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ORIGINAL RESEARCH

Examining adolescent football dropout in the Czech Republic

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Abstract

Background: Increases in early sport specialization, professionalization of youth sports, and leisure opportunities have led to growing numbers of youth dropping out of competitive sport. Understanding youth sport motivation and reasons for dropout is essential to crafting national federation policy, finance, and strategy decisions, as well as for clubs in aiding youth to reach their maximum potential. **Objective:** The study explored the leisure constraints perceived by former Czech youth football players as their main reasons for dropout. Based on leisure constraints theory, the hierarchical relationship between structural, intrapersonal, and interpersonal constraints was analyzed. **Methods:** A modified Czech version of Gould et al.'s Questionnaire of Reasons for Attrition (1982) was used to survey former Czech football players who dropped out between the ages of 13 and 18 years old. Data were analyzed using exploratory factor analysis and structural equation modeling to determine the relative prevalence of, and hierarchical relationship between, leisure constraints. **Results:** The participants' reasons for attrition were grouped into six factors corresponding to intrapersonal constraints (Low interest, Perceived low skills), interpersonal constraints (Team climate and the coach, Peer relationships) and structural constraints (Lacking family resources, External costs/low rewards). The participants most frequently reported interpersonal constraints (Team climate and the coach) and intrapersonal constraints (Low interest and Perceived low skills). Peer relationships significantly predicted intrapersonal constraints, including Perceived low skills ($\beta = .482$, $p = .050$) and Low interest ($\beta = .914$, $p = .013$); and Team climate and the coach significantly predicted Perceived low skills ($\beta = .245$, $p = .036$). **Conclusions:** Our results emphasize the importance of intrapersonal constraints and interpersonal constraints related to the team climate as the most significant reasons for dropout in Czech youth football. Based on these findings, we conclude that the coach, including coaching education, is the best place for the federation and clubs to address attrition in Czech football.

Keywords: Czech Republic, dropout, soccer, leisure constraints theory

Introduction

Collecting and understanding data on youth sport motivation and dropout is vital to make effective policy, finance, and strategy decisions at the national federation level. At the club level, understanding the motivations which drive youth toward and away from sport is essential to guiding youth to their maximum sport potential, and to maintaining the club's competitive advantage in today's crowded marketplace of leisure-time alternatives. A failure to examine the data on youth sport attrition, coupled with the inability, or unwillingness, to change modes of operation to meet motivational demand, will lead to shuttering the doors of sport clubs, declines in elite performance, and a general decrease in public health. Participation of youth in organized sport contributes significantly to leisure-time physical activity throughout one's lifespan (Mäkelä et al., 2017). Studies also consistently show strong correlations between the size of the talent pool (registered players) and national team success (Grix & Carmichael, 2012; Valenti et al., 2020).

Based on the importance of collecting and understanding youth sport attrition data, we examine the sport of football in the Czech Republic. Sport dropout has not been widely researched in the Czech context (Jurková & Slepička, 2018; Mudrak, 2010; Silva Dias et al., 2018), and it could be easily assumed that football, as the top sport in the nation in terms of registered players and media coverage, would be most resistant to changing demand. The evidence, however, reveals that Czech football has a salient need to understand youth sport dropout. Syrůček (2018) reported that in the three years preceding 2018, approximately 350 Czech football teams ceased to exist due to a lack of players. He stated that while this was troublesome, it is in line with UEFA statistics citing that as many as 40% of European football players drop out between ages 15 and 19.

Youth sport dropout has been studied using various instruments, in many sports and competition levels, and across numerous cultures (Bailey et al., 2013; Crane & Temple, 2015; Witt & Dangi, 2018). Crane and Temple's (2015) systematic review of 43 different studies used leisure constraints theory and placed reasons for dropping out into three categories: intrapersonal, interpersonal, and structural constraints. These three categories were first examined

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inter-relationally by Crawford and Godbey (1987) and Crawford et al. (1991), who termed the framework as hierarchical leisure constraints. Our analysis attempts to understand the interplay of these three constraints within the context of dropout factors of youth football players in the Czech Republic. Items included in the category of intrapersonal constraints are lack of enjoyment, low perceptions of physical competence, and expressions of negative team dynamics (including negative feelings for/from the coach). Interpersonal constraints include parental pressure and not having enough time to participate in other activities. Structural items include time constraints, injuries, and cost. These constraints, the dropout motivations represented therein, and the inter-relation of the constraints, have consistently proven to be the primary drivers of youth sport attrition.

