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Causes and consequences of dropping out from organized youth sports

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Abstract: The purpose of this study is to examine dropout reasons and various types of dropouts in relation to demographic variables, various types of sports, physical activity, and underlying motivational processes. Retrospective data was collected from three cohorts including 1,176 participants, of which 712 stated that they had sometimes dropped out of organized sport. Findings showed that time-related reasons were the primary causes for dropping out. It was also revealed that athletes with low versus high levels of perceived physical competence dropped out to a higher extent because of experiencing too much pressure, and athletes reporting low versus high social competence withdrew to a higher extent because they did not like their teammates. Results also showed that girls with a foreign background had a higher rate of dropouts compared to boys with the same background. Girls with foreign backgrounds were also found to be less physically active after dropping out from organized sports.

Key words: Dropout, surface, underlying reasons, competence, physical activity

Introduction

Sports are the most popular leisure activity in Western countries, especially in Sweden where almost 90% (~1.7 million) of all children and youths at times have been participating in some of the 20,000 sports clubs located throughout the country (Swedish Sports Confederation, 2011; Wagnsson, 2009). Even though participating in organized sports continues to be one of the most popular leisure activities, a significant number of the athletes quit organized sports as they grow older. The decline in youth sport participation starts at the age of 13

and continues until late adolescence (i.e., 17-18 years), when only approximately 30% of all youths still participate in organized sports (Swedish Sports Confederation, 2011; Wagnsson, 2009). In other words, there is no problem getting children involved in organized sports, but keeping them involved seems to be a great challenge.

Youth sport dropout has been an issue for researchers since the early 1970s. Primarily this research was descriptive, focusing on identifying reasons for dropping out of organized sports. A variety of reasons for withdrawal were detected, including conflicts of interest, lack of fun and low perception of ability (Cervelló, Escartí, & Guzmán, 2007; Weiss & Amorose, 2008; Patriksson, 1988). Moreover, differences between groups such as gender, types of sports and age have been studied (Moliner, Salguero, Tuero, Alvarez & Márquez, 2006; Salguero, Gonzalez, Tuero & Marquez, 2003; Butcher et al., 2002). This research has revealed that reasons such as “More time for school”, “More time for other sports” and “Did not like the coach” are becoming more important with increasing age. Athletes who drop out from individual sports rate performance ability linked to competition as a more important reason than those dropping out from team sports. Gender differences that have emerged are that girls drop out to a greater extent than boys because they feel that they have low performance ability and that they experience too much pressure.

Previous research has provided a greater understanding of the reasons for dropout, but in order to increase the theoretical knowledge more research derived from countries with different (sporting) cultures would be useful (Weinberg, et al., 2000; Si & Lee, 2007). Bairner (2010) suggests that there is evidence of a specifically Scandinavian approach to sport, associated above all with social solidarity and how to maintain a balance between mass participation and elite performance.

Moreover, there is a gap in the dropout literature regarding the relations between dropout and ethnicity. Research on how people with different ethnic backgrounds, other than Swedish, influence sports participation is warranted, especially in view of the fact that the proportion of foreign-born citizens has increased in the past twenty years, and that integration into the Swedish society through sport has become a high priority (Peterson, 2008).

Gould and Petlichkoff (1988) suggest that it would be erroneous to believe that young athletes who end their participation in sports will never take part again. They present two sport withdrawal categories: *sport-specific dropout* (i.e., dropping out of a specific sport while joining or continuing in another sport) and *domain-general dropout* (i.e., quitting all sports). Several studies have confirmed that many of those who drop out of sports will reenter the same or other sports/clubs later on (Butcher, Linder & Johns, 2002; Patriksson, 1988; Seippel, 2005). However, few researchers have made a distinction between sport-specific and domain-general dropouts when studying dropout reasons. Moreover, to our knowledge no study has used Gould's and Petlichkoff's (1988) model to examine young people's overall level of physical activity after a domain-general dropout. It is important to have more knowledge in this area because physical activity is an important factor to prevent overweight and obesity among young people (WHO, 2012).

Gould and Petlichkoff (1988) have claimed that descriptive research does not provide a complete understanding of why youths discontinue in organized sports, which calls for a study of the underlying motivational processes to comprehend the surface level reasons for dropping out. Studies that have used a more theoretical approach, such as Competence Motivation Theory (Harter, 1982; 1999) and Achievement Goal Theory (Nicholls, 1989) when trying to

grasp these processes, indicate that children and adolescents who withdraw from youth sports are more ego-oriented² and perceive themselves to have lower physical competence than those individuals who remain involved in sports (Cervellò et al., 2007; Kelly, 2002; Ommundsen & Vaglum, 1997; Sarrazin, Vallerand, Guillet, Pelletier, & Cury, 2002; Ullrich-French & Smith, 2008). Moreover, McCarthy, Jones, and Clark-Carter (2008) found that perceived competence strongly predicts enjoyment in sports while Butcher, Sallis, McKenzie and Alcaraz (2001) have shown that perceived physical competence predicts participation in sports and the extent to which youths change from one sport to another. However, no study has examined if physical competence can predict the amount of physical activity after domain-general dropout.

Furthermore, dropout research using Competence Motivation Theory as a theoretical framework has been partially contradictory. For, in contrast to the studies reported above, there are studies that have found no differences in physical competence between dropouts and non-dropout athletes (see Weiss & Amorose, 2008 for a review). These results have contributed to research with the purpose of examining the relationship between perceived competence and different reasons for participation. For example, Klint and Weiss (1987) found that athletes with high physical competence rated skill development reasons as more important and those with higher social competence rated friendship and team affiliation as more important. However, more research is needed to reveal how underlying motivational processes (e.g., perceived competence) are related to surface level reasons (i.e., reasons young athletes cite for dropping out of organized sports), preferably using Harter's (1982, 1999) Competence Motivation Theory as a theoretical framework. As previous research has

² Characterized by a normative perception of ability with the primary goal to perform a task better than others, or as good as others, but with less effort in order to perceive oneself competent (Nicholls, 1989).

indicated, this theory can be useful when studying the cognitive processes that underlie youths' decisions to dropout of organized sport.

Purpose of the study

The purpose of this study is to examine the most common cited surface level reasons for dropping out of organized sports, and to examine various types of dropouts (sport-specific versus domain-general dropout), in relation to i) demographic variables such as gender, age and ethnicity ii) various types of sports (team versus individual sport) and iii) frequency of physical activity after domain-general dropout.

Using Harter's (1982; 1999) Competence Motivation Theory as a framework, an additional purpose is to iv) study the relation between underlying motivational processes (i.e., perceived physical, social and cognitive competence) and surface level reasons for dropping out of organized sports. Moreover this study aims to iv) examine whether perceived physical, social and cognitive competences are related to frequency of physical activity/inactivity among domain dropout-youths.

Method

This study is part of a larger research project funded by the Swedish Sport Research Council. The aim of the project is twofold: i) to study socialization effects of youth sports involvement, and ii) to examine dropout types and reasons in organized children and youth sports in Sweden. This study focuses on the second purpose of the project, using data from the first data collection. The project has a three-occasion longitudinal multiple cohort design, including elements of retrospective questions.

Participants and procedures

Data were collected from pupils residing in schools situated in the western and middle parts of Sweden. The initial sample (85% answering rate), including both participants and non-participants in organized sports, was based on a randomly stratified sampling procedure and comprised of a total of 1,176 pupils (41% females and 21% with foreign background) distributed in primary school (33%), lower secondary school (34%), and upper secondary school (33%). The intensity of sport involvement was very wide, ranging from youths who had just entered sports to elite participants who were involved more than 40 hours per week. On average participants took part in sports for 3.17 hours per week, distributed over 45 different sports, where the most common sports were: soccer (40%), equestrian (9%), ice-hockey (6%), floor-ball (5%) and golf (5%). The most common dropout sports were football (57%), followed by handball (17%), floor-ball (14%) and martial arts (14%).

The questionnaire was administered by a co-director of the project and/or by trained university students and was collected in the respective classrooms. This procedure made it possible to guide participants with poor reading abilities and to answer questions related to the questionnaire. The purpose of the study was explained, and it was emphasized that participation was voluntary, and that they could withdraw at any time. Parental and teacher consent to participate in the study was also given. Parents were sent a letter explaining the purpose of the study and were asked to contact the research leader of the project if they did not want their child to participate in this study. The project was approved by the Research Ethical Committee at Karlstad University.

The questionnaire was also translated into Swedish using a structured translation-back-translation process (Geisinger, 2003). In this process, the questionnaire was translated from English into Swedish by a translator and then

back-translated into English by a different translator. The scale was checked for differences between the English and Swedish versions, and was adjusted accordingly.

Questions regarding alcohol and tobacco were not given to pupils in the lower secondary school (10-12 years). Additionally, questions regarding goal orientation were also excluded, since children of these ages have generally not developed the ability to assess the motive for success (Nicholls, 1989). Moreover, the wording and visual presentation were aligned according to the respective age group. The children's questionnaire also contained cartoon characters that were designed to motivate and guide when answering the questions. To strengthen the validity and reliability of the used instruments, a pilot study was conducted. Pupils filled in the questionnaire on two separate occasions and were asked about the form, scope and query design. After that the questionnaire was modified to its final form.

Measures

Socio-demographic variables

In order to analyze dropout reasons in relation to the age of dropout the respondents were divided into three age groups: a) dropout before the age of 11 (<11 years), b) dropout between the age of 11-13 years (11-13 years), and c) dropout after the age of 13 (>13 years). Ethnicity was categorised and coded into two categories: Scandinavian background (83%), when participants and parents were reported to be born in Scandinavia and foreign backgrounds for other constellations (i.e., participants were born outside Scandinavia and one/or both parents born outside Scandinavia). Participants with foreign backgrounds were distributed accordingly: Western Asia, 32%; Southern Europe, 26%; North Africa, 12%; Eastern Europe, 7%; South America, 7% and rest of the world, 16%.

Sport participation

Participation in organized sports was assessed by the question “Are you a member of a sports club?” The possible answers were “Yes”, “No, I have never participated in a sports club”, and “No, I have dropped out.” The respondents were then asked to list every sport in which they participated.

Dropout and types of sports

Dropping out from organized sport was assessed by the question, “Have you dropped out of any organized sports? The possible answers were “No, I continue to practice every sport I begun” and “Yes, I have dropped out from one or several sports”. The respondents were then asked to list every sport from which they had dropped out. For each dropped sport, details were obtained, including the name of the sports club and the age at which they began and withdrew from the activity.” A dichotomous variable of participation in various sports was then created (*Individual* and *Team Sports*) based on this information. Only the persons (n=712) who stated that they had dropped-out of organized sports were included in further analysis (see Table 1 for descriptives).

Dropout types

Athletes who responded that they participated in organized sports and additionally answered that they had dropped out of one or several sports, were categorized as sport-specific dropouts. Athletes who answered “No, I have dropped out” when asked if they were a member of a sports club, were categorized as a domain-general dropout.

Dropout reasons

Dropout reasons were measured by using 12 potential dropout reasons derived from a review of the literature (Butcher et al., 2002; Patriksson, 1988).

Responses to each of the items were reported on a 5-point Likert scale ranging from *I strongly disagree* (1) to *I strongly agree* (5). The dropout reasons included in the study have also been replicated in subsequent studies (e.g. Armentrout & Kamphoff, 2011; Enoksen, 2011; Molinero et al., 2006). Furthermore, Weiss and Williams (2004) suggest that many dropout reasons are, inversely, related to reasons for staying involved in sport, thus identifying three highly consistent reasons for participating in sports. These reasons are also represented among the 12 main reasons for dropping out of organized sports mentioned above: (a) (did not) develop or demonstrate physical competence or adequacy (e.g., “I was not good enough”) (b) (did not) attain social acceptance and approval (e.g., “I did not like my team members”) (c) (did not) enjoy experience (e.g., “I did not have fun”).

Physical activity

Physical activity was assessed through one question regarding sport, gym or exercise during leisure time using a five-item response scale (*Not at all*=1, *1-3 times/month*=2, *1-2 times/week*=3, *3-4 times/week*=4, *5 times/week or more* =5). This item relates to participation in both organized and unorganized physical activity during leisure time. Participants, who reported that they were not physically active at all, or only active one to three times per month, were labeled as physically inactive. Additionally, those who reported that they remained physically active twice a week or more were categorized as physically active.

Perceived competence

A modified version (shortened and a one-item-one-pole-format) of Harter’s SPPC-scale (1982, 1985) was used for the assessment of self-concept. Reliability coefficients (Cronbach’s alpha) for physical competence (.80) and social competence (.80) were acceptable (Tabachnick & Fidell, 2007), whereas

alpha estimates for cognitive competence were poor (.42). Consequently, this variable was removed from further analyses.

Data Analyses

For descriptive analyses, means and standard deviations were computed for each variable. In order to investigate whether dropout reasons were related to gender, age, ethnicity, types of sports (team versus individual sports), sport-specific versus domain-general dropout, perceived physical and social competence, a multivariate analysis of variance (MANOVA) was performed for each variable with the 12 dropout reasons (Butcher et al., 2002; Patriksson, 1988) as dependent variables. Moreover, to reveal whether perceived competence differed between those who had made sport-specific or domain-general dropouts, a MANOVA was conducted with the types of dropout (domain-general and sport-specific) as an independent variable and perceived physical and social competence as dependent variables. Furthermore, with the intention of examining if physical and social competences are related to physical activity after a domain-general dropout, a similar analysis was conducted with physical activity as an independent variable. Significant multivariate effects were followed up with univariate analyses (ANOVA). Significant effects in more than two groups were followed up with Sheffé's post hoc test (Tabachnick & Fidell, 2007).

In order to examine whether dropout types could be differentiated by gender, age, ethnicity and types of sport, Chi Square tests were conducted for each variable in relation to types of dropouts (domain-general and sport-specific dropout) and physical activity after a domain-general dropout. An alpha level of $p < .05$ was used for all statistical tests (Tabachnick & Fidell, 2007).

Results

Table 1 outlines descriptive statistics for the variables examined in the study, except for the 12 reported dropout reasons (see table 2). Among those who dropped out of a sport, almost half continued in another sport club (i.e., sport-specific dropouts), while the other half left all sports club activities (i.e., domain-general dropouts). Additionally, results showed that the main part of the domain-general dropouts remained physically active twice a week or more.

Table 1:

Descriptive statistics for drop-out participants (n=712) characteristics on the variables examined.

Variables	Descriptive statistics
Age	$M=14.4$ ($SD=2.4$)
Gender	Girls, $n=295$ (41%); Boys, $n=417$ (59%)
Type of sport	Team sports, $n=437$ (63%); Individual sports, $n=252$ (37%)
Ethnicity	Scandinavian background, $n=570$ (83%); Foreign background, $n=140$ (17%)
Dropout type	Domain-general, $n=344$ (48%); Sport-specific $n=368$ (52%)
Physical activity after domain-general dropout	Physical active, $n=223$ (66%); Physical inactive, $n=115$ (34%)
Age for dropout	$M=11.5$ ($SD=2.7$); $n_1=260$ (<11 years); $n_2=251$ (11-13 years); $n_3=145$ (>13 years)
Physical competence	$M=3.1$ ($SD=1.6$) (Min=1, Max=5)
Social competence	$M=3.7$ ($SD=0.8$) (Min=1, Max=5)

Dropout reasons and types of dropouts

The most important reason given for dropping out was “Not fun” (see table 2). With the exception for this reason, time-related reasons were found to be the most important ones for dropping out of organized sports. These reasons included “More time for other leisure activity”, “More time for friends”, and “More time for school”. The MANOVA revealed significant overall differences, $F(12,619) = 19.58$, $p < .001$, Wilks' $\lambda = .73$, $\eta_p^2 = .28$), and the following

univariate analyses showed significant differences between two reasons related to various dropout types.

Sport-specific dropouts placed greater emphasis than domain-specific dropouts on the motive “Not fun”, while domain-general dropouts placed greater emphasis than sport-specific dropouts on the motive “Long distance to training” (see Table 2).

Table 2

Participants’ self-reported reasons for dropping out of organized sports, related to various types of dropouts (Min = 1, Max = 5).

Dropout reasons	Total		Sport - specific		Domain-general		F	η^2
	M	SD	M	SD	M	SD		
Not fun	2.96	1.50	3.12	1.52	2.78	1.47	8.17**	.01
Other leisure activities	2.76	1.47	2.83	1.51	2.69	1.46	1.39	
More time for friends	2.66	1.38	2.55	1.39	2.75	1.38	3.46	
Other sports	2.39	1.52	3.05	1.57	-	-	-	
More time for school	2.00	1.23	1.95	1.19	2.02	1.26	0.54	
Too much pressure	1.87	1.19	1.81	1.18	1.91	1.21	1.05	
Not good enough	1.86	1.19	1.90	1.24	1.76	1.09	2.34	
Did not like the coach	1.75	1.25	1.68	1.17	1.80	1.30	1.44	
Did not like the team members	1.72	1.21	1.76	1.24	1.72	1.20	.65	
Did not get to play/compete enough	1.50	1.05	1.50	1.03	1.46	1.04	.23	
Long distance to training place	1.48	1.01	1.41	.93	1.57	1.10	4.10*	.01
Too expensive	1.33	.83	1.29	.74	1.34	.90	.63	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Gender

The MANOVA revealed overall differences in dropout reasons for gender, $F(12,632) = 2.48$, $p < .01$, Wilks’ $\lambda = .96$, $\eta_p^2 = .04$. The univariate analyses showed significant differences for the reasons “Other leisure activities”, $F(1,643) = 10.83$, $p < .001$, $\eta^2 = .02$, and “Did not get to play or compete enough”, $F(1,643) = 4.72$, $p < .05$, $\eta^2 = .01$. Boys placed greater emphasis than girls on the reason “Other leisure activities”, ($M = 2.91$, $SD = 1.50$ vs. $M = 2.55$, $SD = 1.41$) and on “Did not get to play or compete enough” ($M = 1.57$, $SD =$

1.12 vs. $M = 1.39$, $SD = .95$). No significant differences were found between girls and boys in relation to sport-specific or domain-general dropouts or in the case of physical activity after domain-general dropout.

Age

When comparing domain-general and sport-specific dropouts in relation to the dropout age categories, results showed that domain-general dropouts increased with the dropout age (37% at <11 years; 50% at 11-13 years and 65% for >13 years), while sport-specific dropouts decreased accordingly with age (63% at <11 years; 50% at 11-13 years and 35% for >13 years), $\chi^2(2, N = 644) = 28.23$, $p < .001$, Cramér's $V = .21$. Moreover, 57% of those who were domain-general dropouts, before the age of 11 and 76% of domain-general dropouts after the age of 13, remained physically active, $\chi^2(2, N = 305) = 8.00$, $p < .05$, Cramér's $V = .16$. The MANOVA showed a significant main effect for age, $F(24,1162) = 3.36$, $p < .001$, Wilks' $\lambda = .87$, $\eta_p^2 = .07$. The univariate analyses revealed that the reasons "Not fun" and "Not good enough" became progressively less important with age (see Table 3). Between the ages of 11-13, the motive "Too much pressure" became more important compared to other age groups. Furthermore, the motive "Did not like the team members" was significantly more important for those who dropped out in the ages of 11-13 than for those who dropped out after 13. Finally, the results showed that dropping out due to "Did not like the coach" was significantly higher rated among those in the oldest age group compared to those in the youngest age group.

Table 3:

Participants' self-reported reasons for dropping out of organized sports, related to age. Mean (Max=5 Min=1).

Dropout reasons	Age at dropout						Multiple comparisons ^a	η^2	F
	<11		11-13		>13				
	M	SD	M	SD	M	SD			
Not fun	3.15	1.49	3.11	1.53	2.35	1.37	1 > 3***; 2 > 3***	.05	14.52
More time for school	1.99	1.28	1.89	1.17	2.20	1.29			2.71
More time for friends	2.72	1.42	2.77	1.41	2.47	1.27			2.18
Other sports	2.52	1.54	2.45	1.56	2.12	1.48			3.06
Other leisure activities	2.72	1.49	2.84	1.50	2.76	1.46			.38
Not good enough	1.96	1.24	1.86	1.17	1.55	1.01	1 > 3***, 1 > 2*	.02	5.49
Too much pressure	1.78	1.15	2.05	1.30	1.69	1.05	2 > 1, 3*	.02	4.77
Too expensive	1.32	.79	1.32	0.89	1.34	.83			.03
Did not get to play/compete enough	1.55	1.13	1.50	1.03	1.39	.96			1.05
Did not like the team members	1.78	1.26	1.85	1.30	1.50	.98	2 > 3*	.01	3.54
Long distance to training place	1.47	1.03	1.49	.99	1.54	1.06			.20
Did not like the coach	1.59	1.12	1.82	1.27	1.90	1.34	3 > 1*	.01	3.28

Note: Group 1 = < 11 years, group 2 = 11-13 years, group 3 = > 13 years

* $p < .05$, ** $p < .01$, *** $p < .001$.

Ethnicity

The MANOVA revealed significant overall differences in dropout, $F(12,612) = 2.19$, $p < .01$, Wilks' $\lambda = .96$, $\eta_p^2 = .04$. The univariate analyses showed significant effects for "Have more time for school", $F(1,623) = 17.87$, $p < .001$, $\eta^2 = .03$. Athletes with foreign backgrounds ($M = 2.47$, $SD = 1.46$) to a higher extent dropped out in order to have more time for school in comparison with athletes with a Scandinavian background ($M = 1.91$, $SD = 1.15$). Analysis comparing girls with foreign backgrounds and girls with Scandinavian backgrounds revealed no significant multivariate difference. A similar analysis between boys with a foreign background and boys with a Scandinavian background showed a significant multivariate difference, $F(12,349) = 1.89$, $p < .05$, Wilks' $\lambda = .94$, $\eta_p^2 = .06$). The univariate analyses showed that only one of the reasons were significantly different: "More time for school". This motive was shown to be significantly more important for boys with foreign background

($M = 2.37$, $SD = 1.34$) than for boys with Scandinavian background ($M = 1.90$, $SD = 1.18$), $F(1,360) = 4.13$, $p < .05$, $\eta^2 = .01$.

Further analysis showed no overall differences in dropout types (i.e., sport-specific or domain-general dropout) between athletes with Scandinavian background and athletes with foreign backgrounds respectively. However, girls with foreign backgrounds were significantly more represented in the domain-general dropout group (67% vs. 42%) and less in the sport-specific dropout group than boys with the same background (33% vs. 58%), $\chi^2(1, N = 112) = 7.36$, $p < .01$, Cramér's $V = .26$. Likewise, there were no significant differences between participants with Scandinavian background and foreign background concerning physical activity after a domain-general dropout. But further analysis showed that girls with foreign background were less physically active after domain-general dropouts than boys of the same ethnic background (49% vs. 83%), $\chi^2(1, N = 58) = 6.83$, $p < .01$, Cramér's $V = .34$.

Team and individual sports

The MANOVA revealed an overall significant multivariate difference between individual and team sports concerning dropout reasons, $F(12,623) = 3.39$, $p < .001$, Wilks' $\lambda = .94$, $\eta_p^2 = .06$. Univariate analyses indicated significant differences for the reasons "Not good enough", $F(1,634) = 6.97$, $p < .01$, $\eta^2 = .01$, "Cost", $F(1,634) = 13.91$, $p < .001$, $\eta^2 = .02$, "More time for school", $F(1,634) = 4.13$, $p < .05$, $\eta^2 = .01$ and "Long distance to training place", $F(1, 634) = 4.54$, $p < .05$, $\eta^2 = .01$. Athletes who dropped out of team sports scored higher than dropouts from individual sports on the item "Not good enough" and "More time for school". Individual athletes ranked "Costs" and "Long distance to training place" as more important reasons than team sports dropouts.

There were no differences found in dropout frequency when comparing team and individual sports in relation to sport-specific or domain-general dropout.

Moreover, no differences were found when comparing different types of sports and physical activity after a domain-general dropout.

Perceived physical and social competence

In order to determine whether surface level reasons differed as a result of perceived physical and social competence the latter variables were categorized through the cumulative percent into two groups (cut point <50%): high and low perceived physical and perceived social competence. The multivariate analyses showed overall significant differences for social, $F(12,469) = 3.31, p <.001$, Wilks' $\lambda = .92, \eta_p^2 = .08$, and physical competence, $F(12,475) = 6.44, p <.001$, Wilks' $\lambda = .86, \eta_p^2 = .14$) (see table 4). The univariate analyses showed that the reason "Other sports" was more important for those with high degree of perceived physical and social competence.

Those with high physical competence also dropped out to a higher extent because they wanted to have more time for "Other leisure activities". Athletes with both low perceived physical and low perceived social competence considered the motive "Too expensive" more important than those with high perceived competence respectively. Moreover, dropouts who perceived low physical competence rated the motive "Too much pressure" as significantly more important than those with high perceived physical competence. The results also revealed that athletes with low perceived social competence withdrew to a higher degree because they "Did not like their teammates" and because they perceived themselves to be "Not good enough" compared with athletes that perceived high social competence. Contrariwise, dropouts with high perceived social competence rate the motive "More time for school" higher than dropouts with low perceived social competence.

Table 4:

Reported reasons for dropout in relation to perceived physical and social competence. Mean (Min=1 Max=5).

Dropout reasons	Physical Competence <i>n</i> =488					Social Competence <i>n</i> =482						
	High		Low		<i>F</i>	η^2	High		Low		<i>F</i>	η^2
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Not fun	2.88	1.52	2.93	1.46	.06		2.88	1.52	2.90	1.46	.09	
More time for school	2.12	1.24	1.92	1.16	3.40		2.13	1.32	1.92	1.08	5.13*	.01
More time for friends	2.57	1.32	2.65	1.35	.37		2.66	1.35	2.58	1.31	1.01	
Other sports	2.81	1.60	1.89	1.26	53.65***	.10	2.55	1.59	2.16	1.39	10.19**	.02
Other leisure activities	2.97	1.49	2.71	1.42	3.93*	.01	2.87	1.48	2.80	1.44	.71	
Not good enough	1.75	1.13	1.89	1.11	1.36		1.67	1.05	1.93	1.14	5.59*	.01
Too much pressure	1.79	1.09	2.02	1.26	3.95*	.01	1.82	1.14	1.98	1.22	1.64	
Too expensive	1.22	.60	1.42	1.00	6.95**	.01	1.19	.62	1.45	.97	11.42***	.02
Not get to play/compete enough	1.51	1.04	1.43	.92	1.55		1.45	.98	1.50	.99	.15	
Did not like the team members	1.70	1.17	1.74	1.20	.08		1.58	1.09	1.86	1.26	5.81*	.01
Long distance to training place	1.50	1.04	1.57	1.04	.46		1.57	1.14	1.51	.94	.76	
Did not like the coach	1.85	1.32	1.88	1.27	.00		1.79	1.28	1.94	1.30	1.54	

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

In order to study the relation between underlying motivational processes an analysis with various types of dropouts (domain-general and sport-specific) as an independent variable and perceived physical and perceived social competence as dependent variables was also conducted. The MANOVA revealed a significant multivariate difference, $F(2,514) = 40.31$, $p < .001$, Wilks' $\lambda = 0.86$, $\eta_p^2 = .14$. Follow up univariate analyses revealed that sport-specific dropouts perceived themselves as significantly more socially ($M = 3.83$, $SD = .75$ vs. $M = 3.60$, $SD = .90$), $F(1, 515) = 9.57$, $p < .01$, $\eta^2 = .02$, and physically competent ($M = 3.52$, $SD = .96$ vs. $M = 2.76$, $SD = 1.00$), $F(1, 515) = 80.41$, $p < .001$, $\eta^2 = .14$ than domain-general dropouts.

Moreover, following the fourth purpose of the study, a second analysis was conducted with the same dependent variables (i.e., physical and social competence) and with physical activity *after* domain-general dropout as an independent variable. The multivariate analyses revealed an overall significant difference, $F(2,748) = 42.13, p < .001$, Wilks' $\lambda = .90, \eta_p^2 = .10$). Univariate analyses showed that athletes who were physically active after a domain-general dropout scored significantly higher on physical competence ($M = 3.28, SD = 1.04$ vs. $M = 2.39, SD = 1.07$), $F(1,749) = 84.01, p < .001, \eta^2 = .10$, and social competence ($M = 3.77, SD = .82$ vs. $M = 3.41, SD = .97$), $F(1,749) = 21.03, p < .001, \eta^2 = .03$) than those who were physically inactive.

Discussion

The overall aim of this study was to investigate processes related to dropping out of organized youth sports. Earlier research has indicated that dropping out of sports is a complex phenomenon with numerous factors involved. In the same way that children participate in youth sports for a variety of reasons, they also cite multiple reasons for withdrawal from organized sports (Gould & Petlichkoff, 1988). This complexity contributes to making the subject of dropouts a complicated topic to investigate. Gould's and Petlichkoff's (1988) model gives an increased theoretical understanding of the dropout process, but the model in total seems very difficult to test empirically. The intent of this study was therefore to use some of the theoretical ideas in the model to reach a deeper understanding of the dropout process.

The result of this study showed that dropout from sports does not necessarily have to be permanent, either from organized sports or physical activity. As indicated by Seippel (2005) and Patriksson (1988), there seems to be a great mobility among youths in sports. This factor is important to consider when discussing the frequency of dropouts. Moreover, dropout results indicate that

dropout patterns differ depending on at what age the dropout occurs. Those who dropped out before the age of 11 were mostly categorized as sport-specific dropouts and those who dropped out after the age of 13 as domain-general dropouts respectively. Hence, it seems appropriate to suggest that youths try different sports to a higher extent at a younger age (i.e., the sampling years) before focusing on one or two specific sporting activities (i.e., specializing years) (Côté, 1999; Fraser-Thomas, Côté & Deakin, 2008). When youths are entering the specializing years (13-15 years), it also seems plausible that they have to enjoy the activity and perceive themselves to be competent in the specific sport in order to find it worthwhile to perform the time-consuming training often required to excel. Additionally, the opportunity to enter a new sport, or to perform at a less intense level, will probably be limited as they grow older, thus increasing the risk of a general dropout from organized sports. In the specializing years many clubs are also starting elite activities, where teams already have started to sort players out, making it hard for novice players to enter (Franzén & Peterson, 2004). Moreover, when entering a new sport, youths probably will perceive themselves to be less competent than their peers, increasing the probability to drop out of sports (Harter, 1999; Nicholls, 1989).

Lindner, Johns and Butcher (1991) have proposed that age-related psychosocial and physical differences influence the withdrawal process. In the present study there were several significant age-differences noticed. The motive “Too much pressure” was the most important motive cited between 11-13 years. This might be a result of an increased focus on competition, which is generally seen in youth sports at the end of this age-span (Côté, 1999; Fraser-Thomas, et al., 2008). In turn this might also increase the social demands to perform above, or at least at the normative standard in the training group. Interestingly, the pressure motive seems to become less important after 13 years of age. Perhaps

this implies that those who still participate after these ages have learned to handle the pressure?

As indicated by Butcher et al. (2002), disliking the coach becomes a more relevant motive for dropping out of organized sport with age. It is also interesting to note that there were no significant age differences detected related to the motive “Other things to do”, which have been seen in other studies (Butcher et al., 2002; Molinero, et al., 2006).

Notably, a majority (76%) of the domain-general dropouts after the age of 13, continued to be physically active, while only 57% of domain-general dropouts before the age of 11 continued to be physically active. In the light of these findings, it appears that one should pay more attention to the younger age groups when addressing interventions to get children to be more physically active. Moreover, a Danish study has shown that self-organized physical activities (e.g., walking, jogging) and physical activities in commercial organizations (e.g., fitness center) are increasing considerably at the age of 16-19, while participation in organized sports are decreasing at the same rate (Pilgaard, 2012).

There were no significant differences found in dropout types related to gender or types of sports (team or individual). However, results showed that girls with a foreign background had a higher rate of domain-general dropouts compared to boys with the same background. The same patterns occur in relation to physical activity after domain-general dropout. Further research would benefit from identifying the obstacles for this group found in organized sports and moreover to reveal the types of physical activity to which they are attracted. The twelve dropout reasons used in this study seem not sufficient to explain what elements in organized sport that do not fit girls with foreign backgrounds. With a view to

developing theoretical perspective on dropout from sport, further research should determine dropout reasons for this group.

According to Gould and Petlichkoff (1988), it is important to understand the underlying processes that lead to youth attrition from organized sports. Harter's (1982, 1999) Competence Motivation Theory, for instance, has strongly been supported in the physical domain. Empirical findings have shown that sport dropouts typically score lower on perceived competence than persistent participants (Ullrich-French & Smith, 2008; Weiss & Amorose, 2008). Supporting these findings, results in the present study showed that the domain-general dropouts reported a lower degree of perceived physical and social competence than sport-specific dropouts. Moreover, the motive "other sports" seemed more important for those reporting high degree of perceived physical and social competence. In line with Butchers and her colleagues (2002), these findings indicate that individuals who perceive themselves to be highly physically and socially competent have greater opportunities to change to other sports when faced with a context that does not fully satisfy their needs, or when they find other more enjoyable alternatives to choose between. Additionally, the results showed that participants who perceived themselves to have a high degree of physical or/and social competences and also were categorized as domain-general dropouts continued to be significantly more physically active outside organized sports, compared to domain-general dropouts with low perceptions of physical or/and social competence. Moreover, those youths who perceived themselves to have high degree of physical or/and social competences remained more physically active in general—whether specific or domain dropouts—either by continuing in some other sports club or being physically active in other activities outside organized sports. Consequently, it seems more important to view dropouts as a problem among those who perceive themselves as having a low degree of physical or/and social competence than among the group who

perceive themselves to have a high degree of some of the competences mentioned above.

McCarthy, Jones, and Clark-Carter (2008) have found that perceived competence strongly predicts enjoyment in sports. In line with this, it seems reasonable to suggest that perceived competence underlies the surface reason “Not fun.” However, the results in the present study did not support this hypothesis, showing no significant differences between those with high or low physical and social competence respectively when comparing the strength of the motive “Not fun”. However, we found significant differences between participants with high versus low perceived physical competence in relation to the reason “To much pressure”. These results may be interpreted as a consequence of a selection out of sport effect, meaning that sport participants with low perceived physical competence are sorted out of their sport, for example, because they are not able to handle the demands existing in organized sport. As previously reported, “too much pressure” becomes a more important motive between the ages of 11-13. Consequently, further research could usefully investigate if there is a relation between age, physical competence, and the dropout motive “Too much pressure”. Furthermore, dropout youths, who rated themselves to have low social competence, attach significantly greater importance to the motive “Did not like the team members” than dropouts reporting high social competence. In line with earlier research (see Smith, 2006 and Weiss & Stuntz, 2004 for an overview) this might indicate that participants, rated by others to have low sport-specific competence have difficulties being fully accepted by their peer group and are consequently more likely to drop out of sports because of disliking their team mates.

Limitations and future research

There are some limitations in this study that are worth noting. First, it is important to consider that the effect sizes of significant differences were moderate or low for most variables studied, and that the mean lies below 3 for all dropout motive variables (min = 1, max = 5). This might imply that there are other, more important surface level reasons for dropping out of organized sports that have been missed out in this study. Moreover, the retrospective design is inevitably flawed with some problems when respondents are trying to recall earlier experiences (distortions when recalling and reinterpretations when recalling).

Future research would benefit from using prospective data (i.e., longitudinal designs), preferably following youths into adulthood in order to draw safer conclusions and perhaps reveal presumptive effects shown later in life. Moreover, using longitudinal designs makes it possible to sort out whether differences between groups are caused by sport participation per se, or if they, to some extent are due to selection processes, reflecting differences in aspects of psychosocial characteristics established before beginning these sport activities.

A longitudinal design would also provide a deeper understanding of the decision-making process of withdrawal and make it possible to study the athlete's mobility. There seems to be a risk that dropout studies that do not consider different dropout types are simplifying the reasons for withdrawal and consequently misinterpret the extent and the consequences of dropping out of sports. One must remember that it is necessary to separate the different types of dropouts from each other since they have different meanings. It is, for example, one thing to change sports or clubs; and quite another to end all organized sports, thereby ending up doing no physical activities at all. To fully understand the processes influencing withdrawal from organized youth sports, one must

consider the question from different perspectives. It would be useful to distinguish between the individual level, the sports club level, the sport federation level and the national sport confederation level. From an individual perspective an athlete can drop out from a certain sport, but still be active in another sport. However, at the sports club level one club has lost a member, while another club has gained one. The same kind of reasoning can also be applied to the sport federation level. At the national sport federation level there is still no problem. But if an individual makes a general dropout, there will be a problem at all the levels mentioned above. From a societal perspective there will only be a problem if an individual quits all kinds of physical activity since there will be an elevated risk of developing health related diseases (Biddle, Gorely, Stensel, 2004; Janssen & Le Blanc, 2010).

Additionally, more qualitative research is needed. It is hard to identify all factors, regarding such a complex phenomena as sport withdrawal with a survey design. A deeper understanding of why youths drop out from organized sports will hopefully contribute to develop youth sports as a positive socialization arena (see, for example, Fraser-Thomas et al., 2008). Ideally, children and youths will gain greater enjoyment when participating in organized sports that, lead to a lifelong interest in being physically active, even if they eventually choose to withdraw entirely

References

- Armentrout, S.M., & Kamphoff, C. S. (2011). Organizational barriers and factors that contribute to youth hockey attrition. *Journal of Sport Behavior*, 34, 121-136.
- Bairner, A. (2010). What's Scandinavian about Scandinavian sport? *Sport in Society*, 13, 734-743.
- Biddle, S.J.H., Gorely, T., & Stensel, D.J. (2004). Health -enhancing physical activity and sedentary behavior in children and adolescents. *Journal of Sport Sciences*, 22, 679-701.
- Butcher, J., Lindner, K., & Johns, D. (2002). Withdrawal from competitive youth sport: a retrospective ten-year study. *Journal of Sport Behaviour*, 25, 145-163.
- Butcher, J., Sallis, J. F., McKenzie, T. L., & Alcaraz, J. E. (2001). Longitudinal study of children's participation in organized sport and instructional programs. *Avante*, 7, 86-96.
- Cervelló, E.M., Escartí, E., & Guzmán, J.F. (2007). Youth sport dropout from the achievement goal theory. *Psicothema*, 19, 65-71.
- Côté, J. (1999). The influence of the family in the development of talent in sport. *The Sport Psychologist*, 13, 395-417.
- Enoksen, E. (2011). Dropout rate and dropout motives among promising Norwegian track and field athletes. *Scandinavian Sport Studies Forum*, 2, 19-43.
- Franzén, M., & Peterson, T. (2004). *Varför lämnar ungdomar idrotten? [Why do youths drop out of organized sports?]*. FoU-rapport, nr. 2004:3. Stockholm: Riksidrottsförbundet.
- Fraser-Thomas, J., Côté, J., & Deakin, J. (2008). Understanding dropout and prolonged engagement in adolescent competitive sport. *Psychology of Sport and Exercise*, 9, 645-662.

- Geisinger, K. F. (2003). Testing and assessment in cross-cultural psychology. In J. R. Graham, J. A. Naglieri, & I. B. Weiner (Eds.), *Handbook of Psychology: Assessment Psychology* (Vol. 10). Hoboken, NJ: Wiley.
- Gould, D., & Petlichkoff, L. (1988). Participation motivation and attrition in young athletes. In Smoll, R. Magill, R. & Ash, M. (Eds.), *Children in sport*. Champaign, IL: Human Kinetics.
- Harter, S. (1999). *The construction of the self: A development perspective*. New York: The Guilford Press.
- Harter, S. (1985) *Manual for the self-perception profile for children*. Denver: University of Denver.
- Harter, S. (1982). The perceived competence scale for children. *Child development*, 53, 87-97.
- Janssen, I., & Le Blanc, A.G. (2010). Systematic review of health benefits of physical activity and fitness in school-aged children and youth. *International Journal of Behavioral Nutrition and Physical Activity*, 7, 40.
- Kelly, K. (2002). *Retention and attrition in organized sport: a test of goal perspective and self-determination theory*. University of Illinois at Chicago.
- Klint, K-A., & Weiss, M.R. (1987). Perceived competence and reasons for participating in youth sports: a test of Harter's competence motivation theory. *Journal of Sport Psychology*, 9, 55-65.
- Lindner, K., Johns, D., & Butcher, J. (1991). Factors in withdrawal from youth sport: a proposed model. *Journal of Sport Behavior*, 14, 3-18.
- McCarthy, P.J., Jones, M.V., & Clark-Carter, D. (2008). Understanding enjoyment in youth sport: a developmental perspective. *Psychology of Sport and Exercise*, 9, 142-156.
- Molinero, O., Salguero, A., Tuero, C., Alvarez, E., & Marquez, S. (2006). Dropout motives in young Spanish athletes: relationship to gender, types of sport and level of competition. *Journal of Sport Behavior*, 29, 255-270.

- Nicholls, J. G. (1989). *The competitive ethos and democratic education*. Cambridge, MA: Harvard University Press.
- Ommundsen, Y., & Vaglum, P. (1997). Competence, perceived importance of competence and dropout from soccer: a study of young players. *Scandinavian Journal of Medicine & Science in Sports*, 7, 373-383.
- Patriksson, G. (1988). Theoretical and empirical analyses of drop-outs from youth sport in Sweden. *Scandinavian Journal of Sport Sciences*, 10, 29-37.
- Peterson, T. (2008). *Föreningsfostran och tävlingsfostran. En utvärdering av statens stöd till idrotten* [Social and competition development in sports. An evaluation of the Swedish government support to the Swedish sport movement]. Stockholm: Fritzes.
- Pilgard, M. (2012). Teenageres idrætsdeltagelse i moderne hverdagsliv. [Adolescents` sports participation in modern everyday life] *Scandinavian sport studies forum*, 3, 71-95.
- Salguero, A., Gonzalez, Boto, R., Tuero, C., & Marquez, S. (2003). Identification of dropout motives in young competitive swimmers. *Journal of Sports Medicine and Physical fitness*, 43, 530-534.
- Sarrazin, P., Vallerand, R., Guillet, E., Pelletier, L., & Cury, F. (2002). Motivation and dropout in female handballers: a 21-month prospective study. *European Journal of Social Psychology*, 32, 395-418.
- Seippel, Ö-U. (2005). *Orker ikke, gidder ikke, passer ikke? Om frafallet i norsk idrett*. [Can not stand, do not bother, do not fit? About dropout in Norwegian sport.] Oslo: Institutt for samfunnsforskning.
- Si, G., & Lee, H-C. (2007). Cross-cultural issues in sport psychology research. In S. Jowett & D. Lavallee (Eds.), *Social Psychology in Sport* (pp 279-288). Champaign, IL: Human Kinetics.
- Sisjord, M-K. (1993). *Idrett og ungdomskultur*. [Sport and youth culture] Oslo: Norges idrettshøgskole.

- Smith, A. L. (2006). Youth peer relationships in sport. In S. Jowett & D. Lavallee (Eds.), *Social Psychology in Sport* (pp 41-54). Champaign, IL: Human Kinetics.
- Swedish Sports Confederation (2011). *Svenska folkets motions- och idrottsvanor* [Exercise and sports habits of Swedish citizens]. http://www.rf.se/ImageVault/Images/id_18303/scope_0/ImageVaultHandler.aspx Retrieved from internet 2012-03-29
- Tabachnick, B.G., & Fidell, L.S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Allyn and Bacon.
- Trentin, G.C., & Viviani, F. (2002). Sports dropout in the adolescents of the province of Vicenza (Italy). *Acta Kinesiologiae Universitatis Tartuensis*, 7, 203-207
- Ullrich-French, S., & Smith, A.L. (2008). Social and motivational predictors of continued youth sport participation. *Psychology of Sport and Exercise*, 10, 87-95.
- Wagnsson, S. (2009). *Föreningsidrott som socialisationsmiljö. En studie av idrottens betydelse för barns och ungdomars psykosociala utveckling.* [Socialization through organized youth sports: A study of young people's psychosocial development]. Doctoral diss. Karlstad: Karlstad University Study, 2009:53.
- Weinberg, R., Tenenbaum, G., McKenzie, A., Jackson, S., Anshel, M., Grove, R. & Fogarty, G. (2000). Motivation for Youth Participation in Sport and Physical Activity: Relationships to Culture, Self-Reported Activity Levels, and Gender. *International Journal of Sport Psychology*, 31, 321-346.
- Weiss, M. R., & Amorose, A. (2008). Motivational orientations and sport behaviour. In T. S. Horn (Eds.), *Advances in sport psychology* (pp.115-155). Champaign, IL: Human Kinetics.
- Weiss, M. R., & Stuntz, C. P. (2004). A little friendly competition: Peer relationships and psychosocial development in youth sport and physical

activity contexts. In M. R. Weiss (Eds.), *Developmental Sport and Exercise Psychology: A Lifespan Perspective* (pp. 165-196). Morgantown, WV: Fitness Information Technology.

WHO. (2012) *Prioritizing areas for action in the field of population based prevention of childhood obesity: a set of tools for member states to determine and identify priority areas for action*. Geneva: World Health Organization.

