is the child.

The first wave of data was collected in 1994-95 and is available for public use on a microdata file. Although the population of interest for this study was children aged 10-13, the availability of the data in this national database at the time of this study limited the analysis to only 10 and 11 year old children.

### Variables

Variables were selected from the NLSCY public microdata file in the categories of extracurricular activity participation, social determinants of health, and health outcomes, based on the literature review and availability in the database. Below is a list of variables that were included in the study. A complete listing and description of the variables used in this study is presented in Appendix A.

#### Activity participation.

Three structured activity variables were used in the analysis:

In the past year (last 12 months), how often have you...

1. Played sports WITH a coach or an instructor, other than in gym class (school teams, swimming lessons, etc.)? (SWC)
2. Taken part in art, drama or music groups, clubs or lessons, outside of class? (Arts)
3. Taken part in clubs or groups such as Guides or Scouts, 4-H club, community, church or other religious groups? (Clubs)

Four unstructured activity variables were explored in the initial analysis: playing sports without a coach, playing computer or video games, hours of television watched per day, and time spent reading for fun.

### Social determinants of health.

Based on relevance to children and youth (as identified by the literature reviewed in Chapter 2) and the availability in the National Longitudinal Survey of Children and Youth, the following social determinants of health were used in this study:

1. Household income level
2. Family scale (relationships with mother, father, siblings)
3. Friends scale (relationships with peers)
4. How well a child feels he/she is doing in school
5. How a child feels about school

### Health Outcomes

Consistent with the WHO's broad definition of health, both physical and mental health were used as outcomes for this analysis. Because the NLSCY contained many variables that index health, two primary outcome measures were developed for the study.

#### Physical health.

The physical health of the child was reported by the person most knowledgeable about the child (PMK) (i.e., "would you say the child's health is: excellent, very good, good, fair, or poor?"). The child was not asked to report his or her own perceived physical health, therefore this proximate source was used.

#### Emotional well-being.

The 10 and 11 year old children completed sections of the self-report questionnaire titled "About Me" and "Feelings and Behaviours". Items from these sections were used to construct scales describing psychological and behavioural tendencies of the child. The following four scales were judged to measure the psychological well-being of children:

1. A 4 item general self esteem scale ( $\alpha=.728$ ; e.g., "a lot of things about me are good")
2. A 7 item emotional disorder scale ( $\alpha=.760$ ; e.g., "I am not as happy as other people my age")
3. A 6 item conduct disorder/physical aggression scale ( $\alpha=.738$ ; e.g., "I physically attack people")

4. A 10 item pro-social behaviour scale ( $\alpha=.766$ ; e.g., “I help other people my age (friends, brothers or sisters) who are feeling sick”)

Table 1

Relationships between Emotional Well-being Scales

Variable	Correlations			
	Emotional disorder	General self esteem	Conduct disorder	Pro-social
Emotional disorder	--			
General self esteem	.446**	--		
Conduct disorder	.309**	.382**	--	
Pro-social	.345**	.122**	.295**	--

\*\*correlation is significant at 0.01 level (2-tailed)

Correlations between the four scales varied from .122 to .446 (as shown in Table 1). The strongest relationship was between the general self esteem and emotional disorder scales. The weakest relationships involved the pro-social scale.

In order to simplify the analyses to a single outcome measure of emotional well-being, a principal components analysis was conducted using the four scale scores. Results are presented in Table 2.

Table 2

Varimax-Rotated Factor Loadings<sup>a</sup>

Scale	Factor	
	1	2
Emotional disorder scale	.906	
General self esteem score	.710	
Conduct disorder scale	.571	.442
Pro-social scale		.948

Extraction Method: Principal Component Analysis

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

The factor analysis revealed that the four scales loaded onto two different factors. Factor 1 exhibited high loadings on emotional disorder, general self esteem and conduct



disorder; this factor accounted for 41.5% of the total scale variance. Factor 2 exhibited high loadings on conduct disorder and pro-social scales and accounted for 30.4% of the total scale variance.

The pro-social scale was discarded because it loaded onto a separate factor. The conduct disorder scale was removed because it cross-loaded onto a second factor and also exhibited the smallest loading on the first component. Therefore, the emotional disorder and general self scores were combined to produce a measure of psychological well-being for 10 and 11 year old children ( $\alpha=.638$ ).

All variables were coded so that the highest values represented the best, or most desirable outcome (e.g., financially well-off, good relationships with friends, excellent health).

Analyses were run separately for males and females, and for each health outcome (i.e., physical health and emotional well-being).

## Part II: Qualitative Study

The purpose of the second part of the project was to gain an in-depth understanding from grade 6 and 8 students of the factors that affect extracurricular activity participation in this age group.

This qualitative study was intended to supplement the quantitative work done in part one. A child's perceptions of barriers and facilitators to extracurricular participation is a complex phenomenon involving a number of factors which could be more effectively uncovered through qualitative, rather than quantitative research. It is easier to "reach aspects of complex behaviours, attitudes and interactions" through qualitative work (Mays & Pope, 1996, p. 8). By combining the two methods, a wider and deeper picture of the influence of extracurricular activities on a child's development was produced.

### Sampling and Procedure

The purpose of sampling for qualitative research is "not to establish a random or representative sample drawn from a population, but rather to identify specific groups of people who either possess characteristics or live in circumstances relevant to the social phenomenon being studied" (Mays & Pope, 1996, p. 12). For this study it was important to select children in grade 6 and 8 who were willing to talk about extracurricular activities in their age group. Therefore, participant recruitment was undertaken through school classrooms.

Schools were randomly selected for inclusion in the study after stratifying for income level. Average household income level was taken from the 1996 Canadian census (Statistics Canada, 1996). Census tracts in the Edmonton Census Metropolitan Area were labelled either low, middle or high income based on the average household income for the tract. Low income schools were those located in census tracts where the average household income was \$40,000 or less (Ross & Roberts, 1999). High income schools were those located in census tracts with an average household income of \$60,000 or more. Schools in each income strata were assigned a number and Microsoft Excel was used to randomly select 11 elementary and 11 junior high schools. A list of these “preferred” schools was submitted with the application to the Cooperative Activities Program at the University of Alberta. Access to five elementary and five junior high schools was requested (2 low income, 6 middle income, and 2 high income schools).

Permission to conduct the study in the Edmonton Public School System and the Edmonton Catholic School System was gained in December 1999 through the Cooperative Activities Program. Eight principals in the Catholic System and ten in the Public School System were selected by a representative from the respective school system to be approached by the researcher.

Permission to enter the school was gained from the principal (see Appendix B for Principal Information Letter). One grade 6 class was selected from each elementary school and one grade 8 class was chosen from each junior high. The participating classroom was determined by the principal when there was more than one grade 6 or 8 class in the school.

A brief initial visit was made to the participating classroom to introduce the researcher and the study and to distribute parental information sheets and consent forms (see Appendix C). Approximately one week later, on a date that had been arranged with the principal and the teacher, the researcher returned just prior to the lunch break (or at an alternative arranged time) to collect the parental consent forms and conduct the qualitative study.

#### Focus Groups – Data Collection Process

Seven children were randomly selected from those who had returned their permission forms indicating that their involvement was approved by their parents (i.e., active parental consent). The group size was based on literature which suggests that this is an effective number of participants (Kitzinger, 1996; Morgan, 1997). The selection process involved placing all of the parental consent forms in a box and randomly drawing out seven names.

The discussion group took place over the lunch hour (unless otherwise preferred by the teacher) so that students would not miss class.

Eight focus groups were conducted. The first focus group was a pilot session to ensure that the questions were appropriate and elicited useful information from the participants. During the pilot focus group, interesting and relevant points were brought up by the students that the researcher decided should be asked about directly in subsequent groups. As a result, questions on parental, peer and teacher influence, community- vs. school-based activities and the role of gender in activity participation were added to the focus group script (see Appendix D). At the end of the discussion, the children were asked for their feedback on the process. Their only suggestions were to “relax and get more comfortable”, and to “eat with us”. They indicated that it was a fun experience.

Three of the remaining sessions involved children in grade 6 and the final sessions were conducted with grade 8 students. The same focus group script was used with both grade 6 and 8 students. Morgan (1997) suggests that conducting 3 – 5 focus groups is a good rule of thumb. Glasser and Strauss (1967) argue that researchers should stop completing data when a saturation point is reached; that is, “the point at which additional data collection no longer generates new understanding” (p. 43). In this project, eight groups were conducted in order to represent grade 6 and 8 classes in low, middle and high income schools, in both the Edmonton Public and Edmonton Catholic School Systems. By the end of the eight groups it was evident that the saturation point had been reached.

A trained facilitator conducted the focus groups and the researcher was present to observe. The location of the discussion was selected by the principal or the teacher. The students were given an information sheet (see Appendix E), which was also read aloud to them. They were given an opportunity to ask questions and to withdraw from the study.

All sessions were audio-recorded and notes were taken by the researcher. The tapes were transcribed verbatim. Names were not included in the transcription.

The purpose of the discussion was explained to the participants and their parents. At the session, children were told again that they did not have to participate or answer any questions that they did not feel comfortable answering. They were also informed that although the session was audio-recorded, no one outside of the room would hear the tape and everything that they said would be kept confidential.

Although the topic of extracurricular activity participation is less sensitive than most other health research, the researcher recognized that certain issues might be sensitive for

participants. For example, in the literature, income level has been shown to be a potential barrier or deterrent to activity participation (Offord et al., 1998; Poon & Spence, 1997; Posner & Vandell, 1994). This may have been a sensitive issue for some children.

The research participants should benefit from their experience in some way (Marshall & Rossman, 1995, p. 148). In this study, focus group participants were offered refreshments during the sessions.

Response rates for the active parental consent ranged from 10% to 75% (mean: 43%). Length of discussion (not including the introduction and signing of student consent forms, which took approximately 15 minutes) ranged from 15:00 to 49:00 (mean: 31:00). The longest groups occurred with grade 6 students. Shorter groups were restricted by the length of lunch breaks or class times.

### Questionnaires

By obtaining parental consent, there was an expectation by the students that they would be participating in the study. Therefore, the researcher took the opportunity to collect data from those children who received parental consent for participation but were not selected for the discussion group. These data were used to supplement the information collected in the focus groups and was also used to test the validity of the focus group discussions.

Those children who received parental consent for participation but were not selected for the discussion group, or, in the case that not enough parental consent forms were returned to comprise a focus group (which occurred at one school), students were given an information sheet (see Appendix F) and a short (5-question) questionnaire that they could complete if they chose (see Appendix G). The survey contained one yes/no question and four open-ended questions that were also asked in the focus group discussions. The information sheet was read aloud to the students and they were given an opportunity to ask questions or withdraw from the study. The children were asked to fill out the questionnaire at their desks and then place them in a box when they were finished (which the researcher then took with her to the focus group session). The questionnaire took approximately 10 minutes to complete. Only those children who returned their consent forms indicating parental approval of participation in the study were given a questionnaire.

Most of the discussion groups and survey completion took place over the lunch break so that students did not miss class. In two of the schools, teachers requested that class time be

used for the study. Those children who did not receive parental consent or chose not to participate in the discussion group or to fill out a questionnaire were encouraged to take their lunch break or use class time as usual.

### Ethical Considerations

Ethical approval for this project was granted by the Health Research Ethics Board B (University of Alberta, Capital Health and Caritas Health Group) in May 1999. Permission to conduct the study in the Edmonton Public and Edmonton Catholic School Systems was gained through the Cooperative Activities Program at the University of Alberta in December 1999.

Consent to conduct focus group sessions and surveys was received from school principals. Active parental consent was a requirement for selection into the focus group sessions and questionnaire completion. Information sheets, stating the purpose and procedure of the study were distributed to, and then read aloud to, the study participants. The students' voluntary agreement to participate in the focus group discussion or to complete the questionnaire was demonstrated by their signature on the student assent form. Those students who did not receive parental consent or chose not to participate in the discussion group or to fill out a questionnaire were encouraged to take their lunch break or use class time as usual.

Focus group discussions were audio recorded and then transcribed by the researcher. Names were not included in the transcription. Audio tapes were heard only by the researcher and will be stored in a locked cabinet at the researcher's home for the duration of the study and for seven years following the project, at which time they will be erased.

Students were asked NOT to indicate their names anywhere on the questionnaires. The questionnaires will also be kept in a locked cabinet. After seven years they will be shredded. Parental consent forms will also be stored in the locked cabinet for seven years, and then shredded. The names of schools and students participating in the project will be kept confidential and are not included anywhere in the final report. Analysis was conducted by grade and on a group level. Individual students are quoted in the final report, but their identity and the school's identity remains confidential.

Students were assured that everything that they said during the focus group sessions or wrote on the questionnaires would remain confidential (i.e., parents and teachers will not know what they have said) and that their participation or nonparticipation in the study would not affect their school grades.

## CHAPTER 4

### ANALYSES AND RESULTS OF QUANTITATIVE STUDY

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#### Introduction

This chapter presents the analyses and the findings from the quantitative study. The initial analysis included the examination of frequencies of participation in a number of structured and unstructured activities. In preparation for further analyses, a dichotomized measure of activity participation was derived, subgroups of males and females were created, and outcome measures were constructed. Further analyses were then conducted to explore relationships between social determinants of health, extracurricular activity participation and health outcomes. Three relationship models (mediator, moderator and independent-effects) were tested to investigate the role that activity participation might play in the relationship between social determinants of health and physical and emotional well-being.

#### Initial Analysis

Initial analysis computed descriptive statistics for the activity variables. The objective was to describe the patterns of activity involvement in 10 and 11 year old Canadian children. In the NLSCY, the questionnaire for 10 and 11 year old children included a section titled "Activities" which contained questions about how children use their leisure time. Three of these questions were related to structured extracurricular activities:

In the past year (last 12 months), how often have you...

1. Played sports WITH a coach or an instructor, other than in gym class (school teams, swimming lessons, etc.)? (SWC);
2. Taken part in art, drama or music groups, clubs or lessons, outside of class? (Arts);
3. Taken part in clubs or groups such as Guides or Scouts, 4-H club, community, church or other religious groups? (Clubs).

Respondents completed each item by indicating participation levels in the following scale: never, less than once a week, 1 to 3 times a week, 4 or more times per week. Response rates for each of these activity variables ranged from 84.8% to 85.3%.

The children were also asked about involvement in other activities such as playing sports without a coach (NoCoach), playing computer or video games (CGame), watching television, and reading for fun. For NoCoach and CGame, respondents indicated their level of participation as never, less than once a week, 1 to 3 times a week, or 4 or more times a week. Watching television was measured in hours per day (0-1, 1-2, 3-4, 5-6, 7 or more), while reading for fun was reported in the following categories: everyday, a few times a week, once a week, a few times a month, less than once a month, almost never.

### Participation Rates

The initial analysis included an examination of rates of participation of 10 and 11 year old children in a number of structured and unstructured activities. Tables 3-6 present the frequency of participation in these activities.

Table 3 shows that males had higher rates of participation in sports with a coach, while more females were involved in arts and clubs. The rates of nonparticipation are striking. Seventy-seven percent of males and 69% of females never participated in clubs. Sixty-nine percent of males and 46% of females were not involved in art, drama or music groups. Finally, 28% of boys and 36% of girls did not participate in sports with a coach. If children were involved in these activities, they tend to have participated 1-3 times a week.

Table 3

Frequency of Activity Participation in Structured Activities, by Gender

Variable	Males				Females			
	Frequency (%)				Frequency (%)			
	Never	<1/ wk	1-3/ wk	4+ / wk	Never	<1/ wk	1-3/ wk	4+ / wk
SWC	407 (27.8)	168 (11.5)	628 (42.8)	263 (17.9)	331 (36.3)	200 (13.7)	571 (39.0)	161 (11.0)
Arts	1002 (68.7)	132 (10.4)	243 (16.7)	62 (4.2)	668 (45.7)	167 (11.4)	533 (36.5)	93 (6.4)
Clubs	1123 (77.1)	91 (6.2)	212 (14.6)	31 (2.1)	1008 (69.1)	86 (5.9)	319 (21.9)	45 (3.1)

Rates of participation were higher in unstructured activities such as playing sports without a coach, playing computer or video games, or watching TV (see Tables 4 and 5). Seventy one percent of boys played sports without a coach and 95.3% played computer or video games one or more times a week. Forty-five percent of boys played computer or video games *four or more* times a week. The girls also reported playing sports without a coach and video games, but less frequently than the boys. Both genders watched TV everyday (as shown in Table 5). Again, boys reported a greater amount of time spent in this activity than girls did. The most frequently reported category of TV watching was 3-4 hours per day (37.1% of males, 35.5% of females).



Table 4

Frequency of Activity Participation in Unstructured Activities, by Gender

Variable	Males				Females			
	Frequency (%)				Frequency (%)			
	Never	<1/ wk	1-3/ wk	4+/ wk	Never	<1/ wk	1-3/ wk	4+/ wk
NoCoach	201 (13.7)	222 (15.1)	448 (30.5)	598 (40.7)	298 (20.4)	292 (20.0)	499 (34.1)	374 (25.6)
CGame	70 (4.7)	281 (19.1)	464 (31.5)	659 (44.7)	170 (11.6)	421 (28.7)	521 (35.5)	354 (24.1)

Table 5

Hours of TV Watched per Day, by Gender

	Frequency (%)				
	0-1	1-2	3-4	5-6	7+
Male	159 (10.9)	509 (34.9)	541 (37.1)	155 (10.6)	96 (6.6)
Female	200 (13.7)	496 (34.0)	517 (35.5)	140 (9.6)	104 (7.1)

Table 6 shows the frequency that children reported reading for fun. Girls were more likely to read, and to read more often, than boys. Almost 50% of the girls said that they read everyday, while only 31.6% of boys read everyday. Twelve percent of the boys stated that they "almost never" read for fun. Only 6.1% of the girls reported "almost never" reading.

Table 6

Frequency of Reading for Fun, by Gender

	Frequency (%)					
	Everyday	A few times a week	Once a week	A few times a month	Less than once a month	Almost never
Male	463 (31.6)	497 (33.9)	126 (8.6)	155 (10.6)	50 (3.4)	173 (11.8)
Female	710 (48.4)	462 (31.5)	100 (6.8)	80 (5.5)	25 (1.7)	90 (6.1)

Relationships Between Activities

The relationships between participation in different extracurricular activities was explored. Table 7 shows the correlations between the three structured activities.

Table 7

Relationships between Structured Activities

		SWC	Arts	Clubs
SWC	r	---		
Arts	r	.146**	---	
Clubs	r	.051**	.168**	---

\*\* correlation is significant at 0.01 level (2-tailed)

The correlations between activities shown in Table 7 indicate a significant, but weak interrelationship between involvement in different types of activities. The weak correlations show that for the most part, different children participated in different activities. Therefore, it is not plausible to create a composite measure of extracurricular activity participation: each activity variable must be analyzed separately.

## Preparation for Further Analysis

The second objective of the quantitative study was to explore the role of extracurricular activity involvement in the relationship between social determinants of health and physical and emotional health outcomes.

In preparation for further analyses, a dichotomized measure of activity participation was derived, and subgroups of males and females were created. Then the participation frequencies and intercorrelations were re-run.

### Derivation of Dichotomized Measure of Activity Participation

After the initial analysis, the activity variables were collapsed into two categories (“never” and “participate”). Offord et al. (1998), in their study on rates and correlates of participation in sports, arts and community programs which utilized NLSCY data, collapsed activity categories to “never” and “participate” to facilitate their analysis. Dichotomizing the variables was done to simplify analysis and interpretation in this study as well. Correlations between the original and collapsed variables were strong ( $r_s=.855-.989$ ,  $p_s<.001$ ). Based on the high association between the original and collapsed variables, the use of collapsed variables in other research using the same data, and the desire to distinguish participants from nonparticipants in each activity, this study conducted analysis using the dichotomized activity variables.

### Separation of Genders

Table 8 shows the gender differences on the mean participation scores for each activity. In all activities except for hours of television watched per day, the differences between males and females were significant. Based on this finding, the remaining analyses of structured activities were undertaken with each gender separately.

Table 8

Gender Differences in Activity Participation

Activity	Mean		t
	Males	Females	
SWC	2.51	2.25	6.617*
Arts	1.56	2.03	-12.996*
Clubs	1.42	1.59	-5.308*
NoCoach	2.98	2.65	8.510*
Cgame	3.16	2.72	12.844*
TV	2.67	2.62	1.226
Reading	2.56	1.99	10.095*

\* p .001

Table 9 contains the frequencies of involvement in the three structured activities, by gender.

Table 9

Frequency of Activity Participation, by Gender

Variable	Males	Females
	Participate (%)	Participate (%)
SWC	1059 (72.2%)	932 (63.7%)
Arts	457 (31.3%)	793 (54.3%)
Clubs	334 (22.9%)	450 (30.9%)

Note. Males: n=1749; Females: n=1685

For both boys and girls, the participation rate was highest for sports that involve a coach. Almost 70% of boys did not participate in arts, music or drama, compared to 45% of girls. Involvement in clubs was low for both boys and girls (23% and 31% respectively).

## Relationships Between Activities, Separated by Gender

Table 10

### Intercorrelations of Extracurricular Activity Participation, by Gender

Variable	Males				Females			
	Correlations				Correlations			
	SWC	Arts	Clubs	N	SWC	Arts	Clubs	N
SWC	--			1466	--			1463
Arts	.119**	--		1459	.235**	--		1461
Clubs	.068**	.146**	--	1457	.065*	.136**	--	1458

\* correlation is significant at 0.05 level (2-tailed)      \*\* correlation is significant at 0.01 level (2-tailed)

As Table 10 shows, the correlations between activities were low and positive and differed only slightly by gender. The strongest association was between participation in sports with a coach and arts activities (boys:  $r=.119$ ,  $p<.001$ ; girls:  $r=.235$ ,  $p<.001$ ). The weakest relationship was between sports with a coach and clubs (boys:  $r=.068$ ,  $p<.001$ ; girls:  $r=.068$ ,  $p<.05$ ). Again, the weak correlations indicate that each activity must be analyzed separately; a composite activity variable can not be created.

## Relationships Between Social Determinants of Health, Activity Participation, and Health Outcomes

Further analyses investigated the role of activity participation in the relationship between social determinants of health (DOH) and health outcomes in children aged 10 and 11 years. Before testing the mediator, moderator and independent-effects models, the individual relationships between DOH, activity participation, and health outcomes were explored for 10 and 11 year old Canadian children.

First, do the determinants of health predict health outcomes? This relationship was evaluated using a linear regression equation to determine whether the social determinants of

health predict physical health and emotional well-being (in two separate regression equations)  
for each gender.

Table 11

Relationship Between Social Determinants of Health and Health Outcomes, by Gender

Predictor	Males					Females				
	Physical Health		Emotional Well-being			Physical Health		Emotional Well-being		
	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F
Social Determinants of Health	.03	7.61**		.35	137.55**	.03	8.87**		.41	185.51**
Income Level			.12**					.13**		
Family Scale			.01					.05		
Friends Score			.06*					.08**		
How well doing in school			.06*					.01		
How feel about school			.00					.01		

Note. \*\*p<.01. \*p<.05.

Males: n=1749; Females: n=1685

The results presented in Table 11 show that the social determinants of health predicted both physical health and emotional well-being for males and females. Results from the analyses also showed that effects of social determinants of health are less pronounced for physical health outcomes compared to emotional well-being. For males, social determinants of health predicted a significant 3% of the variance in a child's physical health ( $p < .01$ ) and 35% of the variance in a child's emotional well-being ( $p < .01$ ). Specifically, physical health was positively related to income level ( $\beta = .12$ ,  $p < .01$ ), and, to a lesser extent, relationships with peers ( $\beta = .06$ ,  $p < .05$ ) and how well the child perceives he is doing in school ( $\beta = .06$ ,  $p < .05$ ). There were more significant predictors of emotional well-being than physical health in males among the social DOH. Relationships with peers ( $\beta = .33$ ,  $p < .01$ ), relationships with family members ( $\beta = .24$ ,  $p < .01$ ), how well the child feels he is doing in school ( $\beta = .20$ ,  $p < .01$ ), and how the child feels about school ( $\beta = .07$ ,  $p < .01$ ) were all positively related to the child's emotional well-being.

Similarly, with females, DOH accounted for 3% of the variance in physical health ( $p < .01$ ) and also significantly improved the prediction of emotional well-being ( $R^2 = .41$ ,  $p < .01$ ). As with male children, physical health in females was predicted by income level ( $\beta = .13$ ,  $p < .01$ ), but relationships with friends was also positively related to a female child's health ( $\beta = .08$ ,  $p < .01$ ). Emotional well-being was predicted by all of the DOH: relationships with friends ( $\beta = .37$ ,  $p < .01$ ), and family members ( $\beta = .26$ ,  $p < .01$ ), how well a child felt she was doing in school ( $\beta = .18$ ,  $p < .01$ ), how she felt about school ( $\beta = .11$ ,  $p < .01$ ), and income level ( $\beta = .04$ ,  $p < .05$ ).

The second question to be explored before testing the three models is: do social determinants of health predict activity participation? This was tested by performing a series of linear regression analyses. The activity variables were regressed onto the social determinants of health for each gender.



Table 12a  
Relationship Between Social Determinants of Health and Extracurricular Activity Participation Among Males

Predictor	Sports with a Coach			Arts			Clubs		
	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$
Social Determinants of Health	.065	19.26**		.02	5.01**		.01	2.47*	
Income			.20**			.10**			.06*
Family Scale			-.02			.03			-.01
Friends Score			.14**			.00			-.06*
How well doing in school			.05			-.02			.02
How feel about school			.02			.09**			.05

Note. \*\*p<.01. \*p<.05.

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Table 12a. presents the results of these regressions for the male subgroup. The determinants of health predicted participation in each activity, confirming the second requirement of the mediator analysis for males. Specifically, DOH accounted for 6.5% of the variance in participation of sports with a coach ( $p < .01$ ). Income level ( $\beta = .20$ ,  $p < .01$ ) and relationships with friends ( $\beta = .14$ ,  $p < .01$ ) were both positively related to playing sports with a coach. DOH also predicted male participation in arts, music, or other lessons ( $R^2 = .02$ ,  $p < .01$ ). Again, income level was positively related to participation ( $\beta = .10$ ,  $p < .01$ ), but so was how a child felt about school ( $\beta = .09$ ,  $p < .01$ ). The social determinants of health accounted for a small but significant proportion of the variance in participation in clubs ( $R^2 = .01$ ,  $p < .05$ ). As with the other two activities, income level predicted participation ( $\beta = .06$ ,  $p < .05$ ). However, unlike the other activities, relationships with friends was *negatively* related to involvement in clubs ( $\beta = -.06$ ,  $p < .05$ ).

Table 12b  
Relationship Between Social Determinants of Health and Extracurricular Activity Participation Among Females

Predictor	Sports with a Coach			Arts			Clubs		
	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$
Social Determinants of Health	.03	7.60**		.03	8.04**		.01	2.27*	
Income			.13**			.13**			.02
Family Scale			-.02			.03			-.07*
Friends Score			.07*			.03			-.02
How well doing in school			.03			.06*			.06*
How feel about school			.02			-.03			.02

Note. \*\*p<.01. \*p<.05.

Table 12b. shows that the social determinants of health also predicted activity participation in females for all three activities. Less of the variance in activity participation was accounted for by the social determinants of health in females than in males. Determinants of health predicted involvement in sports with a coach ( $R^2=.03$ ,  $p<.01$ ). Specifically, as with the males, income was positively related to participation ( $\beta=.13$ ,  $p<.01$ ), as was relationships with friends ( $\beta=.07$ ,  $p<.05$ ). Finally, involvement in clubs was weakly predicted by the social determinants of health ( $R^2=.01$ ,  $p<.05$ ). Relationships with family members ( $\beta=-.07$ ,  $p<.05$ ) and how the child felt about school ( $\beta=.06$ ,  $p<.05$ ) were related to participation in clubs and other such groups.

The third and final question to address before further analysis into the role of activity participation is: does activity participation predict health outcomes? This relationship was evaluated by regressing physical health and emotional well-being onto the activity variables for each gender.

Table 13  
Relationship Between Extracurricular Activity Participation and Health Outcomes, by Gender

Predictor	Males			Females		
	Physical Health		Emotional Well-being	Physical Health		Emotional Well-being
	$\Delta R^2$	F	$\Delta R^2$	$\Delta R^2$	F	$\Delta R^2$
Sports with a Coach	.015	22.165**	.008	.005	6.925**	.009
Arts, Drama or Music	.004	5.827*	.001	.003	5.013*	.009
Clubs	.000	.194	.001	.001	1.224	.000
						.051

Note. \*\*p<.01. \*p<.05.

Males: n=1749; Females: n=1685

The results presented in Table 13 show that playing sports with a coach predicted a small but significant amount of the variance in health outcomes for males and females. Involvement in arts, music or drama activities accounted for less than 1% of the variance in the physical health of boys and girls and the emotional well-being of girls. Finally, participation in clubs did not predict health outcomes in this age group.

#### The Role of Activity Participation in the Relationship between Social Determinants of Health and Health Outcomes

The previous analyses (see Tables 11-13) showed that relationships exist between social determinants of health, activity participation, and health outcomes in 10 and 11 year old children. Many of these relationships, although significant, were weak. However, analysis was continued in order to examine the role that activity participation might play in the relationship between social determinants of health and physical and emotional well-being.

The role of activity participation was tested in three models: mediator, moderator and independent-effects. Baron and Kenny (1986) described models for determining causal effects of independent variables when predicting an outcome measure. They presented models for mediator and moderator effects. These models were used by Wild, MacDonald and Wells (1997) to examine the relationship between alcohol consumption, non-drinking variables, and alcohol-related problems. They also tested whether non-drinking variables had an effect on alcohol-related problems that was independent of consumption level (an independent-effects model).

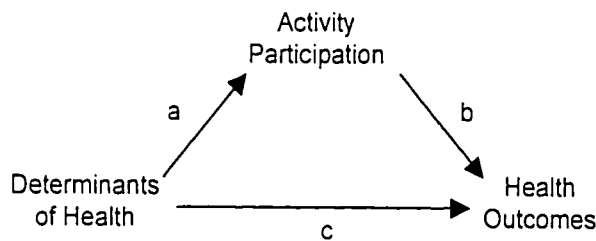
The following analyses were used to test if and how activity participation influences the relationship between social determinants of health and health outcomes for 10 and 11 year old children in Canada. Does activity participation modify the relationship between DOH and physical health or emotional well-being? If so, is this modification best described by mediating or moderating effects of activity involvement, or do DOH and activity participation have direct, unrelated effects on health outcomes?

This analysis will follow the format of Wild et al.'s study, which was based on models and techniques outlined by Baron and Kenny (1986).

### Mediator Model

A mediator is a factor that intervenes between the independent and dependent variables. It represents the main path through which an independent variable is able to influence an outcome. Mediation implies that the social determinants of health affect health outcomes (physical health and emotional well-being) only *indirectly*, through effects of activity participation (see Figure 5, paths a & b). Path c represents the original relationship that might be improved by the presence of a mediator.

Figure 5  
Mediator Model



If activity participation functions as a mediator between the social determinants of health and health outcomes in 10 and 11 year old children, the following three conditions should be observed:

1. DOH predict health outcomes (path c in Figure 5)
2. DOH predict the mediator (activity participation) (path a in Figure 5), and
3. When the mediator is controlled for, the effect of DOH on health outcomes is substantially reduced (or zero in the case of perfect mediation).

The first two requirements for mediation were confirmed for both genders by the previous analyses. The social determinants of health were found to predict physical health and emotional well-being (see Table 11), and also participation in sports, arts, and clubs activities (see Tables 12a & 12b). The final condition for mediation is that the effects of the social determinants of health on health outcomes are substantially reduced when the potential mediator is included in the equation. A number of hierarchical linear regressions were carried out to test this requirement. Physical health and emotional well-being were regressed (in



separate equations) onto activity participation (step one) and the social determinants of health (step two).

Table 14

Relationship Between Social Determinants of Health and Health Outcomes, Controlling for Potential Mediator

Predictor	Males						Females					
	Physical Health			Emotional Well-being			Physical Health			Emotional Well-being		
	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$
Activity Participation (Step 1)	.02	7.67**		.01	4.68**		.01	3.37*		.02	7.00**	
Sports with a Coach			.12**			.09**			.06*			.08**
Arts			.04			.03			.05			.09**
Clubs			-.01			-.04			.02			-.02
Social Determinants of Health (Step 2)	.02	4.98**		.33	125.11**		.03	7.03**		.39	174.69**	
Income Level			.11**			-.01			.12**			.03
Family Scale			.02			.24**			.05			.26**
Friends Score			.04			.33**			.07*			.37**
How well doing in school			.06*			.19**			.00			.17**
How feel about school			.00			.08**			.02			.12**

Note. \*\*p<.01. \*p<.05.

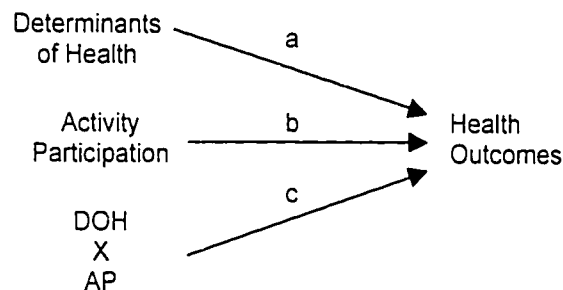
The results from these final analyses are presented in Table 14. For males, once activity participation was controlled, the social determinants of health still accounted for a significant percentage of the variation in physical health ( $R^2=.02$ ,  $p<.01$ ) and a high percent of the total variation in emotional well-being ( $R^2=.33$ ,  $p<.01$ ). Therefore, since the effect of determinants of health on the two health outcomes were not substantially reduced by the addition of activity participation to the model, involvement in activities *does not* act as a mediator between DOH and either physical health or emotional well-being for males; the final condition for mediation was not met.

The same results were found for female children. The social determinants of health still predicted physical health ( $R^2=.03$ ,  $p<.01$ ) and accounted for a substantial portion of the variance in emotional well-being ( $R^2=.39$ ,  $p<.01$ ) after activity participation was entered in the model. This means that activity involvement does not function as a mediator between determinants of health and health outcomes in females.

#### Moderator Model

A moderating variable affects the direction and/or strength of the association between an independent variable and an outcome variable (Baron & Kenny, 1986). A moderating relationship suggests that the social determinants of health interact with activity participation in some way to predict health outcomes, i.e., the relationship between DOH and health outcomes changes as a function of activity participation (see Figure 6). If there is a moderator effect present, the effects of any of the social determinants of health should differ by participation or nonparticipation in certain activities.

Figure 6  
Moderator Model



The existence of a moderating relationship in this situation was tested by creating cross-product variables for each social determinant of health and each activity. Next, a hierarchical regression analysis was run wherein physical health and emotional well-being were regressed (in separate equations) onto all of the DOH and activity variables in step one, and then onto all of the interaction terms in step two.

Table 15

Effect of Determinant of Health-Moderator Interactions after Controlling for Social Determinants of Health and Activity Participation, by

Gender - Moderator Analysis

Predictor	Males						Females					
	Physical Health			Emotional Well-being			Physical Health			Emotional Well-being		
	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$
Social Determinants of Health and Activity Participation (Step 1)	.04	6.03**		.34	80.81**		.03	5.69**		.41	113.55**	
Income Level			.11**			-.01			.12**			.03
Family Scale			.02			.24**			.05			.26**
Friends Score			.04			.33**			.07*			.37**
How well doing in school			.06*			.19**			.00			.17**
How feel about school			.00			.08**			.02			.12**
Sports with a Coach			.09**			.00			.04			.02
Arts			.03			.01			.03			.04*
Clubs			-.01			-.02			.02			.00
Interaction Effects (Step 2)	.01	1.30		.01	.74		.01	.77		.01	1.67*	
Income x Coach												-.04
Family x Coach												.17
Friends x Coach												-.21

School well x Coach	-.20
School feel x Coach	.02
Income x Arts	.14*
Family x Arts	-.05
Friends x Arts	.20
School well x Arts	.10
School feel x Arts	-.03
Income x Clubs	.11
Family x Clubs	.00
Friends x Clubs	-.08
School well x Clubs	.21
School feel x Clubs	.13

Notes: \*\*p<.01. \*p<.05.

Table 15 presents the results for the moderator analysis. Only one interaction effect was significant in the regression equation. Participation in arts, drama or music moderated the effect of income level on emotional well-being among females ( $\beta=.14$ ,  $p<.05$ ). Although this was not a strong relationship, it was a significant finding and therefore further analysis was undertaken to explore the nature of the relationship (see Figure 7).

Figure 7

Moderating Effect of Arts Participation and Income Level on Emotional Well-being of Females

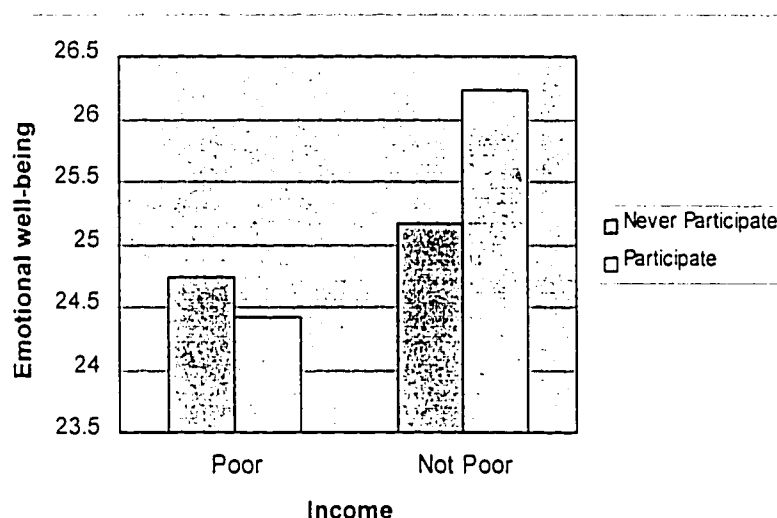
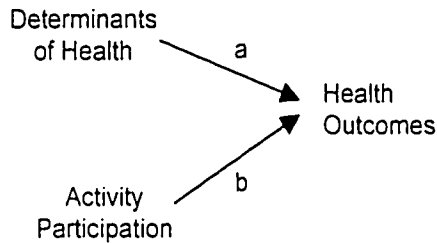


Figure 7 shows the results of the interaction effect between income level and participation in arts, drama or music activities for female children. Further investigation revealed that the difference between participation and nonparticipation in arts was only significant for girls who were not poor ( $t=-3.845$ ,  $p=.000$ ). Among children who were well-off, those who were involved in arts activities had higher levels of emotional well-being than those who were not involved. Therefore, involvement in arts activities had a significantly beneficial effect on the emotional well-being of female children, but only for those who were not poor. There was no significant impact of involvement for poor children.

### Independent-Effects Model

The third model tested by Wild et al. (1997) was an independent-effects model (see Figure 8). If this model were true, both determinants of health and activity participation would have direct and unrelated effects on physical health or emotional well-being.

Figure 8  
Independent-effects Model



The final condition of the mediator analysis (see Table 14) revealed that the social determinants of health still had significant effects on the physical health and emotional well-being of males and females after activity participation was entered in the equation. Therefore, the determinants of health have an effect on child health independent of activity participation.

To complete the second part of the test of this model, child health was regressed onto activity participation after controlling for the social determinants of health. If activity participation still predicted health outcomes then the determinants of health and activity involvement were independent predictors of child physical health and/or emotional well-being.



Table 16

Relationship between Activity Participation and Health Outcomes, Controlling for Social Determinants of Health

Predictor	Males						Females					
	Physical Health			Emotional Wellbeing			Physical Health			Emotional Wellbeing		
	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$	$\Delta R^2$	F	$\beta$
Social Determinants of Health (Step 1)	.03	7.32**		.34	129.43**		.03	8.18**		.41	179.99**	
Income Level			.13**			-.01			.13**			.04*
Family Scale			.02			.24**			.04			.26**
Friends Score			.05			.33**			.08**			.37**
How well doing in school			.06*			.19**			.00			.17**
How feel about school			.01			.08**			.02			.11**
Activity Participation (Step 2)	.01	3.82*		.00	.20		.00	1.51		.03	2.07	
Sports with a Coach			.09**									
Arts			.03									
Clubs			-.01									

Note. \*\*p<.01. \*p<.05.

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As Table 16 shows, there was only one significant factor remaining after controlling for the determinants of health. Participation in sports with a coach predicted physical health in male children, independent of the social determinants of health ( $\beta=.09$ ,  $p<.01$ ).

It is worth acknowledging that none of the Betas in these analyses were over 0.37, and the highest statistically significant Beta of a relationship that involved an activity variable was 0.20. However, because of the presence of statistically significant relationships in this large and representative sample, it was believed that it would be useful and interesting to test the three separate models. Therefore, the extensive analysis was completed and reported. The objective was to gather more information about the effect of extracurricular activity participation in 10 and 11 year old Canadian children in the relationship between social determinants of health and health outcomes.

### Summary of Quantitative Study Results

#### Initial Analysis

Initial analysis reported the activity participation rates of 10 and 11 year old Canadian children, using data from the National Longitudinal Survey of Children and Youth. The rates of involvement in sports were higher for boys, while more girls were involved in arts activities. The highest participation rates were in sports with a coach: 72% of boys and 64% of girls were involved. Thirty one percent of boys and 54% of girls were involved in arts activities, while the rates for clubs were only 23% and 31% respectively. Participation rates were higher for unstructured activities such as watching television, playing sports without a coach, and playing computer or video games. Relationships between the structured activities were weak, but significant. The strongest correlation was between arts activities and clubs ( $r_s=.168$ ,  $p_s<0.01$ ).

The remainder of the analysis was conducted using dichotomized activity variables (i.e., “never” and “participate”), and male and female subgroups. For females, the relationship between involvement in arts and sports participation was the strongest ( $r=.235$ ,  $p<0.01$ ), while the arts-clubs association remained the highest for males ( $r=.146$ ,  $p<0.01$ ).

### Further Analysis

The second part of the quantitative study examined the role of extracurricular activity participation in the relationship between social determinants of health and health outcomes. First, the individual relationships between these three factors were explored. The relationship between the social determinants of health and health outcomes was significant, but surprisingly weak. The DOH accounted for 3% of the variance in physical health of boys and girls. The relationship with emotional well-being was stronger, as the DOH accounted for 35% of the variance in boys and 41% in girls. Despite this weak original relationship, the analysis was continued, as it would provide information about the effect of extracurricular activities on this relationship. The DOH were also found to predict the three activity variables, explaining between 1% and 6.5% of the variance in activity involvement. Finally, participation in sports with a coach and arts activities weakly predicted health outcomes for males and females, while involvement in clubs did not affect health outcomes.

The next step was to test mediator, moderator and independent-effects models in order to examine the role that activity participation might play in the relationship between DOH and health outcomes.

#### Mediator model

The fact that the determinants of health still accounted for a significant percentage of the variation in physical health and emotional well-being after activity participation was entered in the analysis proved that activity participation did not act as a mediator between determinants of health and health outcomes for either males or females.

#### Moderator model

Only one interaction effect was significant in the moderator analysis. Among females who were not poor, those who participated in arts, drama or music activities had higher levels of emotional well-being than those who were not involved. No differences in emotional well-being were observed for participation vs. nonparticipation in arts activities among poor females.

#### Independent-effects

This final analysis revealed that participation in sports with a coach predicted physical health in male children, independent of the effects of the social determinants of health.

## CHAPTER 5

### ANALYSES AND RESULTS OF QUALITATIVE STUDY

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#### Introduction

This chapter presents the analyses and results of the qualitative study. First, the focus group analysis literature and process are reviewed. Then the results are presented. Ten themes emerged from the focus group data and are presented with supporting evidence. Additional analysis was undertaken on three aspects of the discussions that were considered important to extracurricular activity programming: the significance of gender in activity participation, the students' preference for and involvement in structured or unstructured activities, and their preference for community- or school-based activities. The data from the questionnaires were then analyzed and the results, including whether they validate the themes from the focus group analysis, are reported. Finally, the validity of the results is examined.

#### Focus Group Analysis

##### Literature

Marshall and Rossman (1995) describe qualitative data analysis as a "messy, ambiguous, time-consuming, creative and fascinating process" (p. 111). The analyst has to immerse herself in the data and continuously review and interpret the information and recognize and test emerging patterns and themes. In this process it is necessary to make some assumptions, but the analyst must be careful about attributing causation (Krueger, 1998). Patton (1990) stated that there should be an "emphasis on illumination, understanding and extrapolation rather than causal determination, prediction and generalization" (p. 424). It is important that this process be rigorous.

##### Analysis Process

The data analysis process began with the organization and review of transcripts and researcher's notes. Then the available demographics and activity involvement of each participant was compiled. The group process was explored by detailing the chronology of each

discussion and internal consistency was checked by pulling out each respondent's contributions to the group and checking for changes in opinion.

Data collected from the focus groups was subjected to a rigorous content analysis (Marshall & Rossman, 1995). The content analysis was focused on facilitators and barriers to participation in extracurricular activities. Key words and meanings/ideas were extracted from the transcripts and then compiled. Categories were generated based on key words and ideas from the data, and a coding framework was developed (Kitzinger, 1996). The four overarching categories were facilitators, barriers, motivators, and demotivators. Facilitators and barriers are logistical factors that make it easy/possible or difficult/impossible for students to participate (e.g., the activity is available at my school, the activity costs too much so my parents won't sign me up). Motivators and demotivators are factors that, in the child's opinion, make it more or less desirable to participate (e.g., the activity is fun, I don't know anybody in that activity). The raw data was then coded by category. Quotes were extracted from the group interviews to substantiate each of the categories. Categories were modified as directed by the data. Coding was completed when it was believed that all relevant data was captured in the categories. Themes, linking together the four overarching categories and different interviews and increasing understanding of activity participation, were developed and are presented.

Three questions were examined individually because they were believed to be of importance to extracurricular activity programming, independent of the rest of the information on facilitators, barriers, motivators and demotivators:

1. Do you think girls and boys do different types of extracurricular activities? Who does more?
2. Do you prefer structured or unstructured activities?
3. Do you think kids your age do more school-based or community-based extracurricular activities?

The likelihood of a rigorous analysis was increased through the following:

- A chronology of each group was completed and it was determined that the process was similar in each group. This enhances the reliability of the findings.
- The same facilitator and interview script were used in each of the focus groups, again, increasing reliability.

- Descriptive information of each school and participant was compiled in order to better understand the context of each group.
- The reliability of the study was also enhanced by the audio recording of the sessions to ensure accurate transcription, meticulous note taking during the sessions, and by comparing agreement of coding assignments between raters following the analysis (i.e., inter-coder agreement).
- A respondent-by-respondent analysis was done. Each participant's contributions to the group discussion were extracted and examined individually to determine if there was internal consistency: i.e., did their opinions change throughout the session? Examples of wavering opinions were found in a few of the focus groups and were excluded from the analysis.
- Validity was enhanced by the triangulation of the focus group data with the completed questionnaires. Validity of the emerging themes was enhanced by using independent raters to code the focus group data and then calculating the percentage agreement between the raters and the researcher.
- The researcher kept a journal of ideas, concerns, and also documented each step of the analysis. This was a way to monitor the analysis process and strategy and any personal biases.

The results of the research were valid within the parameters of the specific setting, population, and theoretical framework (Marshall & Rossman, 1995, p. 143). The findings were not expected to be generalizable to other settings or populations. However, by triangulating the data with the information gained through the questionnaires and the literature review, conclusions are believed to be more concrete.

#### Focus Group Participants

A total of 56 students participated in the eight focus groups. Table 17 shows the demographic breakdown.

Table 17

Focus Group Participant Demographics

	Number of participants
Grade 6	28
Grade 8	28
Male	11 grade 6, 11 grade 8
Female	17 grade 6, 17 grade 8
Catholic School System	36
Public School System	20
Low-income	15
Middle-income	27
High-income	14

## Focus Groups Analysis Results

Ten themes emerged from the focus group data.

1. *Fun*. When asked “why do you (or kids your age) participate in extracurricular activities”, one of the first responses was inevitably “because they’re fun”. Enjoyment was a primary reason for activity involvement, and nonenjoyment was a common reason for quitting.
2. *Social reasons*. Children indicated that they chose their activities in order to be with their friends, or to meet new people.
3. *Other key motivators*. Common reasons for participation that were indicated in the majority of discussion groups included “something to do”, distraction (from school), and incentives such as bonus marks in class or monetary rewards.
4. *Availability*. A prominent facilitator or barrier of activity participation was whether activities were available to students. Factors affecting availability included school level (elementary, junior high or high school), the season or time of year, and if an



acceptable variety of activities were offered.

5. *Resources.* Another dominant determinant of activity involvement was the existence or non-existence of resources that were required to participate. Crucial resources included money (in the household, and also how “rich” the school was), equipment, and time (i.e., the competition for time between extracurricular activities and other activities or tasks such as schoolwork).
6. *Accessibility.* Factors such as the location of the activity, available transportation and parents’ schedules affected activity participation.
7. *Personal factors.* The early adolescents mentioned that elements of an individual’s personality (e.g., commitment, self-esteem, “laziness”, or desire to stay in shape) affected activity participation. As well, the desire for fame, or to be like someone they admired, and a fear of being teased influenced students’ activity involvement. Another related factor that acted as a facilitator or barrier to involvement was demographics, most notably the child’s age (i.e., too old or young for an activity), culture and gender.
8. *Characteristics of the activity.* Features of the activity itself often swayed a student’s decision to participate or not. For example, whether the activity was perceived as safe or dangerous, or competitive or noncompetitive influenced involvement. Selection criteria affected participation, as well as the length of the season or number of games, and team and coach/instructor characteristics (e.g., the skill or mentality of the team, whether the instructor was “mean” or encouraging).
9. *Mandatory participation vs. choice.* Whether a student participated in an activity or not was often perceived to be because of factors beyond his or her control, primarily parents “forcing” him or her to be involved. Early adolescence is a time of increasing independence and this is evident in students’ reasons for participation or nonparticipation in extracurricular activities.
10. *Influencers – opinions and past experience.* Students were asked about the influence of parents, friends and teachers on their extracurricular activity participation. The

majority of their responses fit under other themes (e.g., characteristics of the activity (i.e., “mean” coaches) or mandatory vs. choice (i.e., parents “forcing” the child into an activity)). However, students also mentioned that friends, family and others offered them advice about certain activities based on their own opinions and past experiences that influenced whether they became involved or not.

Supporting evidence is presented for each of the 10 themes. Following each quote is the gender and grade level of the respondent. In the cases where an excerpt from a conversation is presented, F will be used to indicate the facilitator’s words and R will be used to represent the respondent’s contributions.

### Fun

Enjoyment was a very popular reason for involvement in extracurricular activities. This was true for both grade 6 and 8 students, at any income level, in either school system.

The main reason most people do extracurricular activities is to have fun. (Female, Grade 8)

Just as long as you’re having fun. That’s all that pretty much counts. (Male, Grade 6)

Boredom with an activity indicated nonenjoyment, and nonenjoyment was a common reason for quitting:

R: I used to teach ping pong but... (Male, Grade 6)

F: Go ahead. You used to teach ping pong... and then you don’t anymore.

R: Not anymore, no.

F: How come?

R: I just got tired of it.

I used to be in the writing club. Oh my god it was so boring. You had to write, like, stuff that started with “A”. (Female, Grade 8)

Some students stated that practicing was not enjoyable and led to either less desire to do the activity, or to quitting altogether.

Cuz I have to practice 45 minutes a day and it takes too long. And it’s just boring. (Male, Grade 6)

I used to be in piano and ballet, but they were fairly slow and I hated practicing. (Female, Grade 6)

### Social Reasons

Students in all of the groups participated in extracurricular activities for social reasons. Some wanted to be with their current friends:

It's funner to be with your friends. (Female, Grade 8)

Well, nobody wants to be at like, if you're like at a sport you don't want to just sit there and have no friends. (Female, Grade 8)

F: OK. Why is it easier to go with your friends?

R1: You're more comfortable with them. (Female, Grade 8)

R2: You know someone there. (Female)

R3: Yah. (Male)

Other students became involved in activities to expand their social networks:

You want to meet more people. (Female, Grade 6)

But in structured activities if you like the people, you get to meet new people, you get to find out new interests and stuff like that. (Female, Grade 6)

While the majority of students who expressed a desire to be with their friends and people they already knew were in grade 8, it was mostly grade 6's who thought a benefit of activities was the opportunity to meet new people. Two grade 8 female students had an explanation for this:

R1: But now [that you're older] you're sort of shyer. (Female, Grade 8)

R2: You can't make friends as easy. You don't go up to somebody "do you want to be my friend?" (Female)

As with the "fun" theme, responses did not differ by income level of the school or by school system.

### Other Key Motivators

A few important factors that motivated students to either join or remain in activities came out of the discussion groups. First, respondents indicated that they, and kids their age, were in activities for "something to do":

Maybe they get bored not doing anything and they want something to do to get away from home. (Male, Grade 8)

Pass the time. (Male, Grade 8)

It's a lot more exciting than staying home on Saturday and eating potato chips on the couch. (Female, Grade 6)

"Something to do" was a universal reason for joining activities. It was mentioned by grade 6 and grade 8 students, over all income levels and in both school systems. A second key motivator was that activities offered a distraction from school:

In the community you don't have to listen to teachers. (Male, Grade 6)

Because your mind is not on school. (Male, Grade 8)

And your teachers aren't your coaches or anything. (Female, Grade 8)

In one group, during a discussion about school- versus community-based activities, the students interpreted "community-based" as "away from school" and students stated their preference to be "away from school".

Finally, students were involved in activities because of incentives offered to them:

Like our gym teacher, if you're in a sport you get extra marks, like on a school or community team you get bonus marks. (Male, Grade 8)

Yah, I'd like to cut some stuff like German school... The only reason I'm doing it is because I'm getting high school credits. (Male, Grade 8)

I play the violin cuz I get paid by my mom... Cuz I wouldn't do it on my own free will. (Male, Grade 8)

I'm still in Portuguese dancing because you get free food and you get in parties free. I don't mind the free food! (Female, Grade 6)

Incentives were more relevant for grade 8 students. Bonus marks or extra class credit was mentioned only in the groups in the Public School System and only by grade 8 students. This may have been because they were of closer age to high school, and they would therefore be more aware than students in elementary school of the benefits offered in high school for extracurricular activity participation.

### Availability

The unavailability of activities was a barrier to participation talked about by the students. Availability was mentioned in all of the groups.

Grade 6 students felt that more activities were offered in the communities than in the schools:

Like hockey, the school doesn't have a hockey team... so then you go to the community. Like maybe the school doesn't have enough options. (Male, Grade 6)

You can't do the same things in school as you can outside of school. (Male, Grade 6)

In elementary school there's not like really any teams. In community it's more teams, like basketball team or something. (Female, Grade 6).

Additionally, grade 6 students noted that their elementary schools didn't have many activities, but they knew that there would be more available once they moved to junior high or high school:

Only in the community. Next year, like in junior high, we'll be able to have a team. (Female, Grade 6)

Elementary they don't really have basketball teams and hockey teams, and like at [a junior high/high school in Edmonton] they have like basketball teams and stuff. (Male, Grade 6)

One grade 8 student had a different perspective on availability:

R: There's always something that you can sign up for at school, and if you don't like anything then you can always make opportunities for yourself. (Female, Grade 8)

F: You can make opportunities?

R: Yah, because it's a big city, there are so many things that you could do.

Both grade 6 and grade 8 students, over all income levels and both school systems, noted that season or time of year was component of availability:

Um, well, one thing I think it's more in the summer because there are more activities to do, like outdoor activities when it's nice out. (Female, Grade 6)

Well, in summer people usually like to do more activities and then in winter people lay back and just are relaxed, they don't really want to do much. (Female, Grade 8)

And some sports [in school] are only for some seasons of the year. Like volleyball is only for the beginning of the year and then it's basketball. (Female, Grade 8)

Very few students felt that kids did more activities in the wintertime:

Well, like there might be more people in the wintertime cuz it's really cold and like they want to go do something instead of just staying in the house and not doing anything so they might like to out and join indoor sports or something. (Female, Grade 6)

At one school the respondents had a problem with the time of day of tryouts for one activity:

Too early in the morning! (Male, Grade 8)

### Resources

Another facilitator or barrier to activity participation mentioned in each of the discussion groups was the importance of resources (i.e., money, equipment, and time).

At least one student in each of the focus groups mentioned the cost of activities. Students recognized that participation was an expense for their parents:

Parents may not have enough money at the time for that. (Female, Grade 6)

Tae kwan do. My dad was going to sign me up but it's \$300. (Female, Grade 6)

Like sometimes they cost a lot and maybe you don't have that money. (Female, Grade 6)

Although students recognized that activities could be expensive, they noted that there existed free alternatives to costly extracurricular activities, or options available to help fundraise:

...there's a lot of free things to do and they don't cost you money...So you don't need money to have sports. It's not like you need to be rich. Like if you like skating and you can't pay for hockey, well then you go to the free skate and you go to the public skate. (Male, Grade 6)

Not just community sports but there's these other ones, sometimes, there's a paper, and say people can't afford it, for each one they go practice and play games at school just for fun, you don't have to pay anything, but you have to look in these papers for your community, so that's an opportunity for people who maybe can't afford it as much. (Female, Grade 6)

Yah. But you need money to get into the league. But what you could do is you could just get a couple of friends and just play on your own, like just have a little fun. (Male, Grade 6)

For soccer, it costs a lot of money, and then plus, they have, you can get track suits, you can get all this stuff extra. And a lot of people, they can do Bingos to work it off, but most people don't like to do them cuz there's like twelve, or you can pay a lot of money. (Female, Grade 8)

Some students felt that equipment was a major part of the expense, and the lack of equipment in schools was a barrier to enjoyable participation:

There's money, like football, for equipment and everything. (Male, Grade 6)

There is a limit for some people because the equipment is too expensive and so not everything is available to them. (Female, Grade 6)

Like [fellow participant] said, like in hockey, in school, we're not allowed to raise the puck. But in real hockey they raise it because they have equipment. (Female, Grade 6)

A few students felt it was free to do activities offered at school. But one girl explained the situation differently:

Most of the time it isn't free, like if you go on trips or something, like the concert band, you have to pay like \$200 for the band trip, and in basketball you have to pay for the jersey, and going on tournaments and everything, it usually costs money, it's not usually free. But it is usually cheaper though. (Female, Grade 8)

Students also believed that the wealth of the school affected the number of activities offered:

Depends how much your school has. Like it depends how much money your school has... There would be lots of sign up things. We don't have a really rich school. (Male, Grade 6)

Yah, like there's more choices and stuff that you can do in community. Like, limited to what you have to do and how much money the school has. (Female, Grade 6)

Another universal occurrence was the feeling that students didn't have time to do many activities. There is a finite amount of free time available to early adolescents. Activity participation may be limited due to the necessity to complete other tasks such as schoolwork or the desire to do other things like hang out with friends. Some students felt "stressed out" because they had too much to do and too little time. When asked if they would like to do more activities, students responded:

Some people would want to do more things, they just don't have the time. (Male, Grade 6)

I'd say no because the more stuff you do the more stressed out you're going to be and if you have like lots of homework or something you won't be able to get it done or else you'll be like staying up past midnight. (Female, Grade 8)

Maybe they're too busy. Like doing homework or something. (Female, Grade 8)

R1: There's too much homework. (Female, Grade 6)

F: They have too much homework, so they're busy.

R2: I agree. (Male)

R3: Not enough time. (Male)

I do soccer, lots of soccer, both indoor and outdoor, I do piano, and that's basically all I can do because soccer takes up so much time. (Female, Grade 8)

Well, because I'm in cheerleading and I'm in band and that's after school, and then I hardly have enough time to do my homework and we usually have an hour of homework every

night. And then on other days of the week I'm usually hanging out with my friends so I don't have any time for my homework. (Female, Grade 8)

At one school, respondents felt that sometimes the time that extracurricular activities took up was a benefit:

R1: ... it's really easy on Saturdays, I have a whole bunch of chores to do but they never pay me allowance so I never do them. They'll be like "clean your room" and I'll be like "no, can't, got to go, swimming lessons." (Female, Grade 6)

F: OK. So it's a good way to get out of chores.

R2: It's a good way to get out of babysitting your little brother. (Female)

### Accessibility

Throughout the discussions, factors such as the location of the activity, transportation, and parents' schedules were mentioned as facilitators or barriers to extracurricular activity participation. Students in six of the eight groups talked about some aspect of access.

When speaking about the location of activities, grade 8's talked about the easy access to school-based activities, while grade 6's, who participate in more community-based activities, mentioned the location as a barrier:

But with school-based it's also easier to get to because if it's like after school you're already at school, so you don't have to go anywhere. (Female, Grade 8)

You have better access to [school-based activities]. (Male, Grade 8)

Cuz maybe they live too far away. Maybe they're not in the right, like not city, but sometimes for schools you're not in the area. (Female, Grade 6)

Transportation to and from activities was mentioned in a few of the groups, but the students believed that it wasn't a major obstacle:

My parents drive me there or I car pool with other people who go there. (Male, Grade 8)

R1: Um, like my sister she goes to gymnastics and her gymnastics is all the way across, it's down at Kinsmen, the Kinsmen Sports Centre, so she goes there, one person drives, and the other picks up. (Female, Grade 6)

F: So if they really want to do something a lot of times they can overcome some obstacles?

R2: Well, on my basketball team we have a driving schedule and we have everyone's phone number, so if anybody needs a ride they can call. (Male)

A few students noted that their parents' schedules affected their ability to be involved in activities:



R: And sometimes if your parents are working late or staffing and they work late and there are only certain hours and times that can interfere. (Female, Grade 8)

F: So your parents might not be able to drive you somewhere.

R: Right.

R: I don't do running anymore because I don't have that much time, and it's like on the weekdays and stuff, and so I just... (Female, Grade 6)

F: So you don't have time to do the races, so why don't have time, like what else are you doing?

R: Cuz my mom is so busy and stuff, and so she couldn't...

F: Because your mom is so busy and stuff. If your mom wasn't busy would you have time?

R: My dad, he usually is like out of town.

### Personal Factors

The students indicated that elements of an individual's personality affected his or her participation (or nonparticipation) in extracurricular activities. They were also motivated by perceived personal benefits (such as fame) and deterred by potential negative outcomes (such as a fear of being teased). Facilitators and barriers to activity involvement under this theme included academic achievement and demographics.

Determination and commitment were personality traits that were seen as important to extracurricular activity participation:

You have to be determined to go. It's the kind of thing...you have to be really willing to do it. It takes up a lot of your time to do it. (Male, Grade 8)

Sometimes the reason why I don't get involved in things like X club and I kind of quit Y is because, lack of commitment (laughs). (Female, Grade 6)

When asked why they thought kids their age didn't participate in extracurricular activities, a popular response for students in both grade 6 and 8, from every income level and both school systems was:

Because they're lazy. (Female, Grade 8)

R1: Some people don't like doing anything – just watching TV staying at home. (Female, Grade 6)

R2: Lazy. (Male)

I think they don't want to do sports or anything, they don't want to do anything, they just want to be lazy. (Female, Grade 6)

When asked why they, or kids their age, participated in extracurricular activities, students in all but one group (Grade 8) said:

Just to get some exercise. So to stay fit. (Female, Grade 6)

Well, I also do it, to like [stay in] shape. (Female, Grade 8)

Students were motivated to participate if they felt there could be personal benefits, or not motivated to participate if they sensed there could be negative outcomes. Students from the two low income schools visited were the only ones to talk about activities positively affecting self-esteem:

And in a way you're learning discipline, so that you have a better self-esteem. (Male, Grade 8)

R1: It builds up your self-confidence. (Male, Grade 8)

R2: Yah, definitely. (Male)

A few students felt kids participated to be famous:

Image... I know with my soccer team lots of people, they come and try out because they want to be on a high team and they want to be able to say "oh yah, I'm on a really good team." (Female, Grade 8)

But through the school you get famous. (Female, Grade 8)

But if you play in the community you can get spotted by scouts and stuff. (Male, Grade 8)

A couple of students thought that activity participation could benefit their future:

Maybe it would be good for like your college application. If it says you were on a lot of sports teams and stuff. And it says you're very... active. (Male, Grade 6)

I finished the [swimming] lessons. And I want to be a lifeguard, like just until I go to college or whatever, while I'm still in school. (Female, Grade 8)

At one school, a couple of boys who were serious athletes talked about skill development and exercise:

R1: Improves your skills, you get better at it. Like sports, like, you can just play hockey. you can get quicker and stronger with all those practices, you take checks and everything. So you improve your skills physically and everything. (Male, Grade 6)

R2: And stamina and endurance. (Male)

R1: Yah.

R2: And you get your muscles built up, power.

One deterrent to activity participation mentioned in five of the groups (both grade 6 and 8) was a fear of being teased or looking funny:

Maybe they're scared that people will make fun of them. (Male, Grade 6)

The might think that they're not good at it or that they will get teased for the way they look is funny. (Female, Grade 6)

Another thing with the school activities, like, say you did something really embarrassing, like it would go around the whole school and the whole school would end up knowing. (Female, Grade 8)

While a fear of being left out was a deterrent, the desire to belong was a motivator to become involved:

A lot of people that you talk to are in some kind of after school thing, like on a team mostly, like soccer, so then they might think they have to join as well, or want to try out. (Female, Grade 8)

Poor academic achievement as a potential barrier to activity involvement was only mentioned in two grade 8 groups:

... it's kind of like school sports, if you want to stay on the team you have to get good enough grades. (Female, Grade 8)

Yah, because if you're not doing your homework [teachers] can kick you off the team. (Male, Grade 8)

There was a perception by some students that learning was a part of extracurricular activities, which could be good or bad:

...well you can go to the movies or do fun stuff and hang around and if you have to do structured [activities] , I don't know, it's just the same thing to me because you get to do fun stuff and, I don't know, you get to learn sort of. (Female, Grade 6)

R1: Not really. Soccer is structured and it's not like school. (Female, Grade 8)

R2: Yah, but you have to learn all this new stuff. (Female)

Finally, individual demographics such as age, culture or gender were facilitators or barriers to involvement in certain activities. A few students noted that a person's age was relevant – some activities were appropriate for younger kids, or else the students weren't old enough to be involved in certain activities.

As well, a number of students talked about involvement in culture-specific activities (e.g., Chinese school, Portuguese dancing). While these activities may be available to all children, it was evident that the participants were involved in activities that were specific to their personal heritage.

The perceived effects of gender on activity involvement will be discussed following the 10 themes.

### Characteristics of the Activity

There were some features of extracurricular activities that affected students' decisions to participate, including selection criteria, length of activity, variety, activity organization and administration, team or instructor/coach characteristics, and safety.

Both grade 6 and grade 8 students noted the existence of selection criteria that were potential barriers to participation.

...you go to junior high, that's all structured sports and stuff and then you want to make the team and they say "oh, you're not good enough" so you don't make the team then you just go outside and play like shooting with your friends. (Male, Grade 6)

R1: And then we have X [activity] and Y [activity], and then there's... (Female, Grade 6)

R2: No you can't sign up for that... because the teacher picks you. (Male)

Grade 6's haven't been nominated for it yet. (Female, Grade 6)

Sometimes tryouts were perceived as beneficial:

And, like, in community you get tryouts so there's not like bad people and good people on the same team, they're all even. (Male, Grade 6)

Some students noted the absence of selection criteria:

But community you don't even have to try out. Well, unless you're going to go on the rep team or something. But you don't have to try out for teams. (Female, Grade 8)

When asked if they preferred school- or community-based activities, many students in grade 6 and 8 indicated that they liked community activities better. One factor behind this decision was the belief that community-based activities lasted longer (through the year) and students had more opportunity to participate (e.g., more games, more playing time).

R1: It's funner – you get to play longer. (Male, Grade 8)

R2: And the seasons are longer. (Male)

Yah. Lots of times [the community has] more than what they have in school. And they last longer, lots of them. (Female, Grade 8)

Well, um, say for my hockey team, like, you get like a bunch of practices and you do it like 5 times a week, 5 days a week. And in school things you only do it like maybe once a week or two times a week. (Male, Grade 6)

Another reason that students preferred community-based activities was because a variety of activities were available that were not like schoolwork:

Well, because like you can play other teams, you don't just play your friends all the time, you play other people and get some variety. (Male, Grade 6)

...when you're in school they make you do drills and all that but when you join a club you kind of play against the people and do the drills and it's more interesting being in a club and you have like tournaments... (Female, Grade 6)

F: So you thought that reading clubs and writing clubs were kind of boring?

R1 & R2: Uh huh. (Females, Grade 8)

F: Because – why were they boring?

R1: Because you're just doing more schoolwork.

For some students in both grade 6 and grade 8, the organized nature of extracurricular activities was appealing:

Community is a lot more organized. (Male, Grade 6)

Yah, because then you don't have to organize it yourself, you don't have to worry about who's going to be there. (Female, Grade 8)

One problem that students found with community-based activities was the lack of control they felt with the organization or administration:

R: Or, for some sports, I remember X was telling me about baseball. You don't actually get to pick your team. It's just what district you're in. So if you wanted to be on the Y team because they're really good but you live in Z... (Female, Grade 6)

F: You wouldn't get to be on that team. OK. So is there a team in Z you would be on?

R: Mmm hmm. But they might be a sucky team.

But the problem with that, sometimes it's not really fair, like our basketball team right now, well, they gave us like a whole bunch of bad people, and we had like three good people, that's it. (Male, Grade 6)

Um, there are lots of opportunities, but... one of my friends on a soccer team, she wanted to be with us, but there were way too many people on one team, so she had to be forced on another one and I think that... they should tell how many people can go on the team so they should decide before someone signs them up so the people who want to go on [the same team]. (Female, Grade 6)

Some characteristics of the team or coach/instructor discouraged students from participating:

Like next year I'm quitting indoor soccer, well there's two reasons. One, because I want to snowboard more and it takes up too much of my time and two, like I'm on a division 1 team and everyone expects us to win so much. And all of the kids on my team are like obsessed with winning. And I just say "oh well, I'll just have fun". I'm the only one who thinks so. (Male, Grade 6)

F: Music. You don't enjoy those [activities]?

R1: No. The teacher is mean. (Female, Grade 6)

R2: We just don't enjoy the teacher. (Female)

And in normal gymnastics the teacher was really mean so we just quit cuz he was mean. (Female, Grade 6)

Like racism. Like what's with that?... my coach, he's a complete racist. I quit that team. (Male, Grade 6)

The potential for injuries in some activities was seen as a barrier by a few students (or their parents):

Safety is also another thing with sports... cuz some kids, like with football, there are still injuries when we play. (Male, Grade 6)

My parents didn't want me to play lacrosse cuz it's too... violent kind of. (Male, Grade 6)

#### Mandatory Participation vs. Choice

A prominent theme that emerged from every one of the focus groups was that students' participation or nonparticipation was often dependent on the decisions of their parents. A difference between grade 6 and 8 students was evident. The grade 8 students were less influenced by their parents and took more pride in their independence.

By far, more grade 6 than grade 8 students talked about parents forcing them to join or remain in activities or preventing them from becoming involved:

I like most of my activities, but then some of them my mom just makes me do them... I would rather do something that I like. (Female, Grade 6)

My mom, sometimes she forces me, like ballet, stuff like that, but I don't want to, so she said I could choose my own activities, but... if she's not in support of it then I have to change it. (Female, Grade 6)

My mom doesn't want me to do that stuff anymore. (Female, Grade 6)

I have to take piano, my parents won't let me quit. (Female, Grade 8)

R1: Sometimes they push you. (Male, Grade 8)

R2: Yah, they push you too far. If you don't like it and then you're trying to stop and then they make you... then you don't like it anymore. (Female)

A couple of grade 6 students (both were from the same school), voiced that their parents didn't force them:

My mom doesn't sign me up for anything without asking me, cuz she doesn't want to sign me up, I'll just say "I'm not going". (Female, Grade 6)

My dad is not really like that. He's like, well if you want to play hockey then you probably want to go to the rink – if you really want to be a hockey player, he's like "I'm not going to force you to go to the rink, you can go to the rink if you want to." (Male, Grade 6)

A few grade 6 students stated that maybe pushing kids into an activity wasn't necessarily bad, as they could try it out and maybe they would learn to enjoy the activity:

My mom signed my whole family up for tennis. And I thought tennis was like a dumb sport... but after I realized it was kind of good so my mom will sign me up for things but usually I enjoy it after. (Female, Grade 6)

Maybe to get kids started you have to push them into it and say "you've got to do this" and they'll start enjoying it more instead of sitting around so much, they'll actually do something. (Female, Grade 6)

The grade 8 students interviewed were definitely more independent. They felt "forced" in school, but extracurricular activities was a domain they could, for the most part, exert control over. They felt the freedom not to join (or to ask their parents to sign them up) if they didn't think they would enjoy the activity.

If we didn't want to then I don't think we would join. (Female, Grade 8)

Not really. I have my own choices. (Female, Grade 8)

In school you are so pressured, you are pushed to do a lot of things and in activities you can just do whatever you want. (Female, Grade 8)

F: OK, do you think that your parents influence what you do?

R1: Uh, no. (Female, Grade 8)

R2: A little bit, because some things are more expensive and they won't let you. But only a little bit, because they can't make you do anything that you don't want to do. (Female)

There was a feeling from grade 6 students that once they were involved in something, they couldn't quit. However, the grade 8 students didn't have a problem dropping any activity they did not enjoy:

F: No? Like maybe something that you are signed up for that you wish you weren't signed up for?

R1: I guess we wouldn't still be in it if... (Female, Grade 8)

R2 & R3: Yah (Male, Female)

R1: We would just quit.

Two of the grade 8 groups expressed that teachers could influence students to be involved. At one school, four of the participants bitterly discussed one of their teachers who forced them to play on his team and make it their top priority. At the second school, students didn't mention a specific teacher, but did say that some teachers would encourage them to be involved in school activities.

Finally, a couple of grade 6 and 8 students (both from low-income schools) mentioned that activity selection was dependent on individual preference:

It kind of depends on the person because I know I like football but I don't necessarily like soccer, but I like floor hockey, but I don't like outdoor floor hockey...so it depends on the person. (Female, Grade 6)

It depends what kind of activities you like. If you don't like running, you can do swimming or something... (Female, Grade 8)

Yah, I'm not really a big sports person, that's why I don't do sports after school. I don't like it. (Female, Grade 8)

#### Influencers – Opinions and Past Experiences

Parents, friends, and teachers are prominent players in an early adolescent's life and may therefore influence their activity participation or nonparticipation. In earlier themes, how parents could "force" their children to be involved or not involved or how "mean" coaches could make an activity unenjoyable were discussed. But throughout the discussion groups, other evidence of the influence of these people kept emerging, so they were brought together in this final theme. Family, friends and others could influence a child's participation by sharing their opinions or past experience:

Maybe you don't know whether you should sign up and maybe [your parents] did it when they were little and they say "oh, that's fun" or "I don't think you'll like that". (Female, Grade 6)

I would say, um, friends and my sister and brother, because they play sports sometimes, some that I haven't and they enjoy it, and then I'd like to try it. (Female, Grade 6)

Like maybe your friends do something and they tell you how interesting it is so then you want to start it. (Female, Grade 8)

Friends' advice didn't always work out for the best:

...but one of my friends asked me to try piano lessons but I didn't really like it. (Female, Grade 6)



Some participants (all in grade 6) wanted to emulate family members:

Cuz I always want to be like my dad. (Male, Grade 6)

... and then my sisters and brothers, because they're a lot older than me, and they like all the stuff, so I want to be like them. (Female, Grade 6)

One grade 6 group brought up how students are influenced by famous people:

R1: Pro players influence us because we see them and then we think "oh, I want to be like Wayne Gretzky" or something like that, or John Elway. (Male, Grade 6)

F: Do other people think that?

R2: Yah, TV. (Male)

Grade 6 students were more likely to state that they wanted to be like somebody in their family or were influenced by family members. Students in both grades stated that their friends' opinions and experiences were valuable.

#### Additional Analysis of Focus Groups

While the 10 themes above encompass all that was learned about facilitators, barriers, motivators and demotivators behind activity participation in this sample, the responses to three of the questions asked during the discussion groups were examined individually because they were important to activity program planning and independent of the above analysis. The three questions were:

1. Do you think girls and boys do different types of extracurricular activities? Who does more?
2. Do you prefer structured or unstructured activities?
3. Do you think kids your age do more school-based or community-based extracurricular activities?

The results of each of the analyses ties in with some the themes discussed above.

#### Boys vs. Girls

The results of the quantitative study indicated that in the 10-11 year old population, different genders were prominently represented in certain types of activities (i.e., more girls were involved in arts activities and more boys played sports). This finding suggested that gender was a key factor in activity participation and should be examined in the remainder of the study.

In the focus groups, each grade 6 and 8 students' activity involvement (i.e., what structured activities they mentioned being involved in) was examined. Consistent with the findings for 10-11 year old Canadian children, gender differences were easily identifiable. For both grade 6 and 8, most of the boys were involved in sports, while the majority of girls were in both sports and non-sports activities (Note: dance was included as a sport). (See Table 18)

Table 18

Number of Focus Group Participants in Each Activity Type, by Gender and Grade

Activity type	Males		Females	
	Grade 6 (%)	Grade 8 (%)	Grade 6 (%)	Grade 8 (%)
Sports*	6 (54.5)	4 (36.4)	5 (29.4)	2 (11.8)
Non-sports	0 (0)	1 (9.1)	1 (5.9)	3 (17.6)
Both	3 (27.3)	4 (36.4)	9 (52.9)	8 (47.1)
None	<u>2 (18.2)</u>	<u>2 (18.2)</u>	<u>2 (11.8)</u>	<u>4 (23.5)</u>
<u>Total</u>	11 (100)	11 (100)	17 (100)	17 (100)

\* Sports includes dance

Focus group participants were asked about gender activity patterns (i.e., "do you think boys and girls do different activities?"). Grade 6 and 8 students had different opinions about gender and activity participation.

#### Grade 6.

Many grade 6 students believed that there was not much of a difference between boys' and girls' activity participation and felt that activity participation was determined by the individual:

No because, like football they say it's for boys but there are girls teams and stuff. And people think they're like guys sports but they're really not. (Female, Grade 8)

I think no, because some people say, like hockey is only for boys, soccer is only for boys, and like I'm better at soccer than my brother. (Female, Grade 6)

Well, I think girls and boys are the same. Nobody is different. But, you know, cuz guys are guys and girls are girls, but they should be the exact same.... It depends on the type of person you are. (Female, Grade 6)

One theme was the “physical” nature of activities. When the gender question was asked, all participants relayed examples of sports until otherwise prompted by the Facilitator. By this notion, girls who participated had to be “tough”; rough activities were thought to be unsafe for girls and boys to play together.

Because boys are more physical. (Male, Grade 6)

[Student] in our class, she plays hockey with the guys and she body checks. (Female, Grade 6)

R1: We just don't want you guys to get hurt. (Male, Grade 6)

R2: Oh, yah, right, you think that we're not tough enough. (Female)

One group discussed different “cliques” or types of girls and boys that participated only in certain activities:

Like [fellow participant] said, if you're a preppy girl then you might not like soccer, and a preppy boy...then you've got the other ones that are really into like soccer and sports. (Male, Grade 6)

Some grade 6 students (primarily males) felt that boys and girls did different types of activities:

Some girls like dance and stuff... but boys don't do, most boys don't do that stuff. (Male, Grade 6)

Girls do a lot of musical instruments. (Male, Grade 6)

I think yes because girls are interested in more things than guys are. (Male, Grade 6)

One boy noted that opportunities for girls have increased:

...now they've changed it, now you see girls playing football, like before girls would never even thought of playing, but now there's girls beating on boys. (Male, Grade 6)

### Grade 8.

The picture was quite different with grade 8 students. The majority opinion in each of the groups was that girls and boys did different activities:

R1: Boys are more sports related. (Female, Grade 8)

R2: Or they're lazy as they get older. (Female)

...and girls are more into like the dancing, music. (Female, Grade 8)

Music lessons are usually for girls. (Female, Grade 8)

As with the grade 6 students, the grade 8 participants seemed to default to examples of sports:

Maybe aggressive sports like football, girls don't play it but boys do. (Male, Grade 8)

No. They would get hurt. As long as they play on a girl's team, that's fine. Like in football. (Male, Grade 8)

The minority opinion came from girls, especially those who themselves were involved in sports activities:

There are a lot of girls who do sports... my cousin, like, there's two girls on his hockey team, and there are lots of girls who play soccer, and there are some girls in this school who play football. (Female, Grade 8)

They both do soccer, basketball, piano. (Female, Grade 8)

Interestingly, none of the grade 8 students said that the choice of activity depended on the person, more than their gender, while numerous grade 6 students felt that the decision was an individual one.

For all groups (in grade 6 and 8), females who reported involvement (especially intense or frequent involvement) in sports activities were more likely to say that girls and boys did not do different activities, while males who participated in sports tended to feel that there was a difference.

#### Structured vs. Unstructured Activities.

Researchers have found a decline in organized sports participation that begins at about age 12 and continues into adolescence (Kirshnit, Ham & Richards, 1989; Roberts and Kleiber, 1982 (cited in Kirshnit et al., 1989)). It was anticipated in this study that grade 6 and grade 8 students would report differences in their involvement in structured and unstructured activities. Grade 6 students were expected to state more involvement in and enjoyment of structured activities than grade 8 students.

Each of the discussion groups were asked if they preferred structured activities (i.e., extracurricular activities) or unstructured activities (e.g., hanging out with friends, watching TV). As expected, differences were found in responses between grade 6 and grade 8 students.

### Grade 6.

Students voiced preferences for structured activities, unstructured activities, and a combination of both. There wasn't one single dominating opinion.

Popular reasons for liking structured activities were meeting new people and having variety:

You can play other teams, you don't just play your friends all the time, you play other people and get some variety. (Male, Grade 6)

Other reasons included fun, and learning new skills.

Reasons for choosing unstructured over structured activities involved choice and independence:

I like unstructured because you can just do what you want, when you want. (Male, Grade 6)

Some students couldn't decide which they liked better:

I'd say both because unstructured activities you can be with your friends and hang around and stuff like that...in structured activities if you like the people, you get to meet new people, you get to find out new interests and stuff like that. (Female, Grade 6)

### Grade 8.

Some of the participants in the grade 8 focus groups stated that they preferred structured activities, but many favoured unstructured activities.

The motivation for selecting structured activities were because they were structured:

...if you play unstructured, it's very hard to organize, well if you want to have a game or something you have to get everyone together and it's hard to do that. (Male, Grade 8)

Structured is better because sometimes if you're playing a game with your friends you guys can get out of hand and there's no rules. (Female, Grade 8)

There were a number of reasons for choosing unstructured activities:

Because they're more fun... because you're more relaxed. (Female, Grade 8)

They don't tell you what to do all the time. (Female, Grade 8)

It's unorganized and there's no rules. (Female, Grade 8)

It's funner when there's no rules...in structured, you learn, it's sort of like school. (Female, Grade 8)

As would be expected, those students who were involved in some structured activities, or are involved more frequently or intensely, were more likely to choose "structured" or "same/both" than participants who didn't mention involvement in extracurricular activities. Students who only talked about activities such as video games, hanging out with friends, or watching TV, stated that they preferred unstructured activities. However, most of the participants were involved in some structured and some unstructured activities, so it was difficult to relate their responses to this question to their specific activity patterns. As well, it is likely that through the group discussion, each participant's complete activity pattern was not verbalized.

The purpose of this question and analysis was to examine if the activity attrition mentioned in the literature was evident in this small sample. It appears that grade 8 students prefer to spend more of their time in unstructured pursuits, while the younger students enjoy involvement in structured extracurricular activities.

#### School- vs. Community-based Activities

Students were asked whether they preferred school- or community-based activities. The responses were notably different between grade 6 and grade 8 students.

##### Grade 6.

Overwhelmingly, grade six students responded "community-based", for a few key reasons. First, they felt that there was more variety in the community. Activities were not really available in elementary school, but many were aware that in junior high and high school they had lots of teams and activities.

Yah, like there's more choices and stuff that you can do in community. Like limited to what you have to do and how much money the school has. (Female, Grade 6)

But that depends on if you're in junior high or elementary...elementary they don't really have basketball teams and hockey teams... (Male, Grade 6)

[Teams are available] only in the community. Next year, like in junior high, we'll be able to have a team. (Female, Grade 6)

Some students noted that school resources and rules were factors:

...it depends how much money your school has... we don't have a really rich school. (Male, Grade 6)

...in hockey, in school, we're not allowed to raise the puck. But in real hockey they raise it because they have equipment. (Female, Grade 6)

There were social reasons for preferring community-based activities:

It puts you with other friends, like you're not always with your classmates. (Female, Grade 6)

In community you get to play with your friends from the neighborhood. (Male, Grade 6)

Alternatively, one girl mentioned that she preferred school-based activities "because out of school there's other people you don't know, and in school you could do stuff with your friends." (Grade 6)

The frequency of involvement was also a factor in favor of community-based activities:

Well, say for my hockey team, you get a bunch of practices and you do it like 5 times a week, 5 days a week. And in school things you only do it like maybe once a week or two times a week. (Male, Grade 6)

Other reasons stated for preferring community-based activities were the opportunity to play against other people or teams, the presence of tryouts which ensure that teams in each tier are of equal ability, the perception that the rules were less strict, and the feeling that community activities were a lot more organized.

Later in the discussion, most of the groups were asked whether they thought kids their age did more school- or community-based activities. The responses generally echoed those discussed above. Grade 6 students felt that their peers were involved in more activities outside of school.

### Grade 8.

The majority of grade eight students felt that they, and kids their age, were involved in more school-based activities. The main reasons were convenience/accessibility, and social factors:

But with school based it's also easier to get to because if it's like after school you're already at school, so you don't have to go anywhere. (Female, Grade 8)

R1: It's funner to be with with your friends. (Female, Grade 8)

R2: Yah, cuz you know everyone on the team. (Male)

Some students mentioned that they didn't have a preference, or they wanted the choice to do both:

Doesn't matter...because just as long as you like what you're doing, it doesn't matter where you're doing it. (Female, Grade 8)

I like both. Because I like doing sports both in school and out of school. And in school sports I like stuff to do during lunch and stuff. And it's fun cuz you're with all your friends, and they're not as competitive as out of school sports are. So it's nice to have both, it's like a balance. (Female, Grade 8)

There was a perception by some students that school activities were free. One student, who was involved in a number of different extracurricular activities, stated:

Most of the time it isn't free, like if you go on trips or something, like the concert band, you have to pay like \$200 for the band trip, and in basketball you have to pay for the jersey, and going on tournaments and everything, it usually costs money, it's not usually free. But it is usually cheaper though. (Female, Grade 8)

One of the minority opinions stating a preference for community-based activities gave the following reasons:

But there's usually more variety in community...lots of times they have more than what they have in school. And they last longer, lots of them. (Female, Grade 8)

Another reason for preferring community based activities was: "say you did something really embarrassing, like it would go around the whole school and the whole school would end up knowing" (Female, Grade 8). Alternatively, another student noted that "through school you get famous" (Female, Grade 8).

Students in one group stated that they preferred to be "away from school" - it seemed that in their mind community-based meant a place where there were no teachers and you could be "away" from school:

You spend all day in school and kinda want to get away. (Female, Grade 8)

Some students wanted to keep school separate from activities.

R1: And your teachers aren't your coaches or anything (Female, Grade 8)

R2: Yah, because if you're not doing your homework they [teachers] can kick you off the team. (Male)



These findings have implications for school and community activity programs that will be discussed in the next chapter.

### Grade, Income Level and School System Differences

Overall, each of the themes was represented by students in grade 6 and 8, in all income levels, and in both the Public and Catholic school systems. There were a few exceptions which are detailed below, by theme.

#### Social Reasons

Grade 6 students were more likely to state that a benefit of extracurricular activity participation was meeting new people, while grade 8's wanted to be with their current friends.

#### Other Key Motivators

Incentives, especially bonus marks or extra class credit (in high school), were mentioned mostly by grade 8 students in the Public School System. This may be because high school policies are more relevant to grade 8 students, because these incentives are not offered by elementary school teachers, and/or because they are more commonly (or are exclusively) offered in the Public School System.

#### Availability

Grade 6 students felt that more activities were available in the community. This is likely because fewer activities are offered at elementary schools in comparison to junior high schools.

#### Accessibility

Grade 8 students mentioned the easy access to their school-based activities, while some grade 6 participants stated that the location of activities could be a problem. As well, very few students in high-income groups talked about access in comparison to discussions in the low or middle-income groups.

### Personal Factors

The belief that activity participation benefited self-esteem was mentioned by participants in both of the low-income groups, but none of the others. Poor academic achievement as a potential barrier to participation was brought up only by grade 8 students.

### Mandatory Participation vs. Choice

This was the theme where differences between grade 6 and 8 students was the most evident. Grade 6 students talked about how their parents “forced” them to be involved, while grade 8 students were less influenced by their parents and stressed their independence. The responses did not differ by income level or school system.

### Influencers – Opinions and Past Experience

Grade 6 students were more likely to have their extracurricular activity involvement be influenced by an external source. A number of them wanted to be like somebody in their family. Both grade 6 and 8 students valued their friends’ opinions and experiences.

### Additional Analysis

In the additional analysis, differences were only evident by grade level.

#### Gender.

The majority of students in the focus groups felt that boys and girls did different activities. However, there were a number of students in grade 6 who believed that there was no difference in activity participation by gender.

#### Structured vs. unstructured activities.

Grade 8 students were more likely to prefer spending their time in unstructured pursuits such as hanging out with friends.

#### School- vs. community-based activities.

Grade 6 students overwhelmingly stated a preference for community-based activities, probably because more are available to them in the community than through their elementary schools. The grade 8 students mentioned that they and their peers were involved in more school-based activities, due to the easy access and the presence of their friends.

## Questionnaire Analysis - Results

The 28 questionnaires were entered in a Microsoft Excel file for analysis. The primary purpose of the analysis was validation of the focus group results.

### Questionnaire Respondents.

A total of 28 students from 5 different schools completed the questionnaire. Table 19 shows the demographic breakdown of questionnaire respondents.

Table 19

#### Questionnaire Respondent Demographics

	Number of participants
Grade 6	24
Grade 8	4
Male	9 grade 6, 1 grade 8
Female	15 grade 6, 3 grade 8
Catholic School System	26
Public School System	2
Low-income	3
Middle-income	16
High-income	9

Of the 28 respondents, 18 were female. The majority of the questionnaires were completed by grade 6 students (24), which made it difficult to accurately check the validity of grade 8 student responses. Students from high-, middle- and low-income schools completed the survey.

All but one respondent participated in extracurricular activities, with sports being more prominently mentioned than arts activities or clubs. This was similar to the activity involvement of the focus group participants.

### Questions Used in Analysis.

The analysis was focussed on the following questions from the survey:

1. Why did you participate in these activities?
2. Why didn't you participate in these activities?
3. Why do you think that kids your age participate in extracurricular activities?
4. Why do you think that kids your age **do not** participate in extracurricular activities?

Each of the responses was coded according to the 10 themes from the focus group data. Every one of the responses fit under the themes.

### Reasons for Participation

Table 20 shows the results of the coding of the responses to questions one and three.

Table 20

#### Reasons for Participation by Questionnaire Respondents and Kids Their Age

Theme	Number (%) of respondents – “You”	Number (%) of respondents – “Kids your Age”
Fun	24 (85.7%)	21 (75.0%)
Social reasons	1 (3.6%)	8 (28.6%)
Other key motivators	1 (3.6%)	1 (3.6%)
Personal factors	5 (17.9%)	12 (42.9%)
Mandatory vs. choice	0	1 (3.6%)

The most popular reason for activity participation offered by the respondents was fun. During the discussion groups, fun or enjoyment was usually the first response given when the Facilitator asked these same questions.

The second most common response was personal factors. Students participated for exercise (to be active and stay in shape), to learn new things, to benefit their futures (e.g., to earn a scholarship to University), because they were good at it, and because it was part of their heritage. Each of these responses was given during the focus groups as well, although the

survey respondents mentioned personal ability (i.e., “because they are good at it”) and the opportunity to learn new things more often than the focus group participants did.

Other reasons for participation given on the questionnaire included social reasons (i.e., meet new people or be with friends), a distraction or break, something to do to keep busy, and that parents make them be involved. Again, each of these responses was also offered during the focus group discussions.

#### Reasons for Nonparticipation

Table 21 shows the responses to questions two and four.

Table 21

#### Reasons for Nonparticipation by Questionnaire Respondents and Kids Their Age

Theme	Number (%) of respondents – “You”	Number (%) of respondents – “Kids your Age”
Fun	1 (50.0%)	11 (39.3%)
Resources	1 (50.0%)	12 (42.9%)
Personal factors	0	15 (53.6%)

All of the responses fit into three of the themes. Over half of the respondents gave reasons for nonparticipation that fell into the “personal factors” category. Most of them attributed noninvolvement to “laziness” or the belief that they were not good at the activity. Other personal reasons included shyness, low self-esteem, and not being “cool”.

The second most common reason for noninvolvement related to a lack of resources. The responses were split approximately in half between “not enough time” and “not enough money”.

The final category was fun. Students did not participate because they felt that activities were boring or not enjoyable.

Only two responses were given for why the students themselves did not participate in activities, which is understandable since only one respondent said he was not involved in extracurricular activities. The other response is in reference to a specific activity that the student thought was boring.

## Validation of Focus Group Data

Overall, the questionnaires validated the themes found in the focus group data. However, the survey responses only fell under a few of the categories. Without the group discussion or probing from the Facilitator, the responses on the survey would not be expected to be as deep or varied as the information that came out of the focus groups.

Every one of the questionnaire responses fit within the themes, which indicates that the themes were comprehensive. The survey showed the initial individual responses to the questions of why students do or do not participate in extracurricular activities, without the benefit of discussion, which would have allowed for more responses to be drawn. Therefore, the additional themes are needed to encompass all of the relevant information that emerged from the focus group data that went beyond the questionnaire responses.

### Inter-coder agreement.

The use of multiple coders is one way to determine if the analysis process has validity (Ryan, 1999). "Coders who independently mark the same text for a theme provide evidence that a theme has external "validity" and is not just a figment of the investigator's imagination" (Mitchell, 1979, cited in Ryan, 1999, p. 313). In this study, excerpts from focus group transcripts and questionnaires were coded by three independent raters using the 10 themes presented in this chapter. The three raters were masters-level researchers who have had exposure to qualitative methods and an understanding of youth extracurricular activity participation<sup>1</sup>. Their codes were then compared with the researcher's original coding assignments. The range of agreement between coders and the researcher was 80.6% - 87.8% (mean: 84%) for the focus group data and 76.2% - 83.8% (mean: 80%) for the questionnaire data, indicating that the themes were clear and representative of the data from the qualitative study. This percentage agreement is similar to that reached in other public health research projects (McCaffrey, 1999; O'Connor, 1999).

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<sup>1</sup> The Facilitator served as one of the raters. Her percentage agreement was right at the mean level.

## Summary of Qualitative Study Results

Reasons for participation or nonparticipation in extracurricular activities as assessed by eight focus groups with grade 6 and 8 students fell under the following ten themes:

1. *Fun.* The most popular reason for involvement or non-involvement discussed in every focus group was the enjoyment or non-enjoyment of the activity.
2. *Social reasons.* Grade 6 students saw participation in activities as an opportunity to meet new people, while grade 8's were involved to be with their current friends.
3. *Other key motivators.* Activities offered students "something to do" to pass the time, or a distraction from school and teachers. As well, grade 8 students continued participation in activities that many found non-enjoyable because of external incentives such as bonus marks or course credit.
4. *Availability.* Students felt more activities were available in junior high or high school than in elementary, and that the community offered a wider variety of activities than the schools. The season (winter or summer) also influenced availability and involvement.
5. *Resources.* Students in every focus group mentioned that the cost of activities was a potential barrier. School activities were perceived to be less expensive than community activities. Another factor stated by many focus group participants was a feeling of a "lack of time" to be involved in extracurricular activities. Homework, other responsibilities, and even a desire to spend time just hanging out with friends resulted in less time available for activity participation.
6. *Accessibility.* Grade 8 students appreciated the ease of access to school-based activities, while grade 6 students (who participated in more community-based activities) noted that location might be a barrier to involvement. Transportation to and from activities was not perceived to be as pertinent a barrier as their parents' schedules.
7. *Personal factors.* The focus group participants noted that elements of a student's personality, such as "laziness", "determination", or "commitment", affected participation or nonparticipation. As well, individuals were motivated by perceived personal benefits (such as being famous in school or improved confidence or self-esteem), and were deterred by potential negative outcomes such as being embarrassed or teased if one didn't perform well. Only two groups (both

grade 8) mentioned poor academic achievement as a potential barrier to participation. Finally, demographic factors such as age, ethnicity, or gender influenced participation.

8. *Characteristics of the activity.* Students talked about tryouts as potential barriers to participation, but some noted that they were beneficial, as they evened out the skill levels on teams. They also enjoyed community-based activities because the seasons tended to be longer, there were different tiers or skill levels, and there were more opportunities to play. Students appreciated that extracurricular activities were organized for them, but sometimes felt frustrated with the lack of control or input they had in the administration of the activities. Students were also discouraged by over-competitiveness of teams and “mean” leaders.
9. *Mandatory participation vs. choice.* Students in every focus group noted that they did not always have a choice in their activity involvement. In this theme, a difference between grade 6 and 8 students was clear. Many grade 6 students talked about how parents “forced” them to join or to remain involved in certain activities, while grade 8 students were more likely to stress that activity participation was their decision. Interestingly, some grade 6 students noted that being forced into an activity was not necessarily bad, as it would cause individuals to try the activity and they might learn to enjoy it.
10. *Influencers – opinions and past experience.* Family members, friends, and others such as professional athletes could influence students’ activity participation by sharing their opinions or past experiences. Grade 6 students wanted to emulate family members, while students in both grades valued their friends’ opinions and experiences.

Additionally, the areas of gender as a factor in participation, and preference for structured or unstructured and school- or community-based activities were explored, with the following results:

- Gender was a determining factor of activity involvement, although there was less of a distinction for the grade 6 students and for girls who were involved in athletics. The majority of grade 8 students and a significant number of grade 6 students felt that girls and boys did different activities and that girls did more, and a wider variety, of activities.



- Many grade 8 students preferred to spend their leisure time in unstructured activities such as hanging out with friends while a larger number of grade 6 students in this small sample enjoyed involvement in structured extracurricular activities.
- When asked whether they preferred school- or community-based activities, grade 6 students overwhelmingly responded “community-based”. The main reason was the extent and variety of activities available to them in the community and the paucity offered through their schools. Alternatively, the grade 8 students stated that they and their peers were involved in more school-based activities, because of convenience and accessibility, and the presence of their friends. No students in this study stated that they were involved because of a feeling of school spirit.

The questionnaire data validated the themes found in the focus groups, as every one of the responses fell under one of the ten categories. However, not all of the themes were represented by questionnaire data. It is believed this is because the depth of data gathered on surveys (without the benefit of group discussion or probing from a Facilitator) would be far less than that of focus group data. Many survey respondents mentioned personal ability (i.e., “because they were good at it”) and the opportunity to learn new things as reasons for participation. These factors were raised by very few focus group participants.

Three independent raters coded excerpts from the focus groups and questionnaires, with 84% and 80% agreement (respectively) with the researcher. This indicates that the themes are clear and represent the data from the qualitative study.

## **CHAPTER 6**

### **DISCUSSION**

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#### **Introduction**

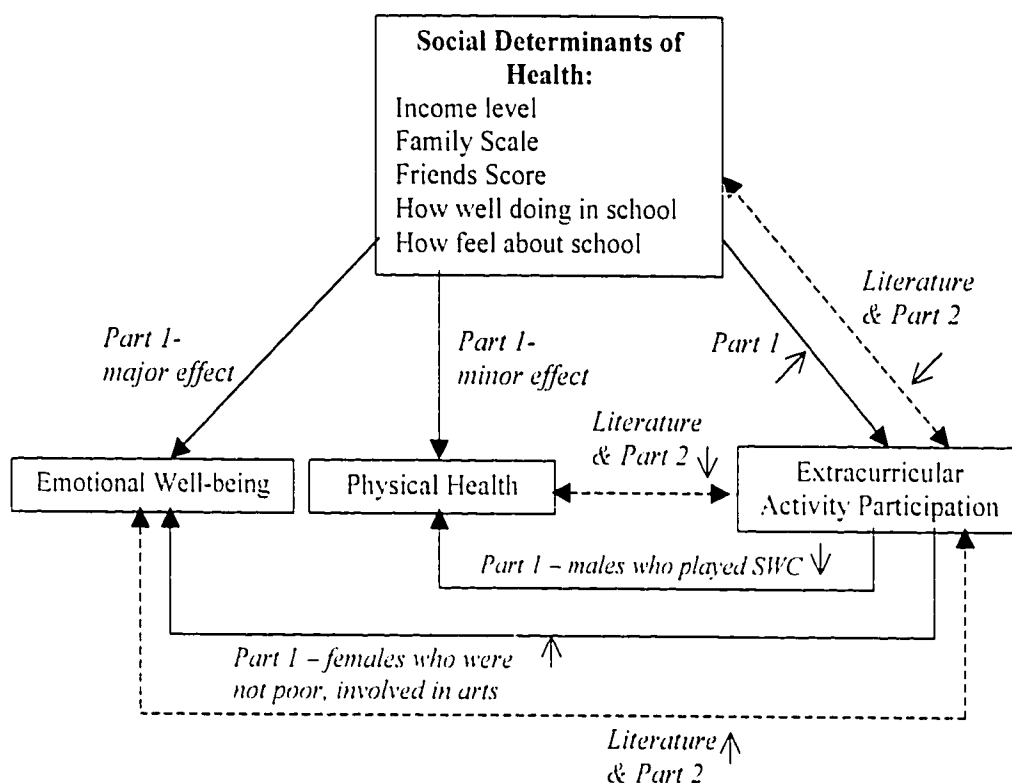
In this chapter, the study findings are discussed with respect to the literature. First, a model depicting the relationships between the social determinants of health, activity participation, and health outcomes for early adolescents is presented. Next, the 10 themes from the qualitative study are compared to reasons for participation and nonparticipation found in the literature. Implications for planning and promoting extracurricular activities are discussed, followed by the study limitations and a look at the validity and reliability of this project. Directions for future research and concluding comments close out this chapter.

#### **Relationships Between Social Determinants of Health, Activity Participation, and Health Outcomes**

The purpose of this project was to examine the role of extracurricular activities in the relationship between social determinants of health and the well-being of early adolescents, and to understand what factors affect their participation in these activities. The model in Figure 9 was developed from the literature review and the findings from both the quantitative and qualitative studies (Parts 1 and 2). It shows the relationship between the social determinants of health, extracurricular activity participation, and health outcomes in early adolescents.

Figure 9

Social determinants of health, extracurricular activity participation and health outcomes in early adolescents.



The solid lines in the diagram are suggestive of causal relationships demonstrated in the quantitative study. The dashed lines show relationships that were consistent with the literature or findings from the qualitative study (either correlational relationships or information shared by the qualitative study participants).

#### Social Determinants of Health and Health Outcomes

One surprising finding in this study was that the social determinants of health had a very small effect on the physical health of 10 and 11 year old children, explaining only 3% of the variance (for both males and females). However, these factors explained 35% of the variance in the emotional well-being of males and 41% for females. It is interesting to note that it was the four DOH other than income that were the most effective predictors of emotional well-being, while income was by far the strongest predictor of physical health for both males and females.

The weak contribution that the social determinants of health made to the physical health of these children could be due to the high level of health reported in this population (i.e., 87% of the children were in excellent or very good health), or perhaps the determinants selected were not relevant to the general health of this age group.

### Social Determinants of Health and Activity Participation

In the quantitative study, the DOH were found to weakly affect extracurricular activity participation. For 10 and 11 year old males, DOH explained a significant 6.5% of the variance in involvement in sports with a coach, 2% of the variance in arts participation, and 1% of the variance in involvement in clubs. Income was the only significant predictor for all three of the activities.

For female children, the DOH explained a statistically significant 3% of the variance in sports and arts participation and 1% of the variance in involvement in clubs. Income was a significant predictor of sports and arts participation. All of these percentages were very small, suggesting that while these DOH do play a role, there exist other, more important predictors of extracurricular activity participation.

The literature and statements from focus group participants in Part 2 suggest that a two-way dashed arrow also exists between these two factors. Findings in the literature suggest that extracurricular activity participation is related to income, the influence of family and peers, and a feeling of success or belonging in the school environment.

Mixed results have been found with respect to the relationship between income and activity participation and the reasons for these varied findings are unclear (Holland & Andre, 1987). Family structure, relationships, and parental involvement have been linked to extracurricular participation (see LeGault, 1985; Overman & Prakasa Rao, 1981; Perry et al., 1993). The attitudes and behaviours of early adolescents are strongly influenced by their peer group. A student's extracurricular activity participation is affected by the existing peer culture (Eccles & Barber, 1999) and their friendships (Buhrman, 1977; Buhrman & Bratton, 1978; Quiroz et al., 1996). Finally, students who participate in school-based activities tend to be more involved in school in general and feel a higher level of commitment, loyalty and school pride (Butterworth, 1977; Holland & Andre, 1988; Landers & Landers, 1978; LeGault, 1985; Marsh, 1992; Poon & Spence, 1997; Rees et al., 1990). As well, many studies have found positive relationships between extracurricular activity participation and academic achievement

or educational aspirations (Haensly et al., 1986; Otto & Alwin, 1977; Phillips & Schafer, 1971; Poon & Spence, 1997; Snyder, 1969, Spreitzer & Pugh, 1973).

However, the direction of these relationships is not known from the literature, except in the case of income level. Offord et al. (1998), in their study using NLSCY data, found that poor children (aged 6-11) were 3.94 times more likely to *almost never* participate in sports with a coach and 1.97 times more likely to *almost never* participate in arts activities than children who were not poor.

The quantitative study revealed that two significant, negative relationships between activity participation and social determinants of health existed. Both involved participation in clubs. For males, better relationships with peers were negatively associated with involvement in clubs. For females, stronger family relationships were negatively related to participation in clubs. This suggests that, contrary to the majority of the literature and other findings in this study, strong social support from family and friends is not necessarily associated with extracurricular activity involvement. The children who were involved in clubs appeared to be “loners” and may not have received the benefits of socialization from these activities.

Findings from the qualitative study confirmed the quantitative findings that activity participation was influenced by the social determinants of health. Students stated that participation might be affected by the amount of money that parents or the school have, parents “forcing” the child to be involved, or a desire to be with friends. Activity participation can also influence DOH. For example, students became involved in activities to meet new people, to belong with their peer group at school, to emulate or please family members, or even to strive for a University scholarship (which would improve education and perhaps even income level in the future).

#### Activity Participation and Health Outcomes

Only two significant predictive relationships between activity participation and health outcomes were found in the quantitative study. Boys who played sports with a coach were viewed by their parents as being in better physical health than those who weren’t involved in this activity. This relationship held after the social determinants of health were taken into account. The physical activity required for sports participation may explain this relationship, but it is not clear why the same relationship was not significant for female children. Perhaps the greater number of males from this population involved in sports activities contributed to the significance. Another explanation may be that at this young age, participation in sports

activities doesn't really have a beneficial effect on present physical health. The literature does show that involvement in physical activity at a young age has positive effects later in life (Barnekow-Bergkist et al., 1996; Centers for Disease Control and Prevention, 1997; Dovey et al., 1998; Hultsman, 1992). Otto (1982) wrote that the breadth of the effect of extracurricular activity participation on later life outcomes was remarkable. Experimentation with activities during youth and early adolescence "helps to shape the behavior and attitudes that lead to more permanent patterns in later adolescence and adulthood." (Hultsman, 1993a, p. 151). Kelly (1974, cited in Hultsman, 1992) reported that half of adults' 10 most important recreation activities were begun in childhood. Therefore, opportunities and experiences at a young age are important.

The second relationship between these two factors was revealed in the moderator analysis. Among females who were not poor, those who were involved in arts activities were emotionally healthier than those who did not participate. Interestingly, the findings from Offord et al.'s (1998) study suggested that extracurricular activity programs should be targeted at children living in lower income households. The results of this study suggest that participation in arts activities is beneficial to the emotional well-being of females, but only for those who are not poor. The health of poor 10 and 11 year old girls may not benefit from involvement in these activities.

Therefore, if one is planning an extracurricular activity participation program for 10 and 11 year old children with the belief that it will benefit their present health, that belief is not supported by this study except in the case of sports for boys and arts activities for girls who are not poor.

However, that being said, findings from the literature and the qualitative study suggest that a dashed line exists between extracurricular activity participation and health outcomes. Studies have linked extracurricular activity participation (primarily athletics) to physical health in adolescents (see Allison, 1996; Centers for Disease Control and Prevention, 1997; Dovey et al., 1997) as well as to a decreased occurrence of health risk behaviours such as tobacco or alcohol use (e.g., Escobedo et al., 1993; Shilts, 1991; Thorlindsson & Vilhjalmsson, 1991). During the focus groups, students stated that a reason for participation was for exercise and to stay in shape, while a reason offered for non-involvement was "laziness".

The extracurricular activity literature has also looked at self-esteem and behavioural and emotional disorders (which are the factors that comprised the emotional well-being measure used in this study). Self-esteem has been positively linked to extracurricular activity

involvement (Holland & Andre, 1987; Leonardson, 1986; Marsh, 1992). Rae-Grant et al. (1989) found that participation was significantly but weakly associated with the absence of disorder (i.e., conduct disorder, emotional disorder, hyperactivity and somatization). During the focus group discussions, some students mentioned that activity participation could improve self-esteem and self-confidence. One female talked about how she felt that her friend should be involved in more activities because she had low self-esteem.

The weak link established in this study between extracurricular activity participation and health outcomes suggests that either:

- There is not much discrepancy in the health of 10 and 11 year old children, as reported by the person-most-knowledgeable about the child in the household (87% of the children were reported to be in excellent or very good health), or
- The involvement of young (10 and 11 year old) children in structured extracurricular activities does not affect their health. As they age and are at increased risk for health-compromising behaviours (such as smoking, alcohol and drug use, and physical inactivity and obesity) and also undergo social and physical changes that can affect their emotional well-being, the literature suggests that activity involvement offers a protective effect. However, it is important to remember that self-selection might be an important factor; causality was not determined in the majority of the studies. Perhaps adolescents who are healthier are choosing to be involved in (or not to drop out of) extracurricular activities.

Overall this means that there was a lot of variance in the physical health of 10 and 11 year old children that was not accounted for by either the DOH or extracurricular activity involvement. Alternatively, much of the variance in emotional well-being is accounted for by the DOH, and very little by activity involvement.

### Reasons for Participation and Nonparticipation

Based on the literature, it was believed that activity participation would be associated with social determinants of health and health outcomes, and would play a notable role between the two factors. The results of the quantitative analyses showed that these relationships were weak or non-existent in 10 and 11 year old children. The analysis revealed a complicated story. We can't just say that participation or nonparticipation matters to the health and well-being of children. There could be different reasons for activity involvement or non-

involvement that may underlie these differences and be contributing to the weak effect of extracurricular activity participation on health outcomes.

For the second part of the project, the focus was shifted onto extracurricular activity participation rather than the DOH and health outcomes. The purpose was to explore the reasons behind the decision to be involved in extracurricular activities – if it was even the child's decision.

During the interviews, the grade 6 and grade 8 students were asked about their own activity participation patterns. Many of the reasons for participation or nonparticipation involved the social determinants of health (i.e., support of friends and/or family, income level, factors in the school context) and even health outcomes (e.g., self-esteem, desire to stay in shape). There were other reasons for participation or nonparticipation brought out in the focus groups that are not represented in Figure 9 but are crucial to note for community and school extracurricular activity program planning. Each of the 10 themes discussed in Chapter 5 was represented in the literature, suggesting that they are consistent with findings of other researchers and are relevant for program planning.

### Fun

The most popular reason stated for involvement in extracurricular activities by grade 6 and grade 8 students was fun. Ninety five percent of the high school students in Gholson's (1979) study marked that an important reason for participation was "fun and personal enjoyment". Quiroz et al. (1996) also stated that high school students joined activities because of interest, and didn't join because they were not interested. Two studies found non-enjoyment or boredom to be a vital reason for the termination of activity participation of younger students (Kirshnit et al., 1989; Medrich et al., 1982). Therefore, many students will only join an activity if it is perceived to be fun and will quit if they are bored. Early adolescents feel that they work during school hours and want to enjoy themselves during their leisure time.

### Social Reasons

Focus group participants felt that students joined activities to be with their friends or to meet new people. Medrich et al. (1982) wrote that one objective of organized activities for children was socialization. Activities provide opportunities for social interaction, can be used to teach social values and can also assist in social control (i.e., "curbing delinquency and reducing violent, antisocial, or self-destructive behavior") (Medrich et al., 1982, p. 160).



Ninety-one percent of the students in Gholson's (1979) study felt that an important reason to be involved in extracurricular activities was to "broaden personal and social contacts". In another study, the number one benefit of extracurricular activity participation stated by both high-achieving and low-achieving high school students was meeting other people (Haensly et al., 1986). The 13-16 year old students in McMeeking and Purkayastha's (1995) study and the high school students in Qiuroz et al.'s (1996) study reported that they joined activities primarily because their friends did. Peer influence is evident in younger students as well. One reason that early adolescents dropped out of activities was because their friends quit (Hultsman, 1992).

There were social reasons for participating in school- and community-based activities in this study. The younger students expressed more of an interest in meeting new people, while students in grade 8 preferred to do activities with their current friends. Class and school size might explain this finding. Elementary schools generally have one or two grade 6 classes (which results in a fairly small peer group), while junior high schools house a larger number of grade 8 students.

#### Other Motivating Factors

Students also participated for "something to do", as a distraction from school, or because they were offered incentives such as money or extra class credit. There was not much evidence of these factors in the literature. Students in Gholson's (1979) study stated that they were involved in extracurricular activities because they were experiences that were not available in the regular school program. The extracurricular activity program was also noted as a reason that many students stay in school: it made school more enjoyable (Haensly et al., 1986; Hall et al., 1984). Incentives were not discussed in the literature, except the benefit of "earning letters, awards and prizes" noted in Gholson's (1979) study. While grade 6 and 8 students in the qualitative study did not talk about material awards given by the school or community, they did mention that students might be involved in activities in order to be famous. Grade 8 students continued to participate in activities that they did not enjoy in order to earn bonus marks or extra class credit, and one student was paid by his parents to continue in a certain activity.

### Availability

Availability is a logical facilitator or barrier to activity participation. The activity must be offered to students in order for them to become involved. However, this factor is only discussed in one other study. McMeeking and Purkayastha (1995) found that affluent suburban and rural-urban fringe communities offered a greater variety of activities to 13-16 year old adolescents than the city. As well, the number of activities offered varied by age group, but in the opposite manner as was found in this project. McMeeking and Purkayastha (1995) reported that activities in the communities that they studied were not offered to students once they moved into junior high. In the focus groups, grade 6 students reported the presence of community-based activities, but a real shortage of activities available through schools until students reached junior high and high school.

### Resources

Students recognize that a cost is associated with extracurricular activity participation, and that this expense is a barrier to involvement for some of their peers. Medrich et al. (1982) noted that 73% of group activities, 53% of individual lessons and 14% of school-based programs required some expenditure. This finding was echoed in the qualitative study, as students felt that school-based activities were free, or at least cheaper than community-based activities. In Hultsman's (1992) study, early adolescents believed that cost was a reason not to join an activity and also a reason to drop out.

Another resource that was perceived by the focus group participants to be in short supply and was therefore a barrier to participation was time. Evidence of this "time crunch" was also found in the literature. Adolescents stated that other commitments like jobs outside of school left little time for extracurricular activities (Gholson, 1979). Extracurricular activities were considered a hindrance by a few students in Haensly et al.'s (1986) study because they were time consuming, resulted in no time to do homework, and students found it difficult to make up work missed in school while taking part in activities. Females and students of high socioeconomic status stated the fact that they already belonged to many activities as a reason for not joining more activities (Hultsman, 1992). Alternatively, for the grade 6 students in Medrich et al.'s (1982) study, finding time for activities was not a problem.

Ferguson (1999) detailed the cost and time required for children who were serious, one-sport athletes (see Table 22).

Table 22

Expenses (U.S.\$) and time required for sports participation

	Soccer	Track & Field	Basketball	Baseball	Tennis
<b><i>COST</i></b>					
Equipment	\$85 - \$265 for uniforms and cleats	\$600 - \$1,500 a year	\$200 - \$395 for shoes and uniforms	\$150 - \$450 for bats, gloves, uniforms and shoes	\$130 - \$750 for rackets, shoes
Clubs	\$30 - \$400 a year	\$100 first year, \$50 thereafter	\$12.40 - \$150 a year	\$25 - \$150 a year for league and team fees	\$50 - \$700 a year, plus \$40 - \$100 a week (coaching, court time)
Travel	\$50 - \$250 per tournament	\$100 - \$500 a meet	\$60 - \$210 a month for a player & parent to attend out-of-town games	Most youth teams play near home, but kids in elite travel squads spend \$10 - \$100 a week	\$100 - \$1,500 a month, depending on number of tournaments
Clinics	\$400 - \$600 per week	\$50 - \$100 a day	\$100 - \$400 per week	\$200 - \$600 for intensive summers and spring breaks	\$600 - \$900 a week at tennis camp, \$150 for a one-day clinic
<b><i>TIME</i></b>					
	6 – 16 hours a week of practice and games	2 – 9 hours of practice a day, plus a daylong track meet every Saturday	2 – 6 hours of practice daily, plus games	3 – 12 hours of practice a week, plus 2 – 4 games	2 – 6 hours of practice and exercise drills daily, plus weekend tournaments

Source: Ferguson (1999)

The numbers in the above table might seem excessive to the average person. They were reported by parents of children and adolescents in the United States who concentrated intensely on a single sport. Hockey is a sport that was talked about by many of the male focus group participants, who also recognized that it was a costly activity. Ferguson (1999) stated that hockey equipment alone would cost parents US\$758.

Accessibility

Activities must be accessible to students to make participation easier, or in some cases, possible. Factors such as transportation and parents' schedules were discussed by focus group participants. A lack of transportation was stated as a constraint to participation for early

adolescents (Hultsman, 1992). Younger students (grade 6 and 7) in McMeeking and Purkayastha's (1995) study had no problem obtaining rides from their parents, but grade 8's voiced their frustration with their lack of independent vehicular transportation and reliance on others for rides. Medrich et al. (1982) found that parents' work schedules and other structural problems did not have a serious effect on children's levels of participation. In that same study the authors discussed the convenience of and ease of access to school-based activities that was also mentioned by grade 8 students in the focus groups.

### Personal Factors

The focus group participants mentioned that elements of an individual's personality, demographic characteristics, or their attitudes could affect extracurricular activity participation. Students were involved in activities because of who they were inherently, their general attitudes and values, and for personal benefit. These factors were prominent in the literature as well. Overman and Prokasa Rao (1981) found that the personal attributes of high school students accounted for significant variance in sport participation. The majority of the benefits of activity participation stated by students in Haensly et al.'s (1986) study fell into this theme. They included: developing self-confidence, increasing self-discipline, developing leadership, preparing for a career, increasing responsibility, broadening their interests ("becoming more well-rounded"), and "keeping in shape". High school students in Gholsen's (1979) study also stated that they did activities to develop leadership services, or to achieve awards or prizes. Students stated that they became involved to learn new skills (Haensly, 1986; Hultsman, 1993a). Finally, students did not join activities because they were not offered for their gender, and stopped participation because they felt too old (Hultsman, 1992).

### Gender

The question "do you think boys and girls do different activities" was asked during the focus groups, which resulted in interesting discussions. There is a large body of literature on gender and activity involvement that echoes the findings in this study.

In the quantitative study, activity patterns differed by gender. A higher percentage of 10 and 11 year old boys were involved in sports, and more girls were in arts activities. As well, the results of the moderator and independent-effects analyses were different for boys and girls. This means that the relationships between the social determinants of health, activity participation, and health outcomes were varied by gender.

Gender was a determining factor of activity involvement in the qualitative study as well, although there was less of a distinction for the grade 6 students and for girls who were involved in athletics. The majority of grade 8 students and a significant number of grade 6 students felt that girls and boys did different activities and that girls did more, and a wider variety of, activities (e.g., “girls are interested in more things than guys are”; “girls do a lot of musical instruments”).

Sports participation has traditionally been considered a male domain, and gender differences in sports involvement are consistently found in the literature, for various age groups (Gibbons et al., 1997; Kirshnit et al., 1989; Koivula, 1999; McNeal, 1998; Offord et al., 1998; Posner & Vandell, 1999; Smith, 1987).

Social expectations are theorized to be behind some of these gender differences. Boys are socially conditioned to be more athletic, while girls are discouraged from sports participation in favour of less physical activities. There may be a “role conflict” associated with being both a woman and an athlete (Kirshnit et al., 1989). Across cultures, men are believed to be aggressive, competitive, and strong, while women are considered to be more affectionate, empathetic, and sensitive (Eder & Kinney, 1995; Gibbons et al., 1997). As well, there may be fewer available opportunities for girls’ athletics in the community (Kirshnit et al., 1989). Medrich et al. (1982) found that the school was the primary provider of team sports for grade 6 girls, whereas boys had many more opportunities outside the school setting.

Kirshnit et al. (1989) note that gender issues are particularly relevant for early adolescents, when the physical changes associated with puberty are accompanied by a “heightened awareness of one’s gender identity, and gender-stereotypic behavior is considered to be particularly prevalent during this stage of the life cycle” (p. 603). Eder and Kinney (1995) found that school-sponsored activities tended to promote traditional gender roles at the middle school level.

However, times may be changing. This was noted by one of the focus group participants when he said “...now they’ve changed it, now you see girls playing football, like before girls would never even thought of playing, but now there’s girls beating on boys.” As well, many grade 6 students noted that individual differences were more prevalent than gender differences. However, this may be because they are a younger age; when they reach grade 8, students are more aware of gender differences and socialization expectations, and this might be reflected in their activity patterns. But the success of the U.S. women’s soccer team, the introduction of the Women’s National Basketball Association (WNBA), and the female role

models that are becoming more visible through mediums such as Nike's advertising campaigns are adding to youth acceptance of girls in sport.

#### Characteristics of the Activity

Often the decision to participate was determined by characteristics of the particular activity; whether students had to be selected into the activity, the coach or instructor was perceived to be "mean" or encouraging, or the skill or level of competitiveness of the team was appropriate. In Gholson's (1979) study, students felt that important reasons for not participating were "not being selected for the activity", and "irrelevant activities [offered]". High school students in Quiroz et al.'s (1996) study didn't join activities if they felt that they didn't qualify. In Hultsman's studies on early adolescents (1992, 1993a), a dislike of leaders was a reason for ceasing participation, and, for females, it was also a reason not to join the activity originally. As well, not liking the rules of the activity was stated as a reason to quit.

Factors discussed in this study but not found in the literature were whether the skill level or competitiveness of the team was inappropriate to students, and the length of the season or number of games. Both of these points were raised in many of the groups as reasons for participation or nonparticipation.

There are many aspects of activities that are difficult to measure, but would influence students' participation and enjoyment of the activity. As Medrich (1982) wrote: "the popularity of extracurricular activities depends in part on intangible aspects of the quality and vitality of programs, which we could not measure directly" (p. 182). This statement explains why the same activities offered at two different schools or communities may differ significantly in their participation levels.

#### Mandatory Participation vs. Choice

One theme that ran through all of the focus groups and surfaced at many different points throughout the discussions was how much of students' activity participation was truly determined by the students themselves and how much was "forced" on them by other people, mainly parents. This was also the category where the differences between grade 6 and grade 8 students were the most evident. The grade 6 students were more likely to talk about their parents being the reason they joined and were still involved in activities that they felt were not enjoyable. Alternatively, the grade 8 students took pride in their independence and the fact that

their parents didn't have a large influence over their activity participation; it was their choice to join or to quit.

One common belief in the extracurricular activity literature is that how adolescents use their leisure time is important because it is said to be how they can best exercise their own preferences or choices (Gibbons et al., 1997). In order to have positive outcomes, activities must be "freely chosen and personally meaningful" (Hultsman, 1992, p. 281; McMeeking and Purkayastha, 1995). However, this is not always the case. Hultsman (1992) found that a constraint to joining activities was parents denying permission, and a reason that students terminated involvement was that their parents didn't want them to stay in the activity. Hultsman (1993b) also discussed how a child's introduction to formal recreation is largely a product of his or her mother's influence: the mother screens potential activities. Alternatively, for the grade 6 students in Medrich et al.'s (1982) study, their judgement carried more weight than their parents'.

There is a fine line between encouraging children to try new activities and not to quit and pushing them continuously to be involved in activities that they do not enjoy. Some of the grade 6 focus group participants noted that it wasn't necessarily a bad thing for parents to push kids into an activity, since they might learn to like it, and it would keep them from "sitting around so much". However, by the time that they reach grade 8, the students were more inclined to remain in non-enjoyable activities because of external incentives such as money or class credit than pressure from their parents. Overall, findings from this study showed that how students use their leisure time is not always their decision, which was a source of frustration and resentment for many, while other students had resigned themselves to having decisions made for them.

#### Influencers – Opinions and Past Experience

The final theme that developed from the focus group discussions was how students' activity participation was influenced by friends', family members' and others' (e.g., professional athletes) opinions about certain activities, and also their past experience. For example, one grade 6 student talked about how her family was very athletic and therefore she was involved in sports activities as well. Another focus group participant played goalie on his hockey team because his father used to play the same position. Overman and Prokaska Rao (1981) found that the past accomplishments of parents (specifically, the father's athletic experience and mother's education) accounted for a significant variance in student sport

participation. There is also a body of literature on female sport involvement and the importance of parental role models (Colley et al., 1992; Gregson & Colley, 1986). Parental sport participation and maternal achievement in sport were associated with sport participation in female adolescents (Gregson & Colley, 1986).

In this study, more instances were mentioned of males wanting to emulate their fathers than females participating in sport because of their parents' experiences. As well, many focus group participants talked about how the past experiences of their friends was a determining factor of joining an activity. There was no direct reference to this in the literature, other than general peer influence.

#### Other Facilitators and Barriers Discussed in the Literature

There were a number of reasons for starting or ceasing participation that were raised in the literature but not in this study. These included:

##### *Reasons for participation*

- Increasing responsibility (Haensly et al., 1986)
- Enhancing time management (Haensly et al., 1986)
- Developing a greater involvement in school (Haensly et al., 1986)

The focus group participants in this study did not discuss responsibility, and felt that the time that activities used was a stressor; they did not feel that they helped to enhance time management. The third reason stated above, "developing a greater involvement in school", is one that was heavily discussed in the literature, but not raised at all in this study. Activities were seen as an alternative to or distraction from school, not as a way to increase school spirit or involvement in school. This was likely because the majority of activities that the students mentioned were community-based, not offered through their schools.

##### *Reasons for not joining or terminating involvement*

- Hindered academic studies, grades dropped (Gholson, 1979)
- Not knowing how to sign up (Hultsman, 1992)
- Poor neighbourhood facilities (Medrich et al., 1982; Offord et al., 1998)



The focus group participants did not mention the effect of activity participation on their academic performance, other than that activities took up time, leaving fewer hours available for homework. The link between activity involvement and academic achievement is extensively written about in the literature, but is a relationship that students themselves probably do not take into account, or even notice. It is typically measured using previous academic records and accounts of activity involvement, which are then correlated by researchers. Therefore, it is not surprising that students did not mention academic performance in a discussion about extracurricular activities.

Not knowing how to sign up and the quality of neighbourhood facilities were also not raised during the discussions. Lacking information about activities did not seem to be a problem for students. They found out about activities through their parents, friends, word of mouth, or even advertising in community papers. Students did not mention the quality of neighbourhood facilities, although Offord et al., (1998) found that they were a significant predictor of participation.

Finally, one factor that was discussed in the literature (Hultsman, 1992) and raised in the questionnaires by a number of students, but not in the focus groups was personal ability. Students would not participate if they felt that their skill level was inadequate (i.e., they were not good enough). It is interesting that it was one of the first reasons for participation or nonparticipation that came to mind for the questionnaire respondents, but was not discussed in the focus groups. The closest factor to personal ability was participation because of a desire for "fame", or nonparticipation because of a fear of doing something embarrassing and being teased.

### Policy and Program Implications

The recommendations for policy makers and program planners are divided into two sections: planning extracurricular activity programs, and promoting extracurricular activities.

#### Planning Extracurricular Activity Programs

##### Ensure that activities are age appropriate

Early adolescents were the focus for this project. At this age, children are making the transition into adolescence, which involves physical, social and emotional changes, and a

transition from elementary to junior high school. Accompanying this transition is an increase in independence and peer influence and a decreased reliance on parents. Activities have to be interesting to and appropriate for their “child” role in elementary school and more “grown-up” role in their new environment in junior high, otherwise decisions may be made toward nonparticipation (Hultsman, 1992). They have to be considered fun, and provide social opportunities for students for the majority of students to take an interest in them.

#### Control Characteristics of Activities Where Possible

This is probably the theme found in the study over which program planners have the most control. Many of the students’ reasons for participation or nonparticipation were activity- or context-specific. Therefore, it is important to have skilled and encouraging leaders and appropriate skill levels or tiers (and levels of competitiveness). As well, the students appreciated a longer season with more opportunities to play.

#### Seek Student Involvement

Students know what they want. Therefore, in order to plan appropriate activities, student input is invaluable. They can inform program planners about the activity choices that should be available, the best times to offer activities, and may even have ideas for leaders, promotion, and other details. As well, if they are involved in the planning process they will take more ownership of the activity program at their school or community.

#### Ensure Availability and Accessibility

Students in grade 6 felt that their schools did not provide many opportunities for activity participation, however, many children knew that activities were available once they reached junior high and high school. Therefore, they relied on their community or the City to offer activities to them when they were younger. They appreciated the variety and choices that existed in community programs. If activities were not offered by communities, children would not gain experience, or learn about activities until the transition to junior high school. Children who participate in activities at a younger age are more likely to continue to be involved when they are older (Hultsman, 1993b). Therefore, if children are not given opportunities to learn about and participate in activities before they reach grade 7, many may never become involved.

Once students reached grade 8, most of them stated a preference for school-based activities. This indicates that schools are offering activities that students are interested in and

wish to become involved in. They appreciated that school-based activities were convenient and offered opportunities to do fun things with their friends. However, if students wished to become more intensively involved in an activity, they looked outside of school. One factor that some students felt was detrimental to school-based activities was the fact that they were school-based; the teachers were your coaches, and at the end of the day you just want to get away from school. This suggests that students may not feel a sense of "school spirit" and "connectedness" through activities, but rather, they want to keep their "fun" activities separate from school.

Although transportation was not noted as a serious access barrier by the focus group participants, providing driving schedules, or locating the activity within the community (e.g., using school facilities) are useful ways to decrease reliance on parents or others for transportation. As well, by lowering the dependence on parents or others, the student will feel like they are more in control of their leisure time activity.

One barrier to participation that was noted by students and the literature was the cost of activities. There are alternatives available to parents to decrease the expense of activities. For example, businesses such as Play It Again Sports or other second hand equipment stores can be found in every city. One focus group participant mentioned that many free activities (such as baseball teams) were available through her neighborhood's community centre. As well, school activities tend to have fewer financial costs (i.e., fees for registration, equipment and travel) than those offered through community organizations. Therefore, it is crucial that activities continue to be offered through schools, as not all students are able to participate in community-based activities, which, on average, have more requirements, in terms of fees, equipment, transportation, etc. Medrich et al. (1982) found that music activities provided in schools were the only ones accessible to many students.

One important point is that parents and students be informed of these options, which leads to recommendations for the marketing of extracurricular activities.

### Promoting Extracurricular Activities

#### Parents

Parents are the ones who make the decisions for younger children regarding their extracurricular activity participation. It is typically the mothers who learn about opportunities, and screen them before allowing the student to participate. Parents are the ones who pay for

their child to be involved, and support them through transportation and time spent sitting in the bleachers watching games or performances. Because of the important influence of parents, marketers need to realize that an appropriate target for information about children's activities is the parents, particularly the mothers.

Studies indicate that parents themselves believe that extracurricular activities are important for children (Gholson, 1979; Medrich et al., 1982). Most parents sign their children up for at least one activity during their youth. Therefore, it would seem that the purported benefits of extracurricular activity participation do not need to be promoted to parents; rather, factors such as safety, cost, and logistical points to allow the activity to fit with their schedules (i.e., close location, driving schedules or car pooling, etc.) would appeal to the parents. The quality of the activity, the leader(s) and the facilities would also be points about which parents want information.

However, "the extent to which a parent could find or encourage participation in organized activities was partly a function of information received" (Medrich et al., 1982 p. 177). Organizations offering activities need to find a way, either through flyers, posters, newspapers, radio or TV advertising, or just word of mouth, to inform the parents about the availability of the activity, otherwise the chance of their children participating is significantly decreased.

### Students

As students move into adolescence and they become more independent and more involved in the decision making of leisure activities, the target for activity promotion should shift to the youth themselves. Marketing efforts need to highlight the reasons for participation uncovered in this study, such as fun, socialization, a range of skill levels or tiers, and/or plenty of opportunities to play (i.e., long seasons or many games). While resources might not be available (i.e., money, human resources) to provide an ideal number of options to students, there may be ways for schools and community organizations to work together to pool resources and provide activities. Students want to have choices.

Students in this study did not report a lack of knowledge about available activities. They found out about activities through parents, friends, school personnel, or advertisements. These are the main communication channels for adolescents that should be utilized by program promoters.

## Study Limitations

### Personal Bias

This is a study limitation for the entire project. However objective a researcher tries to be, his or her attitudes, values, and past experiences can affect a study's data collection methods, and especially analysis and interpretation. Personal biases were addressed and reduced through the use of standardized statistical tests and a single interview guide, and the maintenance of a journal throughout the project to monitor research strategy and thoughts.

### Quantitative Study

#### Variables

The social determinants of health selected for this study may not have been comprehensive. For instance, ethnicity is a common determinant that was not used because it was unavailable in the public data microfile of the NLSCY.

As well, income level may not necessarily have been representative of all of the students in the school. The average household income for the area in which the school was located was used to represent the students' income level. Besides the income variation that may exist within census tracts, some students may be bussed into certain schools from other areas of the city, especially in the Catholic School System, where there are fewer schools throughout the city.

### Qualitative Study

#### Timing of focus groups

The majority of the focus groups were conducted over the lunch break. There were numerous interruptions resulting from this timing - school announcements, interruptions by teachers, principals or other students who were not aware the group was going on, and participants who had to leave (temporarily or permanently) because of other commitments over the lunch break.

The time allocated for each focus group varied (based on the length of the lunch hour or class that it was conducted in). This resulted in some situations where interviews were

rushed and therefore the discussion flow was cut short. More data may have been garnered if more time was allowed for discussions.

### Low Response Rate

Although the importance of informed consent and the ethical treatment of study participants are not questioned, one limitation of this study was the low response rate which was partially due to the use of active parental consent procedures.

The use of minors added complexity to this study. When study participants are under the age of 18, active (rather than passive) parental consent is generally required by the Health Research Ethics Board. Active parental consent requires all parents to return a consent form and assumes that nonresponse is a refusal (Esbensen, Deschenes, Vogel, West, Arboit, & Harris, 1996). Alternatively, passive consent assumes that parents have received proper notification and understand the study and their nonresponse indicates consent. A higher response rate is obtained when passive procedures are used, therefore this method is preferred by researchers.

Studies employing active parental consent have reported consent rates ranging from 30% - 60% (see Anderman, Cheadle, Curry, Diehr, Shultz, & Wagner, 1995; Donovan, Jessor, & Costa, 1988; Kearney, Hopkins, Mauss, & Weisheit, 1983; Lueptow, Mueller, Hammes, & Master, 1977; Severson & Ary, 1983; Severson & Biglan, 1989).

However, researchers have found considerable variability among schools (Anderman et al., 1995; Esbensen et al., 1996). Parents of elementary school children were more likely to grant consent and to respond than parents of secondary school children (Kearney et al., 1983). This study found a similar trend, with a response rate of 54% in grade 6 classrooms and 34% with grade 8 students. The active cooperation of school administration and staff is also a factor. In schools where the teachers were interested in the study and encouraged students to take consent forms home to their parents, and the school staff involved were more interested in the research project, the return rates were higher.

The reason it is necessary to improve response rates is that a nonresponse or sample bias may be present that threatens the external validity of the study. Some researchers have found that the consent sample shares some sociodemographic characteristics that indicate the presence of selection bias:

- Ethnicity – minority populations are underrepresented in consenters (Anderman et al., 1995; Kearney et al., 1983)

- Higher levels of academic achievement and intelligence (i.e., GPA or test scores) (Anderman et al., 1995; Kearney et al., 1983; Lueptow et al., 1977; Severson & Ary, 1983)
- Better educated parents (Severson & Ary, 1983)
- Two parent households (Anderman et al., 1995)
- More involvement in extracurricular activities (Anderman et al., 1995)

As this was a study about extracurricular activity participation, students who were not involved in activities and therefore did not want to participate, or felt they would have nothing to contribute, may not have taken their forms home to their parents. As well, parents of children who were not actively involved may have decided not to return the forms with their children. However, studies have shown that nonresponse was not a statement of opposition but was due largely to apathy and irresponsibility and reflected latent consent (Ellickson & Hawes, 1989; Lueptow et al., 1977).

The most effective way to get a high response rate using active parental consent procedures is through multiple follow ups using varied techniques (Severson & Biglan, 1989). Ellickson and Hawes (1989) achieved an 86% return rate through an intensive four week effort involving mail and school channels of communication. Esbensen et al. (1996) managed a 70% return rate after mailing an initial package to parents, then a follow-up package, follow-up telephone calls, sending letters and consent forms home with students, garnering the active cooperation of the classroom teachers and offering incentives for returning forms. These methods were expensive and time consuming.

The current study afforded neither the time nor the budget to pursue a high response rate under active parental consent procedures. However, the return rate may have improved if more involvement had been requested of the teachers (i.e., reminders to students)<sup>2</sup>, an incentive had been offered to the students (e.g., pizza for the classroom with the highest response rate), or some other follow-up had occurred (e.g., reminder announcements from the principals, or a second visit to the school by the researcher).

### Group Interaction

Group interaction is both a strength and a weakness of focus group research. In group discussion, many ideas come forward and the discussion develops based on everybody's

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<sup>2</sup> One problem encountered in this study is that at some junior high schools, students did not see their teacher at all between the initial visit when parental consent forms were distributed and the return visit to conduct the focus group.

experiences. However "group norms may silence individual voices of dissent" (Kitzinger, 1996, p.38). Groups may tend toward conformity, or perhaps "polarization" (i.e., voice more extreme views than participants hold privately) (Morgan, 1997). As well, the presence of other group members results in privacy and confidentiality concerns (Kitzinger, 1996; Morgan, 1997).

### Analysis and Interpretation of Results

Each qualitative data set contains layers to be interpreted, and the interpretation will be somewhat biased by the experiences of the author. It is impossible to maintain complete objectivity through the process. As Rubin (1983) so eloquently put it: "no one else's view of reality will be exactly the same as yours or mine" (p. 341).

Computer analysis, which may have added further insight to the analysis, was not utilized. Both Patton (1990) and Krueger (1998) suggest that computerized processing is a good complement to manual analysis. However, one can be confident in rigorous manual analysis. The trustworthiness of the findings is discussed in the next section.

### Validity and reliability

#### Quantitative Study

Statistics Canada and Human Resources Development Canada undertook certain procedures to ensure the validity and reliability of the NLSCY. In survey design, input was sought from an NLSCY expert advisory group (consisting of researchers in the areas of child development and the social sciences), federal departments, and representatives of child development programs from provinces and territories. Quality checks were performed for each questionnaire, including comparisons to external data sources and examination of areas where there was a high level of non-response.

All of the scales used in the questionnaires were validated. Most of the scales used in the NLSCY had been used in other studies and validated at that time. Analysis of the scale data included three major steps: a new factor analysis, a calculation of scale scores, and then the production of reliability measures. Cronbach's alpha values were calculated for each of the scales to determine reliability. Cronbach's alpha is a commonly used reliability coefficient that measures the internal consistency of the items within the scale. The Cronbach's alpha values for scales used in this study ranged from .728 to .976.



Finally, sections of the 10 and 11 year old self-report questionnaire were examined for non-response bias. For the most part, no effects were found. However, girls were more likely to respond to the questionnaire than boys, and children who were doing poorly or very poorly in school were more likely to be non-respondents.

### Qualitative Study

The relevance of validity and reliability has been discussed by qualitative researchers with differing views. Some argue that validity and reliability are not important or are too difficult to measure, while others claim that they are possible to measure, and should be measured in qualitative research (Goodwin & Goodwin, 1984).

Validity is defined as whether the research actually measures what it was intended to measure and whether it yields data that represent reality (Goodwin & Goodwin, 1984). Validity can be enhanced in qualitative research by pilot testing, providing conditions conducive to open sharing of information, using an appropriate facilitator, listening carefully to participants, observing how participants respond in the group, seeking clarification on areas of ambiguity, and asking participants to verify summaries of focus group discussions (Krueger, 1998).

In this study, the following points were employed to increase the likelihood that the findings were trustworthy and valid:

- A pilot test was undertaken, followed by a discussion with focus group participants about understandability and relevance of the questions and how the interview could be improved. This feedback resulted in a few changes to the questions and a more standard, comprehensive focus group script.
- In order to encourage openness in the session, the Facilitator and the researcher sat apart from one another and ate lunch and donuts with the children. As well, the first question asked was an easy, icebreaking question ("what do you like to do after school and on weekends?"). Only one group expressed some discomfort with the tape recorder.
- The Facilitator was very open and friendly and had a great rapport with the participants. A woman in her mid-twenties was chosen because it was believed the children would feel more comfortable talking about extracurricular activities with a younger Facilitator. She encouraged involvement from all participants, sought clarification on ambiguous points and frequently summarized responses and verified answers with the group.

- The researcher was present at every focus group discussion as an Observer. Notes were taken during the sessions and the transcripts were typed within 24 hours of the focus group. Transcripts included notes about tone and emphasis of participant's responses.
- The focus group script was followed and completed with each group.

External validity is related to the generalizability of findings (Philipps, 1971).

Generalizability is not a focus of qualitative research; the intent is to gain a more complete, in-depth understanding of a topic (Krueger, 1998; Mays & Pope, 1996; Rubin, 1983).

Generalizability is gained through randomization or adequate sampling of a population (Krueger, 1998; Rubin, 1983). In qualitative research, we want to investigate a specific group. Therefore, generalizability becomes less important. The population for study in this project was grade 6 and grade 8 students. Generalizability within Edmonton was enhanced by random selection of schools and then of participants (from those who returned parental consent forms). However, external validity is threatened by potential selection bias arising from the use of active parental consent procedures. The children who returned signed forms may be different from those who did not. Some researchers have shown that selection biases exist when active parental consent procedures are used (e.g., Anderman et al., 1995; Severson & Ary, 1983).

Reliability is "the consistency or dependability of the instrument or measurement strategy" (Goodwin & Goodwin, 1984, p. 417). A measuring instrument is reliable "if it yields the same result in repeated applications to the same phenomena" (Philipps, 1971, p. 201). To enhance the reliability of this study, the same interview guide was used for each group. As well, excerpts from transcripts and the questionnaires were coded by three independent raters. Their coding was then compared with the researcher's coding to determine the inter-rater reliability and validity of the themes. The average agreement was 84% for the focus groups data and 80% for the questionnaire data, meaning that the themes were sufficiently clear and representative of the data.

#### Future Directions for Research

The limitations of this study and existing gaps in the body of literature suggest that further research needs to be done in this area. This study showed that extracurricular activity participation had very little effect on the present health of children. But what about when they reach 18, 30, even 50 years of age? Will involvement in extracurricular activities, athletic or

otherwise, at a young age have beneficial effects on future health and well-being? The literature certainly suggests that extracurricular activity participation has positive effects in later life. But this can only be determined through a longitudinal study.

The NLSCY is a marvelous, comprehensive resource for examining the effects of certain factors on child development. As time passes and more waves of data are collected, one will be able to examine the effects of activity participation in childhood on physical health and emotional well-being later in life. The database can also be used to look at barriers and facilitators of activity involvement and how they evolve through adolescence, for example; how the effect of social agents changes (i.e., increasing peer influence, decreasing parental influence), and also to record changes in activity patterns. These findings would be an extremely valuable contribution to the body of leisure literature and would have implications for school and community programs, such as informing them about what they should be offering to different age groups and how they should market their programs.

Once the cohort of 10 and 11 year old children has reached 17 and 18 years of age, it would be interesting to re-run the analysis used in the quantitative study to determine if, in older adolescence, extracurricular activity participation has any effect on the relationship between the social determinants of health and health outcomes. This would ascertain if, indeed, 10 and 11 is too young for activities to have any impact on health. There should be more variability in the physical health and emotional well-being of adolescents, and it would be beneficial to determine if extracurricular activity participation explains any of this variability.

One finding in this study that should be explored further is the minimal effect that the social determinants of health had on health outcomes in 10 and 11 year old children. The social determinants of health have been heavily studied and shown to be very important to the health of adults. However, at such a young age, children are largely “undetermined”. They have not been exposed to as many external factors that could be detrimental to their health (e.g., unemployment, years of exposure to poor air quality). Indeed, there was not much variation in the physical health or emotional well-being within this study sample. Research should be conducted to explore why the social determinants of health had such a small effect on health in this population. If the social factors examined in this study do not have a large effect on health, what causes variability in the health of children?

The results of the descriptive analysis in the quantitative study showed that participation in unstructured activities such as watching television or playing computer or

video games was higher than involvement in structured extracurricular activities. These activities are less socially interactive and more sedentary. Therefore, it would be interesting to explore the effects of unstructured leisure time activities on health and well-being. Further secondary analysis of the NLSCY could look at the effects of unstructured activity participation on the relationship between determinants of health and health outcomes.

Finally, it would be interesting to compare the children's perceptions of being "forced" into an activity, with the views of their parents. This study agreed with other research that shows the significant amount of parental influence on younger children. Do parents think that extracurricular activities are beneficial for their children? What is their philosophy about their child's involvement, and how do they determine in what activities their children will participate? What role do the parents see their children having in their leisure-time decision making? Also, activity programmers would be interested in how parents learn about activity availability, in order to assist them with promotion.

### Concluding Comments

This study was conducted within a broad population health framework devised by Evans and Stoddart (refer to Figure 1). There are many factors that contribute to a child's health and well-being, but this study focused on the social determinants of health and extracurricular activity participation. The purpose of this study was to examine the role of extracurricular activities in the relationship between social determinants of health and the well-being of early adolescents, and to understand what factors affect their participation in these activities.

Only two significant health effects of extracurricular activity participation were found in 10 and 11 year old Canadian children. Among girls who were not poor, involvement in arts activities benefited emotional well-being, and playing sports with a coach had a positive effect on the physical health of boys (independent of the social determinants of health). However, the literature is insistent that there are later life benefits to extracurricular activity participation. Students can establish healthy activity patterns at this age, as they are experiencing the transition from elementary to junior high school and are entering adolescence. We need to offer these activities for the benefits that they can provide to students.

The grade 6 and 8 students in the qualitative study have informed us that there are a myriad of reasons behind extracurricular activity involvement or non-involvement. Program

planners need to take these factors into account when developing extracurricular activity programs through the schools or communities in order for them to be accessible to and appropriate for early adolescents. Program planners need to have input from students. Students are certainly willing to talk about extracurricular activities: after all, they consider the number one motivating factor for participation to be fun. If they can exert some control over the use of their leisure time and have appropriate opportunities available and accessible to them, they will have fun that many believe will benefit them in later life socially, emotionally, and physically. If nothing else, extracurricular activities are, for the most part, an enjoyable use of an early adolescent's leisure time, which should be what being young is all about.

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## **APPENDIX A**

### **Selected Items for Analysis from the National Longitudinal Survey of Children and Youth**



This Appendix contains a description of the variables used in this analysis. Coding for responses is in brackets ("( )") before each response.

## **Activity Participation**

### *Structured Extracurricular Activities*

All 10 and 11 year old children were asked to answer the following questions in a section titled "Activities":

In the past year (last 12 months), how often have you...

- Played sports WITH a coach or an instructor, other than in gym class (school teams, swimming lessons, etc.)?
- Taken part in art, drama or music groups, clubs or lessons, outside of class?
- Taken part in clubs or groups such as Guides or Scouts, 4-H club, community, church or other religious groups?

The responses available for each question were:

- (1) Never
- (2) Less than once a week
- (3) 1 to 3 times a week
- (4) 4 or more times a week.

For this analysis, the above variables were collapsed to contain 2 categories:

- (0) Never
- (1) Participate

### *Other Activities*

All 10 and 11 year old children were asked to answer the following questions in a section titled "Activities":

In the past year (last 12 months), how often have you...

- Played sports or done physical activities WITHOUT a coach or instructor (biking, skateboarding, etc.)?
- Played computer or video games?

The responses available were:

- (1) Never
- (2) Less than once a week
- (3) 1 to 3 times a week
- (4) 4 or more times a week.

On average, about how many hours a day do you watch TV?

- (1) 0-1 hour a day
- (2) 1-2 hours a day
- (3) 3-4 hours a day
- (4) 5-6 hours a day
- (5) 7 or more hours a day

How often do you read for fun (not for school)?

- (1) Every day
- (2) A few times a week
- (3) Once a week
- (4) A few times a month
- (5) Less than once a month
- (6) Almost never

## **Health Outcomes**

### *Physical Health*

The PMK (person most knowledgeable) was asked:

Q: Would you say the child's health is...

- (1) Excellent

- (2) Very good
- (3) Good
- (4) Fair
- (5) Poor

This variable was recoded for analysis so that the highest value would represent excellent health (i.e. the most desirable outcome) (5=excellent)

### *Emotional Well-being*

#### General Self Scale (self-esteem)

The self-complete questionnaire for the 10 and 11 year old children included a section titled "About Me". Four statements comprised a general self scale:

- In general, I like the way I am
- Overall I have a lot to be proud of
- A lot of things about me are good
- When I do something, I do it well

Responses ranged from false to true.

The questions were taken from the General-Self Scale of the Marsh Self Description Questionnaire developed by H.W. Marsh. The scale was designed to measure overall self-esteem. The Cronbach's alpha for the general self score was .728. The item that most affects the factor is "a lot of things about me are good" (the Cronbach's alpha would drop to .629 if it were removed). Scores ranged from 0-16. Low scores indicated a lack of general self-esteem. Scores could not be calculated for 16.2% of the children because of missing values in the four items that comprise the scale.

Fifty nine percent of the children scored 14 or higher, indicating that most children felt good about themselves and like the way that they were. The mean value was 13.43.

#### Emotional Disorder Scale

The questionnaire for 10-11 year old children contained a section titled “Feelings and Behaviours”. Seven items were used to construct an emotional disorder scale:

- I am unhappy, sad or depressed
- I am not as happy as other people my age
- I am too fearful or anxious
- I am worried
- I cry a lot
- I am nervous, highstrung or tense
- I have trouble enjoying myself.

Available responses were “never or not true”, “sometimes or somewhat true” and “often or very true”.

The questions were taken from the Ontario Child Health Study. The Cronbach’s alpha value for the “emotional disorder” factor was .760. The item that most affected the factor was “I am too fearful or anxious”. The Cronbach’s alpha value would drop to .717 if that item were removed. Scores ranged from 0-16. Low scores indicated that the child had no emotional problems. Scores could not be computed for 17.4% of the 10 and 11 year old children due to unreported values for the above items.

The mean value was 3.78, indicating that overall, children were fairly emotionally healthy.

This variable was recoded for analysis in this study so that high scores indicated low emotional disorder (i.e., the most desirable outcome - 0=high emotional disorder, 16=no emotional disorder).

#### Pro-Social Behaviour Scale

The questionnaire for 10-11 year old children contained a section titled “Feelings and Behaviours”. Ten items were used to construct a pro-social behaviour scale:

- I show sympathy to (feel sorry for) someone who has made a mistake
- I will try to help someone who has been hurt
- I volunteer to help clear up a mess someone else has made
- I will try, if there is an argument, to stop it

- I offer to help other kids (friend, brother or sister) who are having difficulty with a task
- I comfort a friend, brother or sister who is crying or upset
- I help to pick up objects which another kid has dropped (e.g. pencils, books)
- I will invite bystanders to join in a game
- I help other people my age (friends, brother or sister) who are feeling sick
- I take the opportunity to show support for the work of other people my age who can't do things as well as me

Available responses were "never or not true", "sometimes or somewhat true" and "often or very true".

The questions were taken from the Ontario Child Health Study and the Montreal Longitudinal Survey. The Cronbach's alpha value for the "pro-social behavior" factor was .766. The item that most affected the factor was "I help other people my age (friends, brother or sister) who are feeling sick". The Cronbach's alpha value would drop to .714 if that item were removed. Scores ranged from 0 to 20. High scores indicated that the child had very pro-social behaviour. Scores could not be computed for 17.1% of the 10 and 11 year old children due to unreported values for the above items.

Only 4.5% of children scored an 8 or less. The mean value was 14.62. This high mean indicated that overall, children have fairly pro-social behaviour.

#### Conduct Disorder/Physical Aggression Scale

The questionnaire for 10-11 year old children contained a section titled "Feelings and Behaviours". Six items were used to construct a conduct disorder/physical aggression scale:

- I get into many fights
- I assume, when another kid accidentally hurts me (such as bumping into me) that the other kid meant to do it, and then I react with anger and fighting
- I physically attack people
- I threaten people
- I am cruel, bully or am mean to other
- I kick, bite, hit other people my age

Available responses were “never or not true”, “sometimes or somewhat true” and “often or very true”.

The questions were taken from the Ontario Child Health Study. The Cronbach’s alpha value for the “emotional disorder” factor was .738. The item that most affected the factor was “I physically attack people”. The Cronbach’s alpha value would drop to .678 if that item were removed. Scores ranged from 0 to 12. Low scores indicated that the child has no conduct problems, or had low levels of physical aggressiveness. Scores could not be computed for 17% of the 10 and 11 year old children due to unreported values for the above items.

Only 18.7% of the children had scores of 3 or higher. The concentration of children in the lower end of the scale indicated that overall, children were not physically aggressive. The mean value was 1.38.

This variable was recoded for analysis in this study so that high scores indicated low conduct disorder or physical aggressiveness (i.e., the most desirable outcome - 0=high physical aggressiveness, 16=no physical aggressiveness).

## **Social Determinants of Health**

### *Income Level*

Income level was based on the work that Offord et al. (1998) did with NLSCY data. They used the ratio of household income to low income cut-off points to arrive at four categories (very poor, poor, not poor, well-off). That calculation was replicated for this study. The majority of 10 and 11 year old children in the survey (69.3%) were considered to be well-off.

- (1) Very poor
- (2) Poor
- (3) Not poor
- (4) Well-off

## *Family*

### Family Score (Family Connectedness)

The questionnaire for 10-11 year old children contained a section titled "Friends and Family". Children responded to the following four questions which comprised a the Family Scale:

- During the past 6 months, how well have you gotten along with your **mother, step mother, or foster mother?** (Answer about the mother you are spending the most time with.)
- During the past 6 months, how well have you gotten along with your **father, step father, or foster father?** (Answer about the father you are spending the most time with.)
- During the past 6 months, how well have you gotten along with your **brothers and sisters, step brothers and sisters, or foster brothers and sisters?** (Answer about the ones you are spending the most time with.)

Available responses for the above questions were:

- Very well, no problems
- Quite well, hardly any problems
- Pretty well, occasional problems
- Not too well, frequent problems
- Not well at all, constant problems
- Am not in touch with my (mother/father/brothers and sisters)
- Don't have (a mother, a father, brothers and sisters)

The three questions were modified from the Ontario Child Health Study. The Cronbach alpha for the Family Score was .976. The item that most affected the factor was how well the child gets along with his or her mother (the Cronbach's alpha would drop to .962 if that question were removed). Scores ranged from 0 to 12. Low scores indicated that the child did not get along well and had constant problems with family members

Overall, children felt that they had fairly positive relationships with their families. The mean value was 8.86 and only 6.9% were scored between 0 and 5.

## *Friends/Peers*

### Friends scale

The questionnaire for 10-11 year old children contained a section titled "Friends and Family". Children responded to the following four statements in that section which were used in the Friends Scale:

- I have a lot of friends
- I get along with kids easily
- Other kids want me to be their friend
- Most other kids like me

Available responses were "false", "mostly false", "sometimes false/sometimes true", "mostly true" and "true".

The questions constructed the Peer Relations Subscale from the Marsh Self-Description Questionnaire (developed by H.W. Marsh), which was intended to measure how well the child gets along with peers. The Cronbach alpha for the Friends Score was .779. The item that affects the factor the most is "Most other kids like me" (without it in the analysis the Cronbach's alpha would drop to .689).

Scores ranged from 0 to 16. Low scores indicated that the child did not have a lot of friends or positive interactions with other children.

## *School*

The questionnaire for the 10 and 11 year old children contained a section titled "School". Within this section they were asked the following questions:

How well do you think you are doing in your school work?

- (1) Very well
- (2) Well
- (3) Average
- (4) Poorly
- (5) Very poorly



How do you feel about school?

- (1) I like school very much
- (2) I like school quite a bit
- (3) I like school a bit
- (4) I don't like school very much
- (5) I hate school

The above two variables were recoded for this analysis so that the highest value indicated the most desirable or positive outcome (e.g., "5" = I like school very much, "5" = I think I am doing very well in my school work).

## **APPENDIX B**

### **Principal Information Letter**

December 20, 1999

NAME  
Principal  
SCHOOL  
ADDRESS  
Edmonton, AB CODE

Dear NAME:

**RE: Research request: *Extracurricular Activity Participation in Grade 6 and 8 Students: Relationships with Selected Personal and Social Factors, and Facilitators and Barriers to Involvement***

My name is Tanis Hampe and I am a graduate student in the Department of Public Health Sciences at the University of Alberta. As part of my Master's thesis research I would like to talk to grade 6 and 8 students about extracurricular activities.

Please find enclosed an information letter for yourself, a description of the research project, and copies of consent forms for parents and students and the focus group script and questionnaire to be used in the project.

Approval to conduct this research study in the Edmonton Public School System was granted by Jane Kinoshita in December 1999.

I will be contacting you in January to discuss this package and to see if you would like your school to be included in this research project.

I look forward to speaking with you.

Thank you,

Tanis Hampe  
Graduate Student, Department of Public Health Sciences  
University of Alberta

Dear Principal:

**RE: "Extracurricular Activities in Grade 6 and 8 Students"**

My name is Tanis Hampe and I am a graduate student from the University of Alberta. I would like to talk to grade 6 and 8 students about extracurricular (out of school) activities as part of my Master's thesis research.

The purpose of my study is to examine the relationships between involvement in extracurricular activities and the factors affecting the health and well-being of children. An important objective is to understand the relevance of extracurricular activities for grade 6 and 8 students and what factors affect their participation in these activities. My project involves two phases. The first is the analysis of selected variables from the National Longitudinal Survey of Children and Youth (a comprehensive survey done by Human Resources Development Canada and Statistics Canada). For the second phase I would like to ask the children themselves why they and their friends do or do not participate in extracurricular activities.

I would like to request permission to enter your grade 6 or 8 classroom to give the students a brief introduction to myself and the study, and to distribute parental consent forms. I would then return one to two weeks later (on a date to be arranged with you and the teacher) to randomly select eight students to participate in a group discussion. Those children who were not selected for the discussion group will be given a short (5-question) questionnaire that they can complete if they choose. Only those children who have returned their consent forms indicating parental approval of participation in the study may be selected into the discussion group or given a questionnaire. The discussion group and survey completion will take place over the lunch break so that students will not miss class. The students in the discussion group can eat their lunches during the discussion and will be provided with juice and snacks.

Children will be given an information sheet and an opportunity to ask questions. They can withdraw from the study at any time without penalty. The children do not have to answer any questions that they don't want to. All information will be held confidential except when professional codes of ethics and or legislation require reporting. If a child becomes upset or uncomfortable during the focus group session, a teacher or administrator will be notified. A colleague of mine will facilitate the discussions and I will be present to observe and take notes. The sessions will be audio tape recorded and then transcribed. The names of the participants will not be included in the transcription or the final report. As well, only group data will be presented. Schools will not be identified. Any statistics will be released on the group, not the individual participants. I will be the only one to listen to the tapes. Data from this study will be kept for seven years in a secure area accessible only by the research team.

The purpose of the discussions and questionnaires is to explore why children do or do not participate in extracurricular activities. I will be asking the students what activities they enjoy, why they participate, and why they think that kids their age do or do not become involved. Please see the attached list of questions to be asked during the discussion and copy of the questionnaire.

The results of this research will be used only in a research thesis at the University of Alberta and presentations and written articles for other educators. Upon completion of my thesis, you will receive a report summarizing the findings of this project.

I have also attached copies of the parental consent form and the student information sheets, for your information.

If you have any questions please feel free to call me at 492-4220 or Dr. Doug Wilson at 492-7385. If you have concerns about the study you can call Felicity Hey at 492-2643. She works at the University but is not involved with this project.

Thank you very much for your help.

Sincerely,

Tanis Hampe  
Graduate Student, Department of Public Health Sciences  
University of Alberta

## **APPENDIX C**

### **Parental Information and Consent Letters**

Dear Parent:

**INFORMATION SHEET RE: "Extracurricular Activities in Grade 6 and 8 Students"**

My name is Tanis Hampe and I am a graduate student from the University of Alberta. I would like to talk to grade 6 and 8 students about extracurricular (out of school) activities.

I will be visiting your child's classroom in approximately one week. At this time, I will randomly select seven students to participate in a group discussion. The other children will be given a short questionnaire that they can fill in if they choose. The group discussion will take place at lunchtime and will last about 45 minutes. Children can eat their lunches and will be offered juice and snacks during the discussion. Your child may only participate in the group discussion or fill in a questionnaire if this permission slip has been returned and you have checked that is alright for him or her to participate.

All information learned in the discussion will be held confidential except when professional codes of ethics and/or legislation require reporting. The discussion groups will be tape recorded, but your child's name will never be included in the report. Neither your child nor the school will be identified in any reports. Any statistics released will be on the group, not the individual participant. If a child becomes upset during a discussion, the teacher or school administrator will be notified. Participation is completely voluntary. If your child does not want to be involved that is alright. Your child does not have to answer any questions that he or she does not want to and can leave the discussion at any time. All of the data from the study will be kept for seven years in a locked cabinet and will be seen only by me. The results will be used only in my research thesis at the University of Alberta and in presentations and written articles for other educators. As well, your school will receive a report summarizing the findings from this project.

The purpose of my research project is to explore why children do or do not participate in activities. I will be asking the students what activities they enjoy and why they think that kids their age do or do not become involved.

Please indicate on the form on the following page if you **do** or **do not** wish your child to be involved in this study. It must be returned to your child's teacher by **Thursday, February 17**.

If you have any questions please feel free to call me at 492-4220 or Dr. Doug Wilson at 492-7385. If you have concerns about the study you can call Felicity Hey at 492-2643. She works at the University but is not involved with this project.

Thank you very much for your help.

Sincerely,

Tanis Hampe  
Graduate Student, Department of Public Health Sciences  
University of Alberta

## PARENTAL/GUARDIAN CONSENT FORM

**Project Title:** Extracurricular activity participation in grade 6 and 8 students: relationships with selected personal and social factors, and facilitators and barriers to involvement.

Please check one of the following two options:

*(By giving consent, your child will either be involved in a group discussion or given a short questionnaire)*

\_\_\_\_\_ I **WILL NOT** allow my child to participate in this study

\_\_\_\_\_ I **WILL** allow my child to participate in this study (please complete the section below)

I, \_\_\_\_\_, hereby consent  
(print name of parent/legal guardian)

for \_\_\_\_\_ to be involved in a tape recorded group  
discussion  
(print name of student)

with or to fill out a short questionnaire from Tanis Hampe.

I have received and read a copy of the attached information sheet and I understand that:

- ◆ my child may refuse to participate or withdraw from the study at any time. He or she does not have to give a reason and it will not affect his or her grade in class.
- ◆ all information gathered will be treated confidentially and discussed only by Tanis Hampe and her supervisory committee at the University.
- ◆ any information that identifies my child will be destroyed upon completion of this research.
- ◆ my child and the school will not be identifiable in any documents resulting from this research.
- ◆ any statistics released will be by group, not individual participant

I also understand that the results of this research will be used only in:

- ◆ a research thesis at the University of Alberta
- ◆ presentations and written articles for other educators

\_\_\_\_\_  
(signature of parent/legal guardian)

Date signed: \_\_\_\_\_

For further information about this form or the research project you can call Tanis Hampe at 492-4220 or Dr. Doug Wilson at 492-7385.



## **APPENDIX D**

### **Focus Group Script**

- 1) I'm going to start the discussion by asking you what you like to do after school and on weekends. What are some of your favourite things to do outside of school hours?

For the rest of the discussion, when I say "activities" I want you to think of the definition that was mentioned earlier: structured school or non-school-based activities that occur outside of school hours (including weekends) in which you voluntarily participate – organized activities where an adult is involved, things like music, sports, or clubs. This could be a sports team, a drama club, student council, Boy Scouts or Girl Guides, Guitar lessons, etc. It might be playing on an intramural team or playing for a city league, say in baseball or hockey, or it might be if you're in choir, dance, ballet, ringette, etc. The main points are that 1) there's an adult involved, either as an instructor, leader, coach, etc., and 2) it's organized and not part of your regular school activities (e.g., gym class wouldn't count as an extracurricular activity). Note: it could be organized at lunch or after school (drama, computer club etc.), but not part of regular school activities, where it's your choice to sign up or participate.

- 2) Do you participate in extracurricular activities?

- Compare school-based activities (e.g., teams, intramurals, school choir, school drama club, etc., that you participate in voluntarily) and "community-based" activities, such as a city league, guitar lessons, girl guides, etc.
- What do you like to do more of? less of? why or why not? etc.

- 3) Would you like to do more activities after school and on weekends? If yes, what would you like to do? Why can't you do more activities right now?

- 4) Would you like to do fewer activities after school and on weekends? If yes, what activities have you done that you don't enjoy? What would you rather be doing?

- 5) Why do you think that kids your age participate in extracurricular activities?

- their friends participate? meet new people?
- parents, family members? (encourage or enforce it?)
- exercise/skills
- fun?

- are there opportunities?
  - develop self-confidence?
- 6) Why do you think that kids your age don't participate in extracurricular activities?
- if their friends don't?
  - parents, family members?
  - are they interested?/are activities boring? don't want to?
  - exhausted/tired? are they too busy doing other things? no time? stress?
  - are there opportunities? lack of opportunities/nothing to do? school/comm
  - do you think it costs a lot of money? some can't afford it?
  - do you have to try out for things? do some kids get cut?
  - does it depend on what time of year (winter, summer)
- 7) Do you think kids your age do more school-based or community-based extracurricular activities?
- 8) What are kids your age doing after school and on weekends (instead of extracurricular activities)?
- 9) Do you think girls and boys do different types of extracurricular activities? Who does more?
- Remember, it's not just sports.
- 10) Do your parents, teachers, and/or friends influence what activities you do?
- 11) Do you prefer structured or unstructured activities?

## **APPENDIX E**

### **Student Focus Group Information Sheet**

Dear Student:

My name is Tanis Hampe. I am a graduate student at the University of Alberta.

Today you'll be taking part in a discussion about activities that you and kids your age do outside of school. We will be talking for about 45 minutes. What we talk about today will be part of my research work.

By talking openly and honestly with us you will help us to find out why students do and do not participate in activities outside of school. Your ideas and opinions are really important to us.

Everything that we talk about today will be confidential. The discussion will be tape-recorded but nobody except for me will listen to the tape. Your parents and teachers will not hear from me what you say today. I can not promise that other students in the group will not tell other people what is said today. Your answers will not affect your grades at all. There are no right or wrong answers to our questions.

If you don't want to answer some of the questions, that's OK. You are free to leave whenever you want.

Thank you very much for your help. If you have any questions, please ask me.

Tanis Hampe.

## **APPENDIX F**

### **Student Questionnaire Information Sheet**

Dear Student:

My name is Tanis Hampe. I am a graduate student at the University of Alberta.

Today I would like to ask you about activities that you and kids your age do outside of school hours. I would like to know about organized activities where there is an adult involved, like sports teams, clubs, or music lessons.

Everything that you write about today will be confidential. If you don't want to answer some of the questions, that's OK. You are free to leave whenever you want. The results from the survey will be part of my research work.

The questionnaire will take 5-10 minutes to fill out.

Thank you very much for your help. If you have any questions, please ask me.

Tanis Hampe

## **APPENDIX G**

### **Questionnaire (adapted to fit margins)**





### INSTRUCTIONS:

Please take your time and read the questions carefully. **Do not** write your name anywhere on the page. There are no right or wrong answers - this isn't a test. By being open and honest you will help us to find out why students do and do not participate in activities outside of school. Your ideas and experiences are really important to us.



When you finish this questionnaire...

Please put it in the box at the front of the room.

1. Last year, did you participate in organized activities outside of school hours (at lunch, after school, or on weekends) where there was an adult involved? (Things like sports teams, music lessons, dance, choir, student council, or clubs).



\_\_\_\_\_ Yes - go to **question #1a**



\_\_\_\_\_ No - go to **question #1b**



**1a.** What kinds of activities did you do last year?

Why did you participate in these activities?



**1b.** Why didn't you participate in these activities?





2. What do you think are some of the reasons that kids your age **do not** participate in organized activities?



3. What do you think are some of the reasons that kids your age **do** participate in organized activities?



4. I am:      \_\_\_\_\_ male  
                  \_\_\_\_\_ female

**THANK YOU VERY MUCH FOR FILLING IN THIS SURVEY!**