In evaluating hierarchical leisure constraints theory, Godbey et al. (2010, p. 4) state that "intrapersonal, interpersonal, and structural levels must be navigated sequentially for participation to take place or continue/progress". Godbey et al. (2010) argue that correlation between the constraints is a natural intertwining of motivations, but the order of motivation fulfillment from intra, to inter, to structural actually moves from "the most proximal, powerful, to the most distal" and "denotes a hierarchy of social privilege" (p. 7). Jackson et al. (1993) argue that sport participants use negotiation strategies to create an internal balance proposition, allowing them to continue in their favorite activities despite the presence of leisure constraints. When this balance can no longer be maintained, motivation diminishes, which often leads to dropout.

Stebbins (2005) observed that every serious leisure participant contends with constraints, which must be overcome from time to time if the participant is to persevere in the activity. Thus, individual perceptions of leisure constraints, which limit enjoyment, are negotiated and processed to achieve leisure goals. While these perceptions occur on the individual level (intra), they are often processed and negotiated in a social context (inter). The structural constraints, while consistently most distal in research, nonetheless weigh in on the scale of the ongoing balance proposition occurring between all three categories for the sport participant, and they are often the easiest for the sport federation or club to fulfill. Scott and Shafer (2001) in studying athletes who are increasingly specializing in one sport, with the intention, either personal or organizational, to progress to higher levels continually assess constraints based on a variety of interacting contingencies. At transitional points, such as age group advancement or team transition, these contingencies are re-evaluated.

In terms of intrapersonal constraints, lack of fun or enjoyment is consistently the most commonly cited motivation for the discontinuation of said sport (Butcher et al., 2002; Crane & Temple, 2015; Wall & Côté, 2007). One of the primary motivations of youth for sport participation is to have fun (Bengoechea et al., 2004). Other intrapersonal constraints which consistently prove to be attrition factors for youth are low perceptions of physical competence (Molinero et al., 2009; Mudrak, 2010; Salguero et al., 2003), expressions of negative team dynamics (Delorme et al., 2011; Molinero et al., 2006; Wall & Côté, 2007), not liking the coach (Kim et al., 2021; Rottensteiner et al., 2013; Westfall et al., 2018), and not enough playing time (Witt & Dangi, 2018). Perception of physical competence is the second-most cited reason for sport dropout in the literature, after lack of enjoyment (Crane & Temple, 2015). Perception of physical competence is highly correlated to athlete motivation, as well as acceptance within the team environment.

The second category defined by Crane and Temple (2015) is interpersonal constraints. The most common interpersonal constraints given by athletes who drop out of youth sports are interest in other activities (Armentrout & Kamphoff, 2011; Butcher et al., 2002; Ferreira & Armstrong, 2002; Molinero et al., 2006), and interest in other sports (Boiché & Sarrazin, 2009; Butcher et al., 2002; Figueiredo et al., 2009). Interpersonal constraints also include pressure from family, coach, and peers (Butcher et al., 2002; Ferreira & Armstrong, 2002; Fraser-Thomas et al., 2008; Mudrak, 2010; Salguero et al., 2003).

The third category entails structural constraints, which create barriers to continuing in sport. These constraints are outside the control of the athlete, coach, and parents. Many athletes are simply forced to quit due to injury, or they do not find the risk of repeated injuries worth continuing in their sport (Larson et al., 2019). In some cases, costs related to participation create enough of a barrier that athletes choose, or are forced, to discontinue a particular sport activity (Armentrout & Kamphoff, 2011; Ferreira & Armstrong, 2002). The other consistent structural constraints are the availability of sport facilities or travel time required to practice and compete (Armentrout & Kamphoff, 2011; Ferreira & Armstrong, 2002).

The aim of the current study is to explore the leisure constraints that former youth football players in the Czech Republic perceived as their primary reason for dropout. Based on leisure constraints theory, we assume that participants identify with intrapersonal constraints most strongly, but we also expect a hierarchical relationship between the structural, intrapersonal, and interpersonal constraints, in other words, that interpersonal and structural constraints partially predict the intrapersonal constraints. In this manner, we strive to understand Czech football dropout as a complex phenomenon in which multiple reasons for attrition consolidate, prompting the youth athletes to leave competitive sport.

Methods

Procedure

This article presents the results of a questionnaire survey that focused on the attrition of Czech junior football players. The data collection took place in June 2020, and the questionnaire was open for 20 days. Before data collection began, the research was approved by the Ethics Committee of the Faculty of Physical Education and Sport, Charles University under number 117/2020. The data collection was voluntary and anonymous, and the questionnaire was constructed in a manner that prevented the identification of individual participants or their clubs.

Participants

The participants were former male football players who quit playing organized football during the last 5 years, between the ages of 13 and 18. The 13–18-year-old dropout range was chosen based on Fraser-Thomas et al. (2008), with athletes surveyed retrospectively after having finished playing competitive football. Participants were solicited via email from the records of the Czech football federation of players whose registration was not renewed over the last five years. Additionally, the promotion of the survey was posted on the eurofotbal.cz website, a news and result server for European football. The survey was completed by 208 respondents. The data sample is unbalanced, with the majority of athletes playing at the lowest level, and dropping out at the highest age in the range studied. Ages at drop out were as follows: age 18, 53.37%; ages 16–17, 21.15%; ages 14–15, 19.23%; and age 13, 6.25%. In terms of the last level of competition played 73.08% were at the Regional League level, 16.83% at the Divisional League level, and 10.10% at the National League level.

Instruments

The survey was adapted from the Gould et al. (1982) Questionnaire of Reasons for Attrition which has been used in such wide-ranging sport cultures as the USA, Spain, Finland, and Iran, and has examined sport dropout from diverse sports such as athletics, basketball, football, gymnastics, ice hockey, judo, roller skating, swimming, and tennis (Heydari et al., 2014; Molinero et al., 2009; Rottensteiner et al., 2013; Salguero et al., 2003). Several questions were eliminated, deemed not applicable to the Czech context (for example, "I was too old", "I did not like the awards"). Five structural questions regarding injuries, cost, and travel were added based on the findings of Armentrout and Kamphoff (2011) and Ferreira and Armstrong (2002). The survey was translated into the Czech language and reviewed by two language and psychology experts prior to being pilot tested with a group of ten graduate students. The final survey was composed of 31 statements which respondents answered on a five-point Likert scale (1 = *not important*, 2 = *slightly important*, 3 = *moderately important*, 4 = *very important*, 5 = *extremely important*). The questionnaire showed very good reliability (Cronbach α = .91).

Data analysis

SPSS statistical software (Version 23; IBM, Armonk, NY, USA) was used to analyze cross-sectional questionnaire data, compute the descriptive statistics, and conduct exploratory factor analysis (EFA) of the Questionnaire of Reasons for Attrition items. The next step utilized the lavaan package (Version 0.6-10.1653; https://cran.r-project.org/web/packages/lavaan) in R (Version 4.0.3; https://www.r-project.org) to assess, within a structural equation modeling (SEM) framework, the factor structure and the hypothesized hierarchical relationships between the structural, interpersonal, and intrapersonal constraints. As we included only data from complete questionnaires, there were no missing values. We did not identify any outliers in the data. All the reported coefficients from our analyses were standardized. We assessed the model fit with standard measures, including the chi square statistic and corresponding *p* value, the root mean square error of approximation (RMSEA, with values of approximately .05 or less being indicative of a close fit, and values of .08 or less being indicative of a good fit), the standardized root mean square residual (SRMR, which should approximate or be less than .08 for a good-fitting model), and the comparative fit index (CFI, where values should be approximate .90 for adequately fitting models).

Results

First, to assess a relative importance of various reasons the respondents reported for their dropout from football, means and standard deviations of all questionnaire items were computed (Table 1). As Table 1 displays, the respondents reported the highest scores in items related to intrapersonal constraints (e.g., "Not enough fun" or "Not as good as wanted to be"), or interpersonal constraints related to the team climate ("Did not like the coach", "No teamwork"). The least important reasons participants reported were structural constraints, such as lack of financial resources. Furthermore, we also computed Spearman correlations between the questionnaire items and the age and the level of competition in which the participants dropped out (Table 1). Participants who dropped out at earlier ages reported several intra- and interpersonal constraints as significantly more important, including "Did not like being on the team", "It was boring", or "The training was too hard". The players who finished at higher levels of competition reported some structural constraints as significantly more important, including "Had to stop playing due to injury" and "Did not have money for equipment".

However, it was assumed that respondents had multiple reasons to drop out of football, as most items showed moderate to strong correlations with at least some other questionnaire items. To understand these more global reasons for attrition indicated by the correlation patterns, we conducted an exploratory factor analysis of the questionnaire items (Table 2). The results of the exploratory factor analysis suggest that the questionnaire items group into six factors, which correspond to different types of constraints. These factors can be categorized as intrapersonal constraints (including Low interest, Perceived low skills), interpersonal constraints (including Team climate and the coach, Peer relationships) and structural constraints (including Lacking family resources, External costs/low rewards). The results of the exploratory factor analysis are presented in Table 2 and expounded on in the following paragraphs.

The first EFA factor explained 11.4% of the variance and was labeled "Team climate and the coach". Within this dimension, the items with the highest factor loadings (i.e., items I2, I3, I4, I13, I18, I19) were related to the various aspects of the team climate, including the relationship with the coach, recognition, and team cohesion. The second EFA factor explained 10.8% of the variance and was labeled "External costs/low rewards". Here, the items with the highest factor loadings (i.e., items I16, I22, I24, I28, I30) referred to costs related to time spent on football or

Table 1 Descriptive statistics of the questionnaire items and correlations with age and level

Questionnaire item (from the most important to the least important)	*M*	*SD*	Age	Level
1. Had other things to do	3.30	1.12		
2. Not enough fun	3.15	1.40		
3. Not as good as wanted to be	2.95	1.25		–.147*
4. Did not like the coach	2.77	1.25		
5. No teamwork	2.75	1.22		
6. Not enough playing time	2.74	1.24	–.150*	
7. Did not feel like an important part of the team	2.72	1.27		
8. Did not get enough recognition	2.71	1.12		
9. My skills did not improve	2.60	1.13	–.162*	
10. Not able to be with my friends	2.52	1.25		
11. I lost interest in football	2.50	1.36		
12. Friends no longer compete	2.38	1.25		
13. Did not like the pressure	2.35	1.22		
14. Not in good enough shape	2.34	1.13		
15. Too much time spent traveling to practice	2.28	1.39		
16. Wanted to play another sport	2.23	1.40	–.174*	
17. Did not like being on the team	2.18	1.24	–.275**	
18. Did not meet new friends	2.16	1.18		
20. Did not win enough	2.03	1.06		
21. It was boring	1.94	1.18	–.220**	
22. Did not receive enough rewards	1.90	1.03		
23. The training was too hard	1.84	0.95	–.216**	
24. Had to stop playing due to injury	1.81	0.39		.228**
25. Did not like to compete	1.80	1.05		
26. Not able to be with my girlfriend	1.75	1.11		
27. The sport was not popular with my friends	1.68	0.95	–.174*	
28. Did not have money for equipment	1.65	1.03		.157*
29. Did not travel enough	1.62	0.91		
30. Parents or friends no longer wanted me to compete	1.57	0.92		
31. Did not have money for registration/dues	1.56	0.88		

Note. Spearman correlation coefficient: *$p < .05$, **$p < .01$

to lack of rewards for participation. The third EFA factor explained 9.5% of the variance and was labeled "Lacking family resources", as the items with the highest factor loadings (I7, I17, I26) related to insufficient financial resources or parental support.

The fourth EFA factor explained 9.1% of the variance and was labeled "Perceived low skills", because the items with the highest factor loadings (I8, I11, I15, I20) related to perceived high difficulty of, or lack of success in, football participation. The fifth EFA factor explained 9.1% of the variance and was labeled "Peer relationships", as the items with the highest factor loadings (I9, I10, I21, I23, I29) related to the fact that football participation negatively impacted relationships with friends or did not support creating new friendships. The sixth EFA factor explained 7.1% of the variance and was labeled "Low interest", as the items with the highest factor loadings (I6, I14, I27) related to lack of intrinsic motivation to continue participation in football.

Items I1 (Had other things to do) and I5 (Had to stop playing due to injury) did not show sufficient factor loadings to any of the six factors. We may argue that item I1 is too general, and while it was reported as the most frequent reason for dropout, it does not relate to a specific type of constraint. Item I5 appears to be different from the other items because it refers to involuntary dropout from sport, whereas the other items involve a voluntary decision.

To assess the relative importance of different types of constraints, we computed means of the items corresponding to each of these factors. Team climate and the coach was rated as the most important with a mean of 2.624, followed by Low interest (2.532) and Perceived low skills (2.432). Conversely, Lacking family resources (1.596) was rated as the least important dimension, significantly lower than External costs/low rewards (2.014) and Peer relationships (2.048). Therefore, intrapersonal constraints and interpersonal constraints related to the team climate represented the key reasons for dropout, while the structural constraints appeared to be less important.

To test this factor structure and the hypothesized hierarchical relationships between the structural, interpersonal, and intrapersonal constraints, we specified and tested a structural equation model in which the latent variables represented the factors and corresponding questionnaire items represented measurement variables. Within the model, we assumed that interpersonal constraints (including Team climate and the coach, Peer relationships) and structural constraints (including Lacking family resources, External costs/low rewards) predict the intrapersonal constraints (including Low interest and Perceived low skills). The results of the confirmatory factor analysis are presented in Table 3. The model showed acceptable fit (CFI = .844, RMSEA = .074, 90% confidence interval [.065, .082],

Table 2 Factor analysis of the Questionnaire of Reasons for Attrition items (Varimax rotation)

	Factor loading					
Questionnaire item	1	2	3	4	5	6
Factor 1: Team climate and the coach						
I18. Did not feel like an important part of the team	**.755**	–.028	.092	.296	.114	.029
I4. Did not get enough recognition	.736	.194	.228	.024	–.243	.082
I2. Did not like the coach	**.723**	.194	–.127	–.126	.065	.078
I3. No teamwork	**.685**	–.057	.237	.019	.121	.051
I13. Not enough playing time	**.585**	.136	.019	.405	.164	.111
I19. Did not like being on the team	**.566**	–.060	.164	.198	.465	.087
Factor 2: External costs/Low rewards						
I22. Did not travel enough	.056	**.697**	.228	.204	.036	.085
I24. Not able to be with my girlfriend	.022	**.691**	.354	.056	.034	.047
I16. Not able to be with my friends	.080	**.655**	.127	.220	.168	.057
I30. Too much time spent traveling to practice	–.037	**.559**	.103	.071	.330	.167
I28. Did not receive enough rewards	.251	**.542**	.285	.178	.147	.100
Factor 3: Lacking resources						
I7. Did not have money for equipment	.127	.253	**.766**	.152	.063	.218
I17. Did not have money for registration/dues	.156	.253	**.729**	.054	.129	.175
I26. Parents or friends no longer wanted me to compete	.124	.396	**.528**	.011	.245	.076
Factor 4: Perceived low skills						
I12. Not as good as wanted to be	.177	.094	–.022	**.799**	–.002	.037
I20. Not in good enough shape	–.033	.160	.148	**.673**	.049	.110
I15. My skills did not improve	.233	.099	.165	**.553**	.212	.358
I8. The training was too hard	.069	.110	.530	**.479**	.296	.045
I11. Did not win enough	.159	.316	.318	**.434**	.143	.080
Factor 5: Peer relationships						
I9. The sport was not popular with my friends	.088	.205	.347	.209	**.592**	.081
I23. Friends no longer compete	.119	.504	–.062	.031	**.573**	.133
I21. Wanted to play another sport	.019	.294	.087	–.099	**.528**	.359
I29. Did not meet new friends	.421	.006	.282	.240	**.501**	.128
I10. Did not like to compete	.143	.186	.229	.367	**.445**	.067
Factor 6: Low interest						
I6. I lost interest in football	.037	.055	.217	.087	.140	**.834**
I14. Not enough fun	.292	.148	.048	.234	.064	**.733**
I27. It was boring	.014	.242	.313	.042	.449	**.562**

Note. The items with highest factor loadings are in bold.

SRMR = .070) and explained 64.7% of the variance in Perceived low skills, and 65.9% of variance in Low interest. Therefore, we assume that the model represents fairly well the general factors related to the impetus for Czech adolescent football dropout, as well as the relationships between different types of constraints.

In the structural equation model (Figure 1), Peer relationships appeared to be the most significant predictor of intrapersonal constraints including Perceived low skills (β = .482, p = .050) and Low interest (β = .914, p = .013). In addition, Team climate and the coach significantly predicted Perceived low skills (β = .245, p = .036). On the other hand, neither Lacking family resources nor External costs/low rewards showed significant relationships with the intrapersonal constraints in our model.

Discussion

Our findings illustrate the multiplicity of reasons youth athletes drop out of competitive sports, which can be meaningfully categorized within the framework of the leisure constraints theory as intrapersonal, interpersonal, and structural constraints (e.g., Crane & Temple, 2015, Godbey et al., 2010). Within this framework, our results highlight the role of intrapersonal constraints related to the coach and team climate, as well as intrapersonal constraints stemming from the athletes' motivational beliefs as the primary explanations for attrition from competitive sport. Furthermore, our analysis provides support for the hypothesis that these different levels of constraints can be understood as interrelated, with intrapersonal constraints being most proximal and partially predicted by more distal intrapersonal constraints (Godbey et al., 2010). Implementing such a hierarchical perspective in our analysis also underscored the role of peers in the athletes' decision to drop out from competitive sport. Although our respondents assigned relatively lower importance to relationships with peers as a reason for attrition, the peer relationships appeared to be strongly related to the intrapersonal constraints in our model. Consistent with other studies (Crane & Temple, 2015), the structural constraints appeared to be less important, both as reasons for dropout and as predictors of intrapersonal constraints.

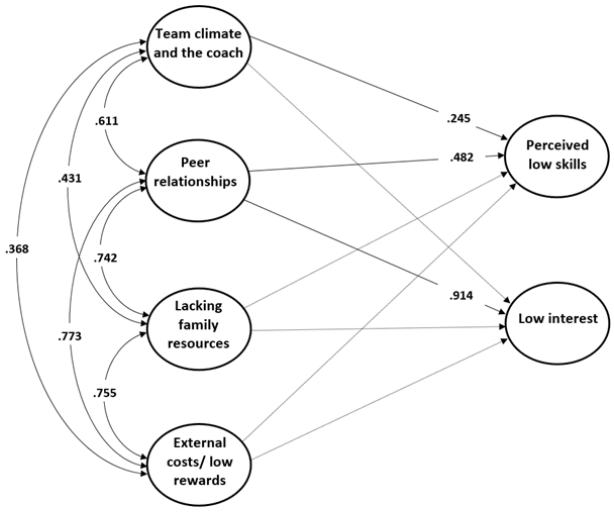
As illustrated by the exploratory factor analysis, intrapersonal constraints can be understood as two distinct

Table 3 Confirmatory factor analysis of the main components

Latent variable/Item	Measurement loading
Team climate and the coach	
Did not like the coach	.499
Did not get enough recognition	.582
Not enough playing time	.740
Did not feel like an important part of the team	.796
Did not like being on the team	.629
External costs/low rewards	
Too much time spent traveling to practice	.657
Did not travel enough	.686
Not able to be with my girlfriend	.684
Did not receive enough rewards	.654
Too much time spent traveling to practice	.568
Lacking family resources	
Did not have money for equipment	.788
Did not have money for registration/dues	.774
Parents or friends no longer wanted me to compete	.634
Perceived low skills	
The training was too hard	.647
Did not win enough	.569
My skills did not improve	.718
Not in good enough shape	.531
Peer relationships	
The sport was not popular with my friends	.643
Did not like to compete	.559
Wanted to play another sport	.501
Friends no longer compete	.565
Did not meet new friends	.621
Low interest	
I lost interest in football	.690
Not enough fun	.660
It was boring	.768

Note. Fit indices: comparative fit index = .844; root mean square error of approximation = .074, 90% confidence interval [.065, .082]; standardized root mean square residual = .070.

Figure 1 Hierarchical model of leisure constraints



dimensions related to the ways in which participants perceived their engagement with the sport (Low interest) and their competence in the sport (Perceived low skills). Both these types of interpersonal constraints have been consistently reported by athletes as key reasons for dropout (Crane & Temple, 2015). Stated this way, the intrapersonal constraints can be understood as stemming from a violation of two general achievement motives – the task valuation and expectancