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Withdrawal from Competitive Youth Sport: A Retrospective Ten-year Study

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This study provided a description of the extent, context, and timing of withdrawal from youth competitive sports and addressed the sport-specific vs. permanent dropout question. Grade 10 students (N = 1387) completed a sport participation profile retrospective to Grade 1 and a withdrawal questionnaire for all sports dropped. Ninety-four percent had withdrawn from at least one sport. Withdrawals increased with grade level. Of the dropouts, 70% continued competing in one or more sports. A sub-sample of Grade 7-8 responses revealed that 55% began at least one new sport after withdrawal (transfers). The most important reason for withdrawal was "lack of enjoyment", followed by "other non-sport activities" and "other sports". Significant differences were found in withdrawal reasons among dropout types, program types, grade levels and between genders.

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Although considerable cross-sectional research on withdrawal from children's and youths' competitive sport programs has been conducted, longitudinal studies are needed (Ewing & Seefeldt, 1996; Petlichkoff, 1996; Roberts & Treasure, 1992; Weiss & Petlichkoff, 1989). However, these are difficult to realize. A retrospective design is an acceptable alternative (Aaron et al., 1995; Durante & Ainsworth, 1996). Using such a design, a detailed analysis of withdrawal patterns from competitive youth sport within the context of simultaneous and subsequent sport participation over a ten-year period was undertaken in the current study, and reasons for withdrawal from youth sport were examined. Ewing and Seefeldt (1996) note that in investigations of sport withdrawal often little is known about the details of the sports dropped, such as level and length of participation and number of simultaneous sports. The sport participation profile in the present research provided the context for each dropped sport, namely the sequence of sports, the length of participation in the dropped sport, other sports the respondents participated in at the time of withdrawal, and subsequent sports after dropping out. As a result, a detailed picture of withdrawal patterns was obtained, not just information on a particular sport that was dropped in isolation from other sports.

Participants who had dropped a sport were identified using the dropout classification system outlined by Lindner, Johns and Butcher (1991) that recognizes four dropout types (sampler, low level participant, high level participant, and elite) based on length of time in the sport, competitive level, and amount of time spent training and competing. The four dropout types were expected to have different withdrawal patterns and reasons. The important question of whether withdrawal was "activity-specific" (discontinuation of a specific sport while continuing with one or more other sports) or "domain-general" (permanent withdrawal from competitive sport) (Gould, 1987) was also addressed by an analysis of Grades 7 and 8 responses. Activity-specific withdrawal occurs in specific sports such as gymnastics (Klint & Weiss, 1986) and swimming (Gould, Feltz, Horn, & Weiss, 1982), but its occurrence in other sports is unknown. Responses for Grades 7 and 8 were selected because the respondents' history of competitive sport participation and their subsequent continuing or transfer participation data could be assessed, and because the number of dropped sports increases substantially in those years compared to earlier school grades (Lindner, Butcher, & Johns, 1994).

Gould (1987), Lindner et al. (1991) and Weiss and Petlichkoff (1989) have provided reviews of the extensive research regarding reasons for withdrawal. Gould (1987) concluded that "conflicts of interest and interest in other activities have been found to be the most consistently cited motives for sport withdrawal, while negative motives such as lack of playing time, overemphasis on competition, boredom, competitive stress, dislike of the coach, and no fun have been rated as major motives by a smaller number of former participants" (p. 67). Weiss and Petlichkoff (1989) reached similar conclusions. Further information comes from Ewing and

Seefeldt (1989) who cited lack of interest and lack of fun as the primary reasons for discontinuing sport involvement by young United States participants, and from Skard and Vaglum (1989) who found that having few friends in soccer and low "soccer satisfaction" were the best predictors of dropping out in Norwegian youth.

In spite of the many studies on withdrawal reasons, Weiss and Petlichkoff (1989) identified two categories of "missing links" in the withdrawal literature, namely contextual factors including type of program and type of sport, and intrapersonal factors including the child's developmental level and intensity of sport involvement. The questionnaire in the present study allowed the comparison of withdrawal reasons for several groups based on program type, grade level and intensity of involvement.

The understanding of withdrawal reasons can be further enhanced by knowledge of what motivates children and adolescents to participate in sports. Weiss (2000) highlights three major motives for participation: the desire to develop and demonstrate physical competence; gaining social acceptance and support from peers and significant adults, including parents; and fun/enjoyment. Questions regarding these three motives were included in the current instrument in order to assess their relative importance in the reasons for withdrawal from competitive sport.

Method

Participants and Procedure

The target population was Grade 10 youth in North America and the study sample consisted of students from 50 complete Grade 10 classrooms from 13 high schools in six school divisions of a mid-sized Canadian city. The divisions and specific schools were selected to ensure the sample (N = 1387; 666 females, 721 males; average age = 15.1 years) was representative of the Grade 10 population in the city in terms of socioeconomic and ethnic characteristics. Grade 10 was chosen because students are required by law to attend school until 15 years of age.

School principals gave permission to conduct the study. A passive parental consent procedure was used. Parents were sent a letter explaining the purpose of the survey and if they did not want their children involved, they were to return forms to the school. The participants were surveyed in their classes during regular school hours and were informed that if they so chose they could withdraw from the study. Fewer than 30 students did not complete or were not serious about completing the survey. Considerable time was allowed for the completion of the questionnaire. Two trained research assistants helped the students where needed.

Materials

Sports Participation Profile. On the profile section of the questionnaire students listed all competitive sports in which they had participated since Grade 1 and the grades during which they had competed. Competitive sports were defined as structured programs sponsored by schools, community or private clubs, and provincial or national sport organizations. Students were not to include school intramural sports, recreational sports, or lessons. To facilitate recall, examples of competitive sports were given. For each sport listed, the participants reported whether they were still competing or had dropped out of that sport.

Details of Dropped Sports. Students completed another section of the questionnaire for each sport they had withdrawn from. A total of 2272 instances of dropped sports were reported. For each dropped sport, participation details were obtained to enable classification into dropout types. These details included number of years competed, type of competition, length of season in months, and average number of hours/week spent in training and/or competition. The information was used to divide the dropouts into Lindner et al.'s (1991) four types: a) sampler - withdrawal after one year or less in the sport, b) low level participant - withdrawal after more than one year with participation at low frequency and duration, c) high level participant - withdrawal after more than one year with participation at high frequency and duration, and d) elite - withdrawal after participation at provincial or national representative level. To allow checking the accuracy of the information on program type and level of involvement, the students were also asked to specify the league or program in which they competed. Information on simultaneous sports at the time of withdrawal was also requested.

Reasons for Withdrawal. Measurement of the reasons for withdrawal occurred in two ways: a) students rated 12 potential dropout reasons derived from the review of literature on 7-point Likert scales (7 denoted strongest agreement), and b) an open-ended question asked for the main reason for withdrawal from a particular sport.

Results

Reliability and Validity

To obtain test-retest reliability data, 22 additional students completed the questionnaire twice with a one-week time gap. Cronbach's Alpha reliability coefficients for the sports participation and withdrawal variables and for the responses given to the 12 reasons for withdrawal are reported in Table 1. The participation and withdrawal coefficients were > .90 and all but two of the withdrawal reasons coefficients were > .72.

To address validity, parents of 11 of the reliability subjects completed an identical questionnaire pertaining to their children's sport involvement. The correlations between parents'

and students' scores for the participation and withdrawal variables were > .45, except for total sports dropped (see Table 1). The 100% agreement on the type of competitive sports dropped is support for validity. The student-parent correlations for withdrawal reasons were mixed.

Table 1
Test-Retest Reliability and Validity of Sports Participation
Variables and of Reasons for Withdrawal

	Test-Retest	Validity:		
Variable	Alpha	Student-parent		
	Coefficients	Correlations		
	n=22	n = 11		
Participation variables				
Total sports participated in	.97	.84		
Total sports dropped	.90	.14		
Grade dropped out	.97	.84		
# years participated in sports dro	opped .96	.45		
Type of competition in sports dr	opped .97	1.00		
Withdrawal reasons				
Other sports took too much time	.84	.23		
Needed time for studying	.79	17		
Took job, giving less time	.72	.72		
Did not enjoy it anymore	.90	.44		
Was not good enough	.97	.14		
Too much pressure to perform w	ell .48	31		
Parents discouraged me from co	ntinuing _	17		
Too expensive	.43			
Injury played a role	.81	.99		
Coach was the reason	.99	1.00		
No longer an opportunity	.99	.36		
Spend more time on non-sport a	ctivities .60			

Withdrawal Patterns and Context

Sport participation and withdrawal were common occurrences for this sample, because 90.3% of the survey respondents competed in at least one sport between Grades 1 and 10, and of these 94.4% dropped out of at least one sport between Grades 2 and 10. Only 5.0% were still participating in every sport they started.

A summary of the results by gender and dropout type is presented in Table 2. The average respondent participated in almost four sports since Grade 1, dropped over half of them, and was still participating in 1.4 sports in Grade 10. The students participated in each sport for an average of three years and were participating in at least one simultaneous sport at withdrawal.

Males had higher values than females on total sports participated in and dropped, and years participated (paired t-tests). For the four dropout types, 1106 were classified as "high level participants", 516 as "samplers", 601 as "low level participants" and 41 as "elite" competitors. Progressing from sampler through to elite, the means of all five variables increased. Elite competitors had the longest and most frequent competitive sport participation history, while samplers had much less overall participation. Elite athletes also dropped out during later grades, on average. The differences among the dropout types were significant for all participation and withdrawal variables (p < .001).

Attrition Rates by Grade and Program Type

For all sports, Table 3 shows a slight increase in the percentage of dropouts from Grades 2-6, with a substantial increase in Grade 7 (when most students move from elementary to junior high school) and again in Grade 10 (when most students move from junior to senior high school).

Sports were categorized into three main program types - interschool, community club, and private club. Interschool sport programs consist of school representative teams competing against other schools (excluding intramural sports). Community club programs are organized by non-profit community organizations which operate sport facilities (such as ice rinks and soccer fields) in different regions of the city. Private club programs are run by individuals or organizations that rent or own facilities usually for the use of one specific sport, such as swimming, gymnastics, dance and curling.

Table 3 presents data for the 10 sports with the most total dropouts (female and male combined), separated into the program types. For each sport, the ratio of dropouts/participants (attrition rate) is presented for Grades 2-10. For interschool sports minimal participation occurred in Grades 1-4 and the highest participation occurred in junior high school. For all four sports, the most withdrawals occurred in Grade 10. For volleyball and basketball, the dropout

rate increased in Grade 7. For community club sports, more participation took place in the lower grades than for school sports. The peak grades for participation were between Grades 5-7. For soccer and baseball-softball, most of the withdrawals occurred in Grade 7, and for hockey and football in Grade 10. The two private club sports had early participation patterns, with the peak in Grades 3 and 5 followed by a steady number of withdrawals. The highest percentage of dropouts per participants occurred in Grades 9 and 10.

The percentage of total dropouts per total participants by gender from Grades 2-10 combined is also shown in Table 3. Except for participation in male dominated sports by females (ice hockey and football), the percentage of dropouts ranged from 20.5% to 74.1%, with a mode of approximately 50%. Excluding these male dominated sports, the highest percentages of total dropouts (average of females and males) were in soccer (65.5%), swimming (62.3%), and gymnastics (60.4%).

Table 2
Means of Participation and Withdrawal Measures, Compared by Gender and Dropout Type

		Gende	r						
Variable	Total sample	Female n=1024	Male n=1248	t value	Sampler n=516		High b n=1106		F-value
Total sports participated in since Grade 1	3.9	3.8	4.0	39.4*	3.3	3.6	4.3	5.1	18.6**
Total sports dropped since Grade 1	2.5	2.4	2.6	23.2*	2.1	2.3	2.7	3.0	15.4**
Years participated in each dropped sp	3.0	2.9	3.2	29.2*	1.0	3.2	3.8	5.9	425.7**
No. of simultaneous sports at withdr	1.4	1.4	1.4	4.85	1.1	1.4	1.5	1.7	11.7**
Grade dropped	7.9	7.9	7.8	5.85	7.5	7.9	8.0	9.1	12.4**

Note. n indicates the number of dropped sports. ^aLow level participant. ^bHigh level participant. *p < .05. **p < .001.

Table 3
Percentage of Dropouts per Participants by Grade and Program Type

Sport				Gr	ade					Gr. 2-10 C	ombined
2 3	4	5	6	7	8	9	10	Female	Male		
All Sports	2.9	5.1	6.7	8.8	11.6	20.6	18.0	29.1	42.7		
Interschool	0	0	0	0	2.2	16.3	8.0*	167	39.9	51.0	48.7
Volleyball Basketball	0	0	12.5	2.4	7.0	16.7		16.3	26.8	40.7	42.1
Track and field	0	0	0	1.0	0	5.4		15.5	24.0	36.4	36.4
Badminton	0	0	0	0	5.9	3.9	3.8*	8.6	12.2	24.0	20.5
Community Clu											
Soccer	5.4	8.4	13.8	15.1*	20.3	31.3	21.0	29.0	14.8	56.9	74.1
Baseball-softba	116.8	5.0	8.1	8.9	10.1	*23.0	19.5	19.3	12.4	31.0	51.3
Ice hockey	2.9	4.7	4.6	5.3*	5.6	8.6	9.8	15.2	16.0	80.0	45.2
Football	0	0	0	4.5	2.8	27.9*	28.8	21.0	32.7	100.0	51.2
Private Club											
Swimming	0	1.5	7.1	10.0*	18.0	22.1	22.4	32.3	26.2	63.2	61.3
Gymnastics	3.6	10.7*	12.3	17.7	22.7	25.9	22.9	32.3	40.9	70.7	50.0

Note. For specific sports, the percentage is of dropouts in that grade per total participants in that sport in the previous grade.*Grade with most participants in the sport.

Sport-specific and Permanent Dropouts

The issue of sport-specific or permanent sport withdrawal was examined by determining simultaneous participation in other sports at the time of withdrawal, and subsequent participation in later years. At the time of withdrawal, 70.7% of the sample were competing in at least one other sport, and thus were sport-specific dropouts.

To further examine this issue, the sport profiles of students who reported dropping a sport in Grades 7 or 8 were examined for the number of sport-seasons competed in during the dropout year (simultaneous participation) or in later years. Of the 300 withdrawals in Grade 7 and 255 in Grade 8, 80.7% and 83.5% of respondents, respectively, competed in other sports during the dropout year or subsequently. The average number of sport-seasons competed in

after dropping out during Grade 7 was 6.4 (Grades 7-10), and during Grade 8 was 5.4 (Grades 8-10), so many of these dropouts were still very actively involved in competitive sport.

Of the students who dropped a sport in Grade 7 or 8, 66% and 42.4%, respectively, (55.1% of the combined sub-sample) began new sports in the dropout year or later. The highest participation rates for non-school sports occurred around Grade 6 and for school sports around Grade 8, suggesting that most of the transfers occurred from non-school sports (community club or private club) to school sports. Not only did many dropouts join other sports, but some rejoined the same sport. The questionnaires of all students were scanned for gaps in participation (e.g., competing in a particular sport in Grades 2-4 and then again in Grades 7-9). Of all students who had dropped out of a sport, 124 (10.5%) rejoined the same sport after a gap of from one to six years.

Withdrawal Reasons

Table 4 presents the means and standard deviations of the ratings of the 12 withdrawal reasons, in rank order of reported importance. The most important reason for withdrawing of the total sample was "I did not enjoy it any more". "Wanting time for non-sport activities" and "other sports took too much time" were the next most important reasons. The reasons ranked fourth to sixth, eighth and ninth, and eleven and twelfth, respectively, had overlapping 95% confidence intervals and should be considered equal.

For each of four variables: gender, dropout type, grade (developmental) level, and program type, a multivariate analysis of variance (MANOVA) was performed to determine if there were overall differences between groups for the combined 12 reasons, followed by univariate analyses of variance (ANOVA) and Scheffé's F-test post hoc analyses.

Gender Differences. Means and ranks by gender are presented in Table 4. The MANOVA revealed a significant overall gender difference in the 12 reasons (F = 2.74, p < .001). Five reasons with significant differences were as follows: females felt more strongly than males that they were not good enough, had more pressure to perform well, needed the time for studying, and that injury played a role in their withdrawal, and males had higher means for taking a job.

Dropout Type Differences. The means for the four dropout types are ranked in Table 5. The elite competitors had substantially different ranks from the other three types. Their main reasons for withdrawing were "too much pressure to perform well, injury, needing time for studying, and the coach". The sampler dropouts also had some different rankings from the low and high level participants. Their second most important reason portrayed poor perceived competence (not good enough), while for the low and high level participants other activities (non-sport and sport) were second and third in importance. The MANOVA revealed significant overall differences (F = 5.36, p < .001) and the univariate analyses resulted in seven of the

statements being significantly different among the groups. Post hoc analyses revealed several significant paired differences. Enjoyment and competence feelings (not good enough) became progressively less important moving from sampler to elite participants. Conversely, expense was more important moving from elite competitor to sampler. Elite competitors also felt significantly more pressure to perform than the other three groups and acknowledged injury as a major factor. Low and high level participants considered time for other sports more important than samplers, and a job was more important for high level participants than samplers.

Table 4
Mean Responses to Dropout Reasons (and Ranks) for Total Sample and by Gender

Dropout Reason	Total San	nple	Gend	er	F-value	
	Mean (± SD)	Rank	Female n=1024	Male n=1248		
Did not enjoy	3.65 (±2.5)	(1)	3.61 (1)	3.71 (1)	0.6	
Wanted more time for non-sport activities	2.99 (±2.3)	(2)	3.02 (2)	2.96 (2)	0.3	
Other sports took too much time	2.86 (±2.2)	(3)	2.88 (3)	2.85 (3)	0.1	
I was not good enough	2.67 (±1.9)	(4)	2.78 (4)	2.57 (4)	6.5**	
Too much pressure to perform well	2.61 (±2.0)	(5)	2.70 (6)	2.53 (5)	4.3*	
Needed time for studying	2.59 (±2.0)	(6)	2.72 (5)	2.47 (6)	8.0*	
Coach was the reason	2.32 (±2.0)	(7)	2.34 (8)	2.30 (7)	0.3	
Injury played a role	2.23 (±2.1)	(8)	2.38 (7)	2.15 (9)	4.4*	
There was no longer an opportunity	2.20 (±2.0)	(9)	2.32 (9)	2.16 (8)	2.1	
Took a job, giving me less time	1.83 (±1.7)	(10)	1.74(11)	1.90 (10)	4.6*	
It was too expensive	1.71 (±1.5)	(11)	1.73 (12)	1.76(11)	0.1	
My parents discouraged me	1.71 (±1.5)	(12)	1.76(10)	1.68 (12)	1.5	

 $[*]p \le .05. **p \le .01.$

Table 5
Mean Responses to Withdrawal Reasons (and Ranks) by Dropout Types

		Dropout 7	Гуре			
Dropout Reason	Sampler n=516	Low n=601	High <i>n</i> =1106	Elite n=41	F-value	Paired Comparisons ^a
Did not enjoy	3.9(1)	3.8(1)	3.5(1)	2.7(6)	4.5**	1>4
Not good enough	3.1(2)	2.8(4)	2.5(6)	1.4(12)	20.4***	1>2,3,4;
						2>3,4;3>4
More non-sport activities	3.0(3)	2.9(2)	3.0(2)	2.8(5)	.4	
Too much pressure	2.7(4)	2.5(5)	2.6(5)	3.9(1)	3.6**	4>1,2,3
Other sports	2.5(5)	2.9(3)	3.0(3)	2.5(8)	6.2**	1<2,3
Studying	2.5(6)	2.5(6)	2.7(4)	3.0(3)	2.1	
No opportunity	2.3(7)	2.4(7)	2.1(9)	2.0(9)	2.0	
Coach	2.3(8)	2.3(8)	2.4(8)	2.9(4)	1.4	
Injury	2.1(9)	2.0(9)	2.4(7)	3.5(2)	7.5**	4>1,2;3>2
Parents discouraged	1.7(10)	1.8(10)	1.7(12)	1.7(11)	.2	
Job	1.7(11)	1.7(11)	1.9(10)	1.9(10)	3.6*	3>1
Too expensive	1.5(12)	1.6(12)	1.9(11)	2.6(7)	3.6*	3,4>1,2

^aGroup 1 = sampler, 2 = low level participant, 3 = high level participant, 4 = elite.

Grade (Developmental) Differences. Developmental differences in the reasons for withdrawing from sport were expected and therefore the respondents were divided into three school-age groups: elementary (Grades 2-6), junior high (Grades 7-9), and senior high (Grade 10). Lack of enjoyment was by far the most important reason for the elementary and junior high students, but it was tied with "needing time for studying" for the Grade 10 students (Table 6). The MANOVA revealed overall differences among the three groups (F = 11.3, p < .001). Univariate analyses produced six significant grade differences. As expected from the differences in rankings, lack of enjoyment became progressively less important with age, while time for studying became more important. Four other factors became increasingly more important with age, namely other sports taking too much time, the coach, injury, and jobs.

^{*}p < .05. **p < .01. ***p < .001.

Table 6
Mean Responses to Dropout Reasons (and Ranks) by Grade Level

Dropout Reason	Elementary	Jr. High	Sr. High		Paired
	(Gr. 2-6)	(Gr. 7-9)	(Gr. 10)	F-value	Comparisons ^a
	n=497	n=1184	n = 590		
Did not enjoy	4.5(1)	3.6(1)	3.1(2)	44.4**	1>2,3;2>3
More non-sport activities	2.8(2)	3.1(2)	3.0(3)	2.0	
Not good enough	2.8(3)	2.6(5)	2.8(5)	2.5	_
Other sports	2.5(4)	2.9(3)	3.0(4)	7.2**	1<2,3
Too much pressure	2.5(5)	2.6(6)	2.8(6)	2.6	
No opportunity	2.1(6)	2.2(9)	2.2(10)	.5	
Coach	2.1(7)	2.4(7)	2.3(8)	4.7*	1<2
Studying	1.8(8)	2.6(4)	3.1(1)	57.9**	1<2,3; 2<3
Injury	1.8(9)	2.3(8)	2.5(7)	15.9**	1<2,3
Too expensive	1.8(10)	1.7(12)	1.6(12)	1.4	
Parents discouraged	1.7(11)	1.7(11)	1.7(11)	.6	
Job	1.3(12)	1.8(10)	2.3(9)	41.2**	1<2,3; 2<3

^aGroup 1 = elementary, 2 = junior high, 3 = senior high.

Program Type Differences. Results for the three program types are presented in Table 7. "Not good enough" was an important reason for interschool dropouts but not for private club dropouts. The MANOVA yielded significant differences between the three groups (F = 13.31, p < .001). The importance of competence was also reflected in the results of the univariate ANOVAS. The interschool dropouts perceived less opportunity than the other two sport types, needed more time for studying and subscribed more strongly to the financial cost reason. Community club and private club more than interschool dropouts gave lack of enjoyment and a job as important reasons for withdrawal.

Open-ended Withdrawal Reasons

A total of 2845 responses to the question "what was the main reason for dropping a sport" were coded and grouped into 12 categories of withdrawal reasons. Table 8 shows the total frequencies of responses in the categories for the whole sample and for the four dropout

^{*} $p \le .01.$ ** $p \le .001.$

types. The first three responses, lack of enjoyment, other things to do, and other sports, were also the top Likert scales responses. The remaining reasons, however, were different and were informative. For example, injury was the main reason for 9% of the sample. Differences in percentages occurred mainly between the elite competitors and the other three dropout types. For elite dropouts, injury was the most frequently cited reason. Lack of enjoyment was not a frequent reason for them and personal competence was not mentioned at all. Pressure to perform and personal commitment were more common responses for elite dropouts than for the other three types. Low level participants cited unsuitability for the sport more often than the other types, and samplers and high level participants ascribed their discontinuation more frequently to peer and parental influences.

Table 7
Mean Responses to Dropout Reasons (and Ranks) by Program Type

Dropout reason	Inter- school n=984	Community Club n=937	Private Club n=290	F-value	Paired Comparisons
Did not enjoy	3.3(1)	4.0(1)	3.9(1)	16.8**	1<2,3
More non-sport activities	3.1(2)	2.9(2)	2.8(3)	2.1	
Not good enough	3.0(3)	2.5(4)	2.3(8)	21.2**	1>2,3
Other sports	3.0(4)	2.7(3)	2.9(2)	2.9	
Studying	3.0(5)	2.2(7)	2.4(6)	38.1**	1>2,3
Too much pressure	2.7(6)	2.5(5)	2.6(4)	3.0	
No opportunity	2.6(7)	2.0(9)	2.0(10)	13.2**	1>2,3
Injury	2.3(8)	2.1(8)	2.4(5)	2.1	
Coach	2.3(9)	2.4(6)	2.4(7)	.5	
Too expensive	2.0(10)	1.7(11)	1.6(12)	9.1**	1>2,3
Parents discouraged	1.7(11)	1.7(12)	1.8(11)	.6	
Job	1.5(12)	1.9(10)	2.3(9)	23.3**	1<2,3;2<3

^aGroup 1 = interschool, 2 = community club, 3 = private club.

^{**} $p \le .001$.

Discussion

This study collected retrospective data from a large sample over a ten-year period. It provided a detailed description of the extent, context, and timing of withdrawal from youth competitive sports and addressed the sport-specific vs. permanent dropout question.

The similarities and differences in reasons that parents and students gave in the validity part of the study were noteworthy. There was very high agreement for the coach, injury, and jobs as the reasons for withdrawal but there were negative correlations for needing time to study, too much pressure, and parental discouragement. Perhaps the parents did not realize that their children felt pressure or that they were discouraging their children. Comparison of perceptions of participants and dropouts with those of their parents may well be a worthwhile topic for further study.

Withdrawal Patterns

Nearly without exception young sport competitors dropped out of a sport at some point in their sport histories. It seems that most youths participate in a variety of sports (average of four) during their school years, looking for the ones that appeal to them most. For the majority of sport dropouts, their withdrawal was from a specific sport and was not permanent withdrawal, since over 70% of the total sample dropouts were competing in at least one other sport at the time of withdrawal, 55% of the Grade 7/8 subsample began a new sport in the dropout year or later, and 10% of the entire sample rejoined the dropped sport after a gap of 1-6 years. Therefore, it appears that adults should not become unduly concerned about a child withdrawing from a particular sport, since chances are good that they are still participating in other sports, they will join a new sport in that year or subsequent years, and they may even rejoin the same sport. In addition, the alarmingly high dropout rates for specific youth sports (Gould et al., 1982; Klint & Weiss, 1986) give an inaccurate impression of the extent of withdrawal from youth sport in general.

Analysis of the context of the dropout occurrences showed that on average the students had participated in the dropped sports for a considerable length of time (three years) and were participating in at least one simultaneous sport. There were significant differences in the withdrawal context for the four dropout types using Lindner et al.'s (1991) classification. Samplers had less overall sport participation and were competing in fewer simultaneous sports at withdrawal. In contrast, elite competitors had been in their dropped sport for nearly six years and were still participating in two simultaneous sports at withdrawal. Thus, participation in these sports was not fleeting. Participants tended to stick with a sport for some time before dropping it and were still participating in other sports at the time of withdrawal. Ewing and Seefeldt (1996) were correct in asserting that multi-sport participation was the norm.

As regards the timing of discontinuation, the number of withdrawals increased with grade level and peaked in Grade 10 when students enter senior high school. This was a later age of peak attrition than in previous research (Ewing & Seefeldt, 1989; Petlichkoff, 1992). There were also increases in withdrawal in Grade 7 when students enter junior high school. As Petlichkoff (1996) suggested, some of these withdrawals may have been externally controlled because of fewer available positions on interschool teams. Different timing patterns emerged for the three program types, i.e., for interschool sports, students tended to join in later grades and to drop out in Grade 10, while for both community club and private club sports students joined in earlier grades and dropped out between Grades 7-10. It appears that many students' initial sport experiences were in community clubs and private clubs.

Disregarding girls' participation in sports traditionally played by boys (hockey, football), the specific sports with the highest percentages of dropouts per total participants were soccer, swimming, and gymnastics. These data challenge some commonly held beliefs, for example, that ice hockey in Canada has a poor retention record. In actual fact, hockey had a lower percentage of dropouts per total participants than the other community club and private club sports - more than half of the boys who had ever started hockey were still playing in Grade 10. It also had relatively low annual attrition rates across grade levels, ranging from 2.9-16%.

Withdrawal Reasons

The reasons given for withdrawal by this large and diverse sample were informative. The number one reason for withdrawal was lack of enjoyment as it was in Ewing and Seefeldt's (1989) study. These findings support Weiss' (2000) contention that fun/enjoyment is one of the three major motives for participation in sports. However, as Gould (1987) suggested, enjoyment is a "surface-level response". In future research, the "enjoyment" reason should be made more specific to determine what aspects of the competitive sport experience were not enjoyable. The second and third most important reasons, "wanting time for non-sport activities" and "other sports", are similar to those reported in recent reviews (Gould, 1987; Lindner et al., 1991; Weiss & Petlichkoff, 1989).

The reasons for withdrawing were also different among the four dropout types. For short duration participants (samplers), lack of enjoyment was an important reason followed by lack of competence. On the other hand, elite participants (provincial or national teams) had different concerns. Their major reasons for withdrawal were too much pressure to perform well, and injury. The open-ended responses confirmed the importance of injuries for these elite athletes, as one in five gave injury as their main reason for withdrawal. These differences appear to justify the use of the dropout classification system proposed by Lindner et al. (1991) and underline the need to study dropout types separately. Sport administrators should con-

sider these differences when planning sport programs for youths, since it seems that for a child just starting a sport, enjoyment and feelings of competence are most important for keeping that child in sport. With increased length of participation at a non-elite level, enjoyment is still important, but conflicts with other sport and non-sport activities become greater deterrents to sport participation. At this stage, time management training and assistance in setting priorities could be helpful for young athletes. Finally, for elite athletes, techniques for coping with pressure (stress management) seem necessary. Injury management (conditioning and rehabilitation) is also important to keep these athletes participating in their sports longer.

The group comparisons helped to address some of the "missing links" raised by Weiss and Petlichkoff (1989). Firstly, considering gender differences, females reported that lack of competence and pressure to perform well were more important reasons for withdrawal than for males. There was also a significant interaction of gender and grade level for the competence reason. For males, this reason became less important with grade, whereas for females it became more important in Grade 10. Gender and dropout type also interacted significantly for "too much pressure". Female samplers had higher scores for this reason than low and high level participants. Ewing and Seefeldt (1989) also reported that the only significant gender difference in their top nine dropout reasons was for "too much pressure". On a practical note, the results suggest that organizers of girls' sport programs should try to put less pressure on beginning participants, while for older girls the emphasis should be on skill development so that they feel a sense of competence and are more likely to remain.

As Weiss and Petlichkoff (1989) contended, and Lindner et al. (1991) hypothesized in their youth sport withdrawal model, there were several developmental (age) differences in withdrawal reasons. For the Grade 10 group, the most important reason was needing time for studying. Jobs, injury, other sports, and the coach were also more important than for younger students. As students grow older, academic and job concerns increase leaving less time for competitive sport. On the other hand, lack of enjoyment was the most important reason for dropping out for the elementary school group. Instructors/coaches should be aware that enjoyment is more important for younger athletes and should make their programs as enjoyable as possible to enhance long-term retention. These developmental differences emphasize the notion that youth sport dropouts cannot be considered as a single entity. Reasons for withdrawal change with age.

The analysis by program type offered insight into the problems associated with interschool and community/private club sports respectively. Interschool competitors were more concerned with competence ("not good enough") and with lack of opportunity. There is often decreasing opportunity for participation as students move from junior to senior high school. Most schools have only one team in each sport, and competence becomes a big factor

in whether a student will make the school team. Interschool officials should be making efforts to include more athletes in school programs. The other significantly different factors for interschool dropouts were a job, studying and expenses. These factors are confounded by age, however, since interschool dropouts tend to be older than community or private club dropouts.

This study's findings regarding withdrawal reasons support two of Weiss' (2000) three major motives for participation. Enjoyment was the top-ranked reason overall. It was more important for elementary school children but less important for interschool and elite participants. Physical competence was the fourth-ranked reason overall and was especially important for females, samplers and interschool competitors. However, the third motive, lack of social support (by parents), was the lowest ranked reason overall with no significant group differences.

In conclusion, this study provided information on withdrawal patterns and on reasons for withdrawing from competitive youth sport. The group differences indicated that the characteristics of dropouts must be considered when discussing withdrawal reasons. Extending the study to Grade 12 to get a more complete picture of youth sport withdrawal would be useful, since at that point many structural changes occur that limit older adolescents' participation in competitive sport. Interschool sports terminate at the end of Grade 12, and community and private clubs offer different programs for adults than for adolescents. Thus, competition in youth sport programs is really an activity in one developmental period of a person's life. The crucial question is whether these former competitive athletes continue participating in physical activity. The answer to that question awaits further research.

References

- Aaron, D.J., Kriska, A.M., Dearwater, S.R., Cauley, J.A., Metz, K.F., & LaPorte, R.E. (1995). Reproducibility and validity of an epidemiologic questionnaire to assess past year physical activity in adolescents. *American Journal of Epidemiology*, 142, 191-201.
- Durante, R., & Ainsworth, B.E. (1996). The recall of physical activity: using a cognitive model of the question-answering process. *Medicine and Science in Sports and Exercise*, 28, 1282-1291.
- Ewing, M. E., & Seefeldt, V. (1989). Participation and attrition patterns in American agency-sponsored and interscholastic sports: An executive summary. Final report. North Palm Beach, FL: Sporting Goods Manufacturers Association.
- Ewing, M. E., & Seefeldt, V. (1996). Patterns of participation and attrition in American agency-sponsored youth sports. In F. L. Smoll & R. E. Smith (Eds.), *Children and youth in sport: A biopsychosocial perspective* (pp. 31-45). Madison: Brown and Benchmark.
- Gould, D. (1987). Understanding attrition in children' sport. In D. Gould & M. R. Weiss (Eds.), Advances in pediatric sport sciences (pp. 61-85). Champaign, IL: Human Kinetics.
- Gould, D., Feltz, D., Horn, T., & Weiss, M. (1982). Reasons for discontinuing involvement in competitive youth swimming. *Journal of Sport Behavior*, 5, 155-165.
- Klint, K. A., & Weiss, M. R. (1986). Dropping in and dropping out: Participation motives of current and former youth gymnasts. *Canadian Journal of Applied Sport Science*, 11, 106-114.
- Lindner, K. J., Butcher, J., & Johns, D. P. (1994). Recall of competitive sports participation by urban grade 10 students. Canadian Association for Health, Physical Education and Recreation Journal, Research Supplement, 1, 79-95.
- Lindner, K. J., Johns, D. P., & Butcher, J. (1991). Factors in withdrawal from youth sport: A proposed model. *Journal of Sport Behavior*, 14, 1-18.
- Petlichkoff, L. M. (1992). Youth sport participation and withdrawal: Is it simply a matter of FUN? *Pediatric Exercise Science*, 4, 105-110.
- Petlichkoff, L. M. (1996). The drop-out dilemma in youth sports. In O. Bar-Or (Ed.), *The child and adolescent athlete: Encyclopedia of sports medicine* (Vol. 6) (pp. 418-432). Oxford: Blackwell Science.
- Roberts, G. C., & Treasure, D. C. (1992). Children in sport. Sport Science Review, 1, 46-64.
- Seefeldt, V. D., & Ewing, M. E. (1997). Youth sports in America: An overview. *Physical Activity and Fitness Research Digest*, 2, 1-12.

- Skard, O., & Vaglum, P. (1989). The influence of psychosocial and sport factors on dropout from boys' soccer: A prospective study. *Scandinavian Journal of Sports Science*, 11, 65-72.
- Weiss, M. R. (2000). Motivating kids in physical activity. *The President's Council on Physical Fitness and Sports Research Digest, Series 3*, No. 11, 1-8.
- Weiss, M. R., & Petlichkoff, L. M. (1989). Children's motivation for participation in and withdrawal from sport: Identifying the missing links. *Pediatric Exercise Science*, 1, 195-211.

Acknowledgements

This research project was supported by Sport Canada's Applied Sport Research Program. We gratefully acknowledge the co-operation of the principals and staff of the high schools that participated in this study and wish to thank the 1387 Grade 10 students for their time and effort in completing the questionnaire. Appreciation is also extended to two anonymous reviewers who provided comments on earlier versions of this paper.