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Children's Sport Participation in Canada: Is it a Level Playing Field?

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Article abstract

In this article a study of children's sport participation in Canada is presented, examining both children's participation in organized sport (with a coach or instructor) and informal sport (without a coach or instructor). This was done using a national sample survey. The results indicate that, for participation in organized sport, household income was the strongest predictor variable, followed by parent's education, gender, regional differences, and age of the child. In informal sport, gender was the strongest predictor variable, followed by regional differences, household income, age of the child, and parent's education. The findings are discussed in terms of the implications these factors may have on the development and reproduction of social division between children who are able to access sporting activities and those who cannot.

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Abstract

In this article a study of children's sport participation in Canada is presented, examining both children's participation in organized sport (with a coach or instructor) and informal sport (without a coach or instructor). This was done using a national sample survey. The results indicate that, for participation in organized sport, household income was the strongest predictor variable, followed by parent's education, gender, regional differences, and age of the child. In informal sport, gender was the strongest predictor variable, followed by regional differences, household income, age of the child, and parent's education. The findings are discussed in terms of the implications these factors may have on the development and reproduction of social division between children who are able to access sporting activities and those who cannot.

Résumé

Cet article, qui porte sur une étude de la pratique des sports par les enfants au Canada, examine la participation des enfants à un sport organisé (avec un entraîneur ou un instructeur) ou à un sport non structuré (sans entraîneur ou instructeur). À cette fin, on a eu recours à une enquête par sondage nationale. Selon les résultats obtenus, dans le cas de la pratique des sports organisés, le revenu du ménage était la principale variable explicative, suivie de l'instruction des parents, du sexe, des différences régionales et de l'âge de l'enfant. Dans le cas des sports non structurés, le sexe était la principale variable explicative, suivie des différences régionales, du revenu du ménage, de l'âge de l'enfant et de l'instruction des parents. Les conclusions sont examinées en fonction des répercussions que ces facteurs peuvent avoir sur le développement et la reproduction du fossé social entre les enfants qui peuvent avoir accès aux activités sportives et ceux qui ne le peuvent pas.

Introduction

Considerable evidence has been provided in recent years demonstrating the benefits of children's participation in sport. Of significant note are the physical benefits of sport in combating childhood obesity and countering negative risk behaviours such as alcohol and drug use (Flegal 1999, Iwasaki 2005, Thorlindsson 1999). Research has also supported the proposition that parents encourage and support their children's participation in sport to facilitate the development of valuable life skills that will carry into adulthood. Parents believe children's participation in sport will give them the opportunity to develop self-esteem, social skills, teamwork, responsibility, cooperation and competition; all attributes that are valued within a capitalist society (Adler and Adler 1994, Coakley 2006, Donnelly and Harvey 1999, Dunn, Kinney, and Hofferth 2003).

The majority of research to date has examined the psychological, moral and physical importance of the sport experience as it relates specifically to the child's growth, development, and performance. While the significance of children's involvement in sport has been demonstrated, access to these activities may not be realistic for all children due to participation barriers. Unlike the European sport literature (see e.g. Scheerder, Vanreusel, Taks, Renson 2002, Waser and Passavant 1997), children's involvement in sport as it relates to participation rates and social class, has received little attention in North America (Stempel 2005). Studies that have examined sport participation as it relates to social differentiation are placed within the context of the child's participation in school related extra-curricular sporting activities (see e.g. Darling, Caldwell, and Smith 2005). Extra-curricular school athletics make up only a small part of the broader context of sporting activities that contribute to adolescent development (Cooper, Valentine, Nye, and Lindsay 1999). Thus there is a need to address children's participation in organized sport outside the context of the publicly funded school system (Waser and Passavant 1997), and to investigate the effects of social differentiation and social inequality within the community, to gain a better understanding of children's sport participation in Canada.

Adler and Adler (1994) argued that children's unstructured sport involvement is also important in understanding children's development and growth. Whereas structured sporting activities may exemplify corporate-style organization, and encourage professionalization and specialization, unstructured sport may provide opportunities for creative thinking, flexibility, and originality (Adler and Adler 1994). These latter attributes give children the freedom to make adaptations and variations to traditional sporting activities' rules and style of play. Furthermore, without adult imposed cultural ideologies and beliefs and the opportunity for

creative adaptations, Yuen and Shaw (2003) argued that "unstructured play may enable children to resist current gender ideologies, while structured play may be more conducive to reproducing gender stereotypes" (12). Not only does children's participation in informal sport have physical benefits, but it may also provide children with the opportunity to develop and enhance individual social beliefs and values, divergent from those provided by adult-organized sport. With this in mind, insight that can be gained from studying children's participation levels in both organized and informal sport is valuable.

As children's participation in community-organized sport has become a phenomenon of the North American culture and added a new aspect to the socialization of children (Berryman 1996, Coakley 2006), clearly there is a need to examine the factors that may assist or inhibit children's participation. Further, a greater understanding of factors that may effect children's participation in informal sport may provide a more holistic representation of children's *overall* sport participation rates. Accordingly, the aim of this present study was to examine the relationship between socio-economic status, as measured by household income and parent's education, and Canadian children's involvement in both organized and informal sport as measured by children's frequency of participation. Data from a national sample survey provided findings that were generalizable to the larger population.

Related Literature

In North America and the United Kingdom, organized sport for youth 12 years and older is largely funded and delivered by interschool sport programs (Berrymen 1996, Coakley and Donnelly 2004). Interschool sport programs refer to organized competition between educational institutions. However, in the 1990s Canadians experienced significant reductions to public expenditures, particularly in the health and education systems. To facilitate cost-saving measures some sports were eliminated from interschool sport programs and/or participation fees were introduced or increased (Coakley and Donnelly 2004). Despite these cutbacks, interschool sport programs still remain a significant sport context for many Canadian youth.

In contrast, organized sport delivery systems in other developing countries are primarily "tied to community-based athletic clubs funded by members or a combination of public and private sources" (Coakley and Donnelly 2004, 441). Accordingly, children's participation in community/club organized sport has received more attention in the European sport literature than in the North American sport literature. For example, while studying the lives of young people (12–18 years) in Caen, France,

Waser and Passavant (1997) reported that socio-economic status influenced youth's organized sport participation. They found that the wealthier the parents, the higher the participation rates in organized sport. Further, they suggested that boys were more active in sporting activities than girls. Harro, Alep, and Eensoo (1999) also reported that children from families with higher monthly incomes were more involved in sport training classes in addition to their regular physical education curriculum at school, than children from families with lower incomes.

However, conflicting findings have been reported between socio-economic status and its relationship with youth sport participation. In contrast, a study that examined youth sport participation over a 30-year period in Flanders, Belgium reported that sport participation for youth 13–18 years old "is no longer correlated with the socio-economic status of the parents" (Scheerder, Vanreusel, Taks, and Renson 2005, 5). Instead, these authors argued that gender was the most significant predictor of youth sport participation. In fact, they reported that female participation rates have actually declined: "At the end of the 20th century, teenage girls are more likely to be non- or moderately active sports participants than was the case a decade before" (Scheerder, Vanreusel, Taks, and Renson 2005, 19). However, when considering club organized sports specifically, Scheerder, Taks, Vanreusel, and Renson (2005) reported that youth participation rates (for both girls and boys) have increased over the past three decades.

In North America, children's organized sport participation has also increased led by national youth organizations and community-based sport programs. Initial organized sport programs were first developed by the Young Men's Christian Association (YMCA), and were followed by various national youth organizations such as the Boys and Girls Clubs in the beginning of the 20th century (Berryman 1996, Hall 1999, Wiggins 1996). Most sport programs were developed for boys and it was not until the 1970s that opportunities for girls' sport participation were created (Coakley and Donnelly 2004).

In the 1950s there was a large movement towards adult-organized activities for children and youth led by agency-sponsored sports such as little league baseball and minor hockey (Coakley 2006, Donnelly 1997, Sundeen 2001). These leagues were "intentionally designed to inculcate children with a particular set of values necessary to function properly in a democratic society" (Wiggins 1996, 15). Consequently, the emergence and popularity of children's sport organizations added a new aspect to the socialization of children and the nature of their leisure (Berryman 1996, Coakley 2006). With each new generation the popularity of children's community-based sport programs has continued to grow (Adler and Adler 1994, Fishman 1999).

Despite the increased participation rates in children's organized sport, relatively little attention has been given to the socio-economic status of its participants within the community context. The sociology of sport literature on adult participation rates has shown that differences according to age, gender, and social stratification variables (education and income) do exist (Donnelly and Harvey 1999, Sport Canada 2000). Even with policy and legislation for gender equity in the provision of opportunities, male participation rates continue to be higher than those of females. Furthermore, younger adults and adults from a higher socio-economic status, as measured by income and education, report higher levels of sport participation.

Canadian studies have also noted regional differences as they relate to adult involvement in sport, through participation rates (Curtis and McPherson 1987) and spectatorship at professional and amateur events (White and Wilson 1999). Both studies found that the farther west the participant's place of residence, the higher the rate of sport involvement. Curtis and McPherson (1987) suggest that this pattern can be partly explained by the effects of regional differences related to "sociodemographic composition, socioeconomic profiles, and opportunity structures" (363). Eastern Canada endures high net out-migration patterns, while Western Canada has a slightly lower mean age, higher socio-economic status, and greater urbanization. Extending this collective body of research, do the patterns of socio-economic status, age, gender, and regional differences also influence children's participation in organized sport as they do for adults? Although it has been alluded to that active parents and higher incomes are key predictors of children's participation in organized sport (Donnelly and Harvey 1999, Kremarik 2000), little quantitative research to date in North America has explored these issues specifically.

In an ethnographic study drawing upon 88 in-depth interviews with working-class and middle-class children and their parents, Lareau (2002, 2003) investigated the effects of social class on family interactions inside the home, and the child's consequent participation in organized and informal leisure activities within their community. The results of the study suggest that middle-class parents engage in what Lareau (2002) termed "concerted cultivation" (748). Parents seek out opportunities to foster their children's talents, skills, and abilities through organized leisure activities. She argues that middle-class parents "enroll their children in numerous age-specific organized activities that dominate family life and create enormous labour, particularly for mothers. The parents view these activities as transmitting important life skills to children" (748). Other research has supported the notion of children's organized sport participation being time-consuming for the family unit as a whole, often at the expense of the

parents' leisure, and in particular the mothers' leisure experiences (Shaw 2001, Shaw and Dawson 2001).

In contrast, Lareau (2002, 748) suggested that the working-class and poor parents engage in what she termed "natural growth." Parents provided the necessary conditions under which children can grow (comfort, food, shelter, and other basic support), but left leisure activities to the children themselves. This facilitated a slower paced day with more impromptu moments of unstructured play and child-directed activities. Lareau illustrates this in her discussion of "Harold," an 8-year-old boy from a working-class family:

> Harold loves sports. He is particularly fond of basketball, but he also enjoys football, and he follows televised professional sports closely. Most afternoons, he is either inside watching television or outside playing ball. He tosses a football with cousins and boys from the neighboring units and organizes pick-up basketball games. Sometimes he and his friends use a rusty, bare hoop hanging from a telephone pole in the housing project; other times, they string up an old, blue plastic crate as a makeshift hoop. One obstacle to playing sports, however, is a shortage of equipment. Balls are costly to replace, especially given the rate at which they disappear—theft of children's play equipment, including balls and bicycles, is an ongoing problem. (Lareau 2002, 758)

Although parents believed that sport participation was important for working-class children and boys in particular, parents did not see the value in their children's participation in organized sport when faced with limited economic resources. In their view, children's participation in informal sport served the needs of their child. Also, unlike the middle-class parent, they did not see the perceived gain in the development of skills and abilities deemed valuable within a capitalist society, and the social connections that sport would facilitate within the broader community.

Summarizing, Lareau (2002) suggested that social differentiation does matter. "It is interweaving of life experiences and resources, including parents' economic resources, occupational conditions, and educational backgrounds, that appears to be most important in leading middle-class parents to engage in concerted cultivation and working-class and poor parents to engage in the accomplishment of natural growth" (772). In reviewing Lareau's (2003) in-depth qualitative study, Stemple (2005) suggested that sport sociologists have not reported on the degree of social differentiation in adult-organized children's sport, "but if Lareau's findings are representative it is considerable" (267).

In the present study our aim is to examine the relationship between socio-economic status, as measured by household income and parent's education, and children's participation in both organized and informal sport as measured by the children's frequency of participation. In doing so, we test the validity of the theoretical arguments focusing on the relative importance of these variables as predictors of Canadian children's participation in organized and informal sport.

Methods

Data were drawn from the National Longitudinal Survey of Children and Youth (NLSCY), Cycle 3. The NLSCY-3 was conducted in 1998–1999 by Human Resources Development Canada (HRDC) and Statistics Canada. The primary objective of the NLSCY is to monitor the development and well-being of Canada's children as they grow from infancy to adulthood. The NLSCY-3 collected information on a wide variety of topics—biological, social, economic, family, peers, school, and community. Data were collected through telephone and/or in-person interviews conducted by an interviewer using a computer. In each case the questions were answered by the parent who was most knowledgeable about the child in question, and it was that parent's level of education that was used in the highest level of education obtained variable.

The analysis of the NLSCY data were limited to children aged 6 to 9 years old based on the available data set (N=5,189; 2,576 males and 2,613 females). Given that the study was a secondary analysis of survey data, the authors had no control over the framing of the survey questions themselves. However, the data presented the authors with the opportunity to investigate the participation of children's involvement in both organized and informal sport and to present controlled findings generalizable to the Canadian population.

The dependent variables were based on responses to the following questions:

> (1) "In the last 12 months, outside of school hours, how often has [child's name] taken part in sports with a coach or instructor (except dance or gymnastics)?" This variable was labelled *Organized Sport* in the data analysis.
>
> (2) "In the last 12 months, outside of school hours, how often has [child's name] taken part in informal sports or physical activity without a coach or instructor?" This variable was labelled *Informal Sport* in the data analysis.

The frequency of participation for both questions were measured along ordinal scales with five categories: (1) most days, (2) a few times a week, (3) about once a week, (4) about once a month, (5) almost never. As a consequence of very low response rates for the "most days" and "about once a month" categories, the frequency of participation for both questions were reversed and re-coded to a simple ordinal scale with three categories: (1) almost never, (2) once a week or less, (3) more than once a week.

The independent variables were *household income* (less than $15,000; $15,000–$19,999; $20,000–$29,999; $30,000–$39,999; $40,000 or more); *highest level of education obtained* (not completed high school; completed high school; some post-secondary; degree/diploma); *gender* (male; female); *age of child* (6 years; 7 years; 8 years; 9 years); *region* (Maritimes—Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland; Quebec; Ontario; Prairies—Manitoba, Saskatchewan, Alberta; British Columbia) and *number of children aged 0–17 in the household* (1 child; 2 children; 3 children).

The analysis of the data was carried out in two stages. First, an examination of the relationship between each of the independent variables and the child's participation in organized and informal sport was conducted. This initial step used a Chi-square analysis that helped to clarify the nature of the direct relationship and statistical significance between individual independent variables and the dependent variables. In the second stage Analysis of Variance (ANOVA) with Multiple Classification Analysis (MCA) was used as the statistical procedure to examine the relationship between a single independent variable and a dependent variable while simultaneously controlling for the effects of the remaining variables. MCA expresses the deviations from the grand mean for each predictor variable. MCA also produces eta scores (zero-order correlations) and beta scores (proportional reduction in error). These scores indicate the relative strength of a predictor variable by itself before controls (eta) and after controlling for the effects of the other predictor variables after controls (beta) (Andrews, Morgan, Sonquist, and Klem 1973, Norusis 1993).

Findings

Table 1 shows the relationship between the independent variables individually and children's participation in organized and informal sport. Generally, all of these variables had a statistically significant relationship with each of the dependent variables, with the exception of the "number of children aged 0–17 in the household." For the variable "number of children aged 0–17 in the household," the relationship with children's partici-

pation in organized sport had no clear direction and was not statistically significant, and children's participation in informal sport showed a weak positive relationship ($p<.05$). In light of this, this variable was omitted from the second stage of data analysis.

Household income and parent's education were both positively related to children's participation in organized and informal sport ($p<.001$ for both). The higher the household income and parent's education level, the higher the children's participation in both organized and informal sport. Families in the lowest income category (less than $15,000) had the highest percentage of inactive children reporting "almost never" participating in organized sport (69%) and informal sport (40%), and the lowest percentage in both categories for "more than once a week" (organized=12% and informal=40%). Children from families in the highest income category ($40,000+) had the highest percentage of active children who reported participating in organized sport (34%) and informal sport (54%) "more than once per week," and the lowest percentage in both categories for "almost never" (organized=34% and informal=23%).

Gender and age of the child were also significantly related to the children's participation in organized and informal sport ($p<.001$ in both cases). Males were more involved in both organized and informal sport than females. Males reported participation in organized sport (36%) and informal sport (59%) "more than once a week." In comparison, females reported participation in organized sport (22%) and informal sport (46%) "more than once a week." More females than males reported "almost never" participating in both organized sport (49%) and informal sport (30%) compared to males (38% and 23% respectively). The age of the child was also significantly related to children's participation in organized and informal sport; the older the child, the higher the participation in both organized and informal sport ($p<.001$). The oldest age group (9 years) was the most active participating "more than once a week" in organized sport (36%) and informal sport (55%). The youngest age group (6 years) was the least active participating "almost never" in organized (47%) and informal (31%) sport.

The further west a child's place of residence in Canada the higher the participation in organized and informal sport, with the anomaly of Quebec ($p<.001$). In organized sport, Quebec had the highest percentage of inactive children (55%) who reported "almost never" participating, followed by the Maritimes (48%), Ontario (38%), Prairies (38%) and B.C. (34%). In informal sport, B.C. had the highest percentage of active children (61%) who reported participating "more than once a week," followed by Quebec (54%), Prairies (53%), Ontario (50%), and Maritimes (50%).

TABLE 1
Frequency of Canadian Children's Sport Participation (Percent) by Household Income, Education, Gender, Age, Region, and Number of Children in Household (Chi-square)

	Level of Participation (*N*=5,189)					
	Organized Sport			*Informal Sport*		
Independent Variables	Almost Never (%)	Once a week or less (%)	More than once a week (%)	Almost Never (%)	Once a week or less (%)	More than once a week (%)
HOUSEHOLD INCOME						
Less than $15,000	69	19	12	40	20	40
$15,000 to $19,999	61	21	18	34	20	47
$20,000 to $29,999	62	20	18	31	19	50
$30,000 to $39,999	53	24	23	29	18	53
$40,000+	34	31	34	23	23	54
Stat.Sig.[1]		***			***	
EDUCATION						
Not Completed High School	69	18	13	37	15	47
Completed High School	49	22	29	28	18	53
Some Post-Secondary	45	28	28	24	22	54
Degree/Diploma	32	34	35	24	24	53
Stat. Sig.		***			***	
GENDER						
Male	38	27	36	23	18	59
Female	49	29	22	30	25	46
Stat.Sig.		***			***	
AGE OF CHILD						
6 years	47	29	24	31	21	48
7 years	44	28	29	26	19	55
8 years	40	29	31	24	23	54
9 years	39	25	36	22	23	55
Stat. Sig.		***			***	
REGION						
Maritimes	48	25	27	29	21	50
Quebec	55	26	19	26	20	54
Ontario	38	32	30	29	21	50
Prairies	38	29	33	23	24	53
British Columbia	35	23	43	17	23	61
Stat. Sig.		***			***	
CHILDREN AGED 0–17 IN HOUSEHOLD						
1 child	45	27	28	30	21	49
2 children	43	29	29	25	23	52
3 children	43	27	30	27	20	54
		ns			*	

[1] Statistical Significance: ***=p<.001; **p<.01; *=p<.05; ns=non-significant

Table 2 shows the relationship of the predictor variables on children's participation in organized and informal sport, before and after controls for the effects of each other (except for the variable "number of children aged 0–17 in the household" as noted earlier). All of the predictor variables, after controls, had a statistically significant relationship with the two dependent variables. Parent's education and informal sport was significant, although only at the five percent level ($p<.05$), compared to the others at the one percent level ($p<.001$).

In organized sport, after controls, household income was a stronger predictor than parent's education ($p<.001$ in both cases, beta=0.18 and 0.16 respectively). For informal sport, household income ($p<.001$, beta=0.07) and parent's education ($p<.05$, beta=0.04) were weaker as positive predictors compared to that of competitive sport, but still significant. Therefore, household income and parent's education were stronger predictors of children's participation in organized sport than in informal sport.

As expected, after controls, gender was a strong predictor of children's participation in both organized and informal sport ($p<.001$ in both cases, beta=0.15 and 0.12 respectively). After controls, age was a weaker predictor in children's participation in both organized and informal sport, but still significant ($p<.001$ in both cases, beta=0.09 and 0.07 respectively). Finally, regional differences were a strong predictor of children's participation in sport ($p<.001$ in both cases). Regional differences were noted to be a stronger predictor in organized (beta=0.14) than informal (beta=0.08) sport.

In sum, the direction of the relationship between income, education, and age of the child in both organized and informal sport were positive. Males were more active in both organized and informal sport than females, and the further west a child resided the more active he/she was in both organized and informal sport (with the anomaly of Quebec). In organized sport, household income (beta=0.18) was the strongest predictor variable, followed by parent's education (beta=0.16), gender (beta =0.15), and regional differences (beta=0.14) ($p<.001$ for all variables). The weakest predictor variable was age of the child (beta=0.09, $p<.001$). In informal sport, gender (beta=0.12) was the strongest predictor variable, followed by regional differences (beta=0.08), household income (beta=0.07), and age of the child (beta=0.07) ($p<.001$ in all variables). The weakest predictor variable was parent's education (beta=0.04, $p<.05$).

It should be noted that the beta coefficients, and thus the variance explained by all of the variables in the models (r^2) are quite low. Clearly there are a number of other factors associated with this unexplained vari-

TABLE 2
Canadian Children's Sport Participation by Household Income, Education, Gender, Age, and Region: Without and With Controls (ANOVA via Multiple Classification Analysis) for Social Background Factors[1]

	Measures of Participation (N=5,189)			
	Organized Sport		*Informal Sport*	
Predictor Variables	*NC*[2]	*WC*[3]	*NC*	*WC*
Grand mean	1.86		2.27	
HOUSEHOLD INCOME				
Less than $15,000	1.44	1.56	2.03	2.05
$15,000 to $19,999	1.58	1.66	2.16	2.18
$20,000 to $29,999	1.56	1.60	2.20	2.20
$30,000 to $39,999	1.70	1.75	2.25	2.25
$40,000+	2.00	1.97	2.31	2.30
Beta/Stat.Sig.[4]	0.18/***		0.07/***	
EDUCATION				
Not Completed High School	1.44	1.56	2.13	2.18
Completed High School	1.79	1.79	2.25	2.25
Some Post-Secondary	1.84	1.84	2.30	2.30
Degree/Diploma	2.03	1.99	2.29	2.28
Beta/Stat. Sig.	0.16/***		0.04/*	
GENDER				
Male	1.99	1.99	2.37	2.37
Female	1.74	1.73	2.17	2.16
Beta/Stat.Sig.	0.15/***		0.12/***	
AGE OF CHILD				
6 years	1.77	1.77	2.18	2.18
7 years	1.85	1.85	2.30	2.30
8 years	1.91	1.92	2.31	2.31
9 years	1.96	1.97	2.33	2.34
Beta/Stat. Sig.	0.09/***		0.07/***	
REGION				
Maritimes	1.79	1.83	2.21	2.23
Quebec	1.65	1.66	2.28	2.29
Ontario	1.93	1.90	2.21	2.20
Prairies	1.95	1.94	2.31	2.30
British Columbia	2.08	2.09	2.44	2.44
Beta/Stat. Sig.	0.14/***		0.08/***	

[1] Controls are for gender, age, region.
[2] NC=No controls.
[3] WC=With controls.
[4] Statistical Significance: ***=$p<.001$; **$p<.01$; *=$p<.05$

ance, such as the availability of opportunities to participate in either organized or informal sport. Given that these analyses were conducted using secondary data, the authors were restricted to the available variables.

Discussion

The findings here make a significant contribution to our understanding of the relationship between socio-economic status, as measured by household income and parent's education, and children's participation in organized and informal sport. The findings show that socio-economic factors influence children's participation in sport; and particularly organized sport. These factors have less of an impact on children's participation in informal sport. Cultural factors such as gender and regional differences appear to be more influential on children's participation in informal sport.

Organized Sport

Children's participation in organized sport was most strongly predicted by household income and parent's education. The higher the household income and parent's education, the higher the child's participation in organized sport. Income was the strongest predictor, suggesting that the financial demands associated with organized sport can create inequity in Canadian children's opportunity to participate in organized sport. Indeed, parents with lower incomes facilitate their children's participation in organized sport less often. This is reasonable when taking into account the financial investment associated with the cost of participating in organized sport programs. The findings here support other studies that have shown registration costs and/or transportation as significant barriers to children's participation in sport (Havitz, Morden, and Samdahl 2004, Lareau 2003, Thompson, Rehman, and Humbert 2005). The need for reliable private transportation (especially as it relates to "select" or "rep" teams who often travel great distances) and the inflexible work schedules that are often congruent with lower socio-economic jobs, may create a social divide in the families who are able to support organized sporting opportunities for their children and those who cannot.

The recognition of the direct costs (i.e. registration fees) as well as the "hidden" indirect costs (i.e. equipment, transportation, tournament fees, hotel rooms, uniforms) needs to be acknowledged and taken into consideration with program implementation to ensure accessibility to all children. For children who come from families already on social assistance, the stigma associated with asking for additional financial assistance is often too much. In a research project conducted in the province of Ontario, Havitz, Morden, and Samdahl (2004) noted, "Some participants

in the study felt that a stigma existed simply from being unemployed; to approach a leisure agency looking for special treatment would potentially exacerbate that stigma" (173). Consequently, with very limited financial resources to cover the rent and bills, many parents on social assistance chose not to facilitate their children's participation in organized sport activities. Furthermore, those who did attempt to access subsidization programs felt that at times the "red tape" and administrative process were too much of a barrier to overcome. Accordingly, easier access to fee assistance programs, development of inclusive sport policies and social marketing may help all children experience the benefits that organized sport provides.

Gender differences also showed significant independence as the predictors of children's participation in organized sport. This would suggest that not only financial implications influence participation, but also cultural factors. Of considerable note (and concern) was that almost half (49%) of females "almost never" participated in organized sport. Gender remains a significant issue in children's organized sport participation. Even with policy and legislation aimed at equality for females, male participation rates continue to be higher than those of females (Raudsepp and Virra 2000, Shakib and Dunbar 2004). This may be representative of a disconnect from policy to practice, and inadequacies found in the quantity and quality of opportunities provided for girls at the community level. In a study conducted in Nova Scotia, Thompson, Rehman, and Humbert (2005) found that "girls only" hockey and baseball teams were not available for the girls and this became a barrier to participation. With limited facility resources (i.e. ice pads and fields) gender differences may also be reflective of the realities of practice and game schedules and females being allocated less "favourable" time slots compared to their male counterparts.

Gender differences in children's organized sport participation may also be shaped by parents' decision-making at the family-unit level. Once again, despite policy and legislation aimed at equality for females, perceptions and traditional gender ideologies reinforcing the notion that participation in sport is more important for sons than it is for daughters, may influence parental support and encouragement based upon gender (Coakley 2006). This notion is particularly important as the "family is a primary socializing agent where gender roles are learned" (Shakib and Dunbar 2004, 275) and may have long-term implications for sport participation patterns.

Informal Sport

Children's participation in informal sport was predicted by socio-economic status as measured by household income and parent's education. The higher the income and parent's education, the higher the child's participation in informal sport. However, relative to organized sport, it had a weaker relationship. The positive relationship between socio-economic status and rates of participation in informal sport may seem counterintuitive to Lareau's (2002, 2003) study, showing that children from lower status families are highly encouraged to participate in "natural growth" activities, that promote unorganized and unstructured moments of play. However, this may be partially explained by some valuable explanations in the literature that suggest why social differentiation occurs.

Parent's informal sport participation may be a predictor of children's informal (and organized) sport participation. Higher educated parents are more physically active themselves (Donnelly and Harvey 1999, Sport Canada 2000) thus serving as positive role models for their children. Scheerder, Vanreusel, Taks, and Renson (2005) suggest that "young people's (non-) participation in leisure-time sports is strongly related to parental attitudes and behaviour with respect to sports" (22). Social learning theory provides one explanation of this type of sport related behaviour, which is facilitated by children's role-modeling and imitation of their parent's informal sport activities and interests, or conversely, lack of activities and interests (Shakib and Dunbar 2004).

Further, higher levels of education not only lead to higher levels of income, but also to greater knowledge about the potential benefits of involvement in sport and physical activity. This increased knowledge may also play a role in explaining the positive relationship between involvement in both levels of sport (organized and informal) and parent's education. Donnelly and Harvey (1999) argue that social awareness programs, such as ParticipACTION, and Active Living are ineffective in breaking down social class barriers, and thus, these programs may have little impact in educating lower status families on the benefits of informal sport participation. This may be a systemic issue of middle-class bureaucrats (Donnelly and Harvey 1999) failing to recognize the "importance of social class as an organizing principle of social life, largely because for them class is an invisible force that makes everyone look pretty much the same" (Kimmel and Messner 2001, x). As Donnelly and Harvey (1999) and Frisby et al. (2001) noted, individuals from the working-class must be included in the original design of programs, in more than just a token role, if the message is to be effective in its meaning and reach more than just middle-class parents and children.

Gender was the strongest predictor variable for informal sport participation, followed by regional differences, household income, age of the child, and parent's education. As the strongest predictor variable, gender influenced children's participation in informal sport as boys in particular were more active. As suggested earlier with respect to organized sport, this may be attributed to gender stereotypes that are learned and reproduced within the individual family unit with sons' informal sport participation being encouraged more than the daughters' (Waser and Passavant 1997). It may also be indicative of broader socio-cultural structures reflecting "patriarchal power relations and ideologies about masculinity and femininity" (Shaw 1999, 272) and appropriate sport participation. In light of the known physical, emotional and social benefits associated with children's participation in sport, this situation is problematic and continued social awareness and education is necessary to ensure the positive development and maturation of all children, regardless of their gender.

A limitation of this study is in understanding the context of with *whom* children participate in informal sport activities. Middle-class children may be more apt to participate in informal activities under parental supervision within the family context as opposed to on their own or with their friends. As Lareau (2002) suggests, "middle-class children are less likely to learn how to fill "empty time" with their own creative play, leading to a dependence on their parents to solve experiences of boredom" (774). In Belgium, Scheerder, Taks, Vanreusel, and Renson (2005) reported that boys spend time in sports activities in the context of friends (51%), followed by family (31.8%) and alone (31.3%). In comparison, girls spend time in sports activities in the context of friends (46.9%), followed by family (31.7%) and alone (23.9%). Canadian research examining the context in which children participate in informal sport (i.e. alone, with parents, siblings, or friends) would be beneficial in further understanding children's informal sporting practices.

Regional Differences

Similar to the Curtis and McPherson (1987) study on adult involvement in sport, and White and Wilson's (1999) study on sport spectatorship, regional differences showed significant independence as the predictors of children's participation in both organized and informal sport. The further west a child resides, the higher the participation in both organized and informal sport. This would suggest the possibility of regional subcultures, social attitudes, and unique regional norms towards the value of children's participation in sport (see Curtis and McPherson, 1987). In part it also addresses White and Wilson's (1999) findings that high levels of amateur spectatorship in the west may be explained by high levels of children's organized sport participation.

However, of particular interest in this study was the anomaly identified in Quebec, for both organized and informal sport, in which this province clearly deviated from the patterns. Quebec had the highest proportion of inactive children in organized sport. Conversely, Quebec had the second highest proportion of active children in informal sport. This would imply that Quebec's subculture places a higher value in supporting children's participation in informal sport than competitive sport, relative to the trends noted across Canada. Future research would be insightful in examining why this regional subculture in particular, supports and encourages informal sport more than organized sport. Is it a reflection of the community and family value systems? Or is it an outcome of provincial policies, programs, and facilities that provide or inhibit opportunities for participation?

Conclusion

Even with policy and legislation aimed at equality for children in accessing sport through funding programs and gender equity initiatives, clearly, Canada remains a country where social divisions exist. Disparity between those with higher and lower household income and education levels, gender, and regional sub-cultural differences is apparent. As demonstrated in this study, the imbalance of children's sport participation may be reflective of the larger inequity of Canadian families' access to social resources and illustrates the complicated and problematic social issues facing its population. As Donnelly and Harvey (1999) noted the "widespread myth that Canada is a classless society, that we are all middle class now" (40) has certainly been blemished, but through continued social awareness and sport program development, cognizant of the varying needs of all Canadians, barriers to sport participation may be diminished.

Although the findings in this study are significant, they raise several questions and suggestions for future research in the exploration of cultural meanings as they relate to parental influences, gender and regional differences and children's participation in organized and informal sport. Further, research also needs to examine structural factors such as federal and provincial policies, programs, and facilities that may encourage or inhibit children's participation in sport. Easier access to fee assistance programs, development of inclusive sport policies and social marketing may help all children experience the benefits that organized sport and informal sport provides. Investigation into these areas may help minimize the imbalance and provide a level playing field for all children.

References

Adler A., and P. Adler. "Social reproduction and the corporate other: The institutionalization of after-school activities." *The Sociological Quarterly* 35:2 (1994): 309–328.

Andrews, F., J. Morgan, J. Sonquist, and L. Klem. *Multiple Classification Analysis.* Ann Arbor: Institute for Research, University of Michigan, 1973.

Berryman, J. "The rise of boys' sports in the United States, 1900 to 1970." In *Children and Youth in Sport: A Biopsychosocial Perspective,* F. Smoll and S. Smith (eds.), 4–14. Toronto: Brown & Benchmark, 1996.

Coakley, J. "The good father: Parental expectations and youth sports." *Leisure Studies* 25:2 (2006): 153–163.

———, and P. Donnelly. *Sports in Society: Issues and Controversies.* Whitby ON: McGraw-Hill Ryerson, 2004.

Cooper, H., J.C. Valentine, B. Nye, and J.J. Lindsay. "Relationships between five after-school activities and academic achievement." *Journal of Educational Psychology* 91:2 (1999): 369–378.

Curtis, J. and B. McPherson. "Regional differences in the leisure physical activity of Canadians: Testing some alternative interpretations." *Sociology of Sport Journal* 4 (1987): 363–375.

Darling, N., L. Caldwell, and R. Smith. "Participation in school-based extracurricular activities and adolescent adjustment." *Journal of Leisure Research* 37:1 (2005): 51–76.

Donnelly, P. "Child labour, sport labour: Applying child labour laws to sport." *International Review for the Sociology of Sport* 32:4 (1997): 389–406.

———, and J. Harvey. "Class and Gender: Intersections in Sport and Physical Activity." In *Sport and Gender in Canada,* P. White and K. Young (eds.), 40–64. Toronto: Oxford University Press, 1999.

Dunn, J., D. Kinney, and S. Hofferth. "Parental ideologies and children's after-school activities." *American Behavioral Scientist* 46:10 (2003): 1359–1386.

Flegal, K.M. "The obesity epidemic in children and adults: current evidence and research issues." *Medicine and Science in Sports and Exercise,* supplement 31:11 (1999): s510–s511.

Fishman, C. "The smorgasbord generation." *American Demographics* 21:5 (1999): 54–57.

Frisby, W., F. Blair, T. Dorer, L. Hill, J. Fenton, B. Kopelow. (2001). Taking Action: Mobilizing Communities to Provide Recreation for Women on Low Incomes. (Available from the British Columbia Centre of Excellence for Women's Health, E311–4500 Oak Street, Vancouver, British Columbia)

Harro, M., J. Alep, and D. Eensoo. "Relationship between the involvement in sport training classes, perceived health, and family's socioeconomic status." *Pediatric Exercise Science* 11:3 (1999): 274.

Havitz, M., P. Morden, and D. Samdahl. *The Diverse Worlds of Unemployed Adults: Consequences for Leisure, Lifestyle, and Well-being.* Waterloo: Wilfrid Laurier Press, 2004.

Hall, M. A. "Creators of the Lost and Perfect Game? Gender, History, and Canadian Sport." In *Sport and Gender in Canada,* P. White and K. Young (eds.), 5–23. Toronto: Oxford University Press, 1999.

Iwasaki, Y. "The role of active leisure in fighting against obesity and inactive lifestyle: Beyond physical activity." Proceedings from the *National Recreation and Park Association Congress: George Butler Lecture, Leisure Research Symposium,* 2005: 21–26.

Kimmel, M., and M. Messner. "Editor's introduction." In *Men's Lives,* 5th ed., M. Kimmel and M. Messner (eds.), ix–xvii. Boston: Allyn & Bacon, 2001.

Kremarik, F. "A family affair: Children's participation in sports." *Canadian Social Trends,* Statistics Canada, 2000 (Catalogue No. 11–008).

Lareau, A. "Invisible inequality: Social class and childrearing in black families and white families." *American Sociological Review* 67:5 (2002): 747–776.

———. *Unequal Childhoods: Class, Race, and Family Life.* Los Angeles: University of California Press, 2003.

Norusis, M.J. *SPSS 6.1 Guide to Data Analysis.* Chicago: SPSS, 1994.

Raudsepp, L., and R. Virra. "Sociocultural correlates of physical activity in adolescents." *Pediatric Exercise Science* 12 (2000): 51–60.

Scheerder, J., M. Taks, B. Vanreusel, and R. Renson. "Social changes in youth sports participation styles 1969–1999: The case of Flanders (Belgium)." *Sport, Education and Society* 10:3 (2005): 321–341.

———, B. Vanreusel, M. Taks, and R. Renson. (2005). "Social stratification patterns in adolescents' active sports participation behaviour: A time trend analysis 1969–1999." *European Physical Education Review* 11:1 (2005): 5–27.

Shaw, S. "Gender and leisure." In *Leisure Studies: Prospects for the Twenty-First Century,* E. Jackson and T. Burton (eds.), 271–281. State College, PA: Venture, 1999.

———. "The family leisure dilemma: Insights from research with Canadian families." *World Leisure* 4 (2001): 53–62.

———, and D. Dawson. "Purposive leisure: Examining parental discourses on family activities." *Leisure Sciences,* 2 (2001): 217–231.

Shakib, S., and M. Dunbar (2004). "How high school athletes talk about maternal and paternal sporting experiences." *International Review for the Sociology of Sport* 39:3 (2004): 275–299.

Sport Canada. *Sport Participation in Canada: 1998 Report.* Minister of Public Works and Government Services Canada, 2000 (Catalogue No. CH24–1/2000–1E–IN).

Stempel, C. "Book reviews: Annette Lareau, Unequal childhoods: Class, race, and family life." *International Review for the Sociology of Sport* 40:2 (2005): 265–272.

Sundeen, J. "A 'kid's game'? Little league baseball and national identity in Taiwan." *Journal of Sport & Social Issues* 25:3 (2001): 251–265.

Thompson, A., L. Rehman, and M. Humbert. "Factors influencing the physically active leisure of children and youth: A qualitative study." *Leisure Sciences* 27 (2005): 421–438.

Thorlindsson, T. "Sport participation, smoking and drug and alcohol use among Icelandic youth." *Sociology of Sport Journal* 6 (1999): 136–143.

Waser, A., and E. Passavant. (1997). "Sport as a leisure time pursuit among the youth of Caen, France." *International Review for the Sociology of Sport* 31:1 (1997): 7–17.

White, P., and B. Wilson. "Distinctions in the stands: An investigation of Bourdieu's 'habitus', socioeconomic status and sport spectatorship in Canada." *International Review for the Sociology of Sport* 34:3 (1999): 245–264.

Wiggins, D. "A history of highly competitive sport for American children." In *Children and Youth in Sport: A Biopsychosocial Perspective,* F. Smoll and S. Smith (eds.), 15–45. Toronto: Brown & Benchmark, 1996.

Yuen, F., and S. Shaw. "Play: The reproduction and resistance of dominant gender ideologies." *World Leisure* 2 (2003): 12–21.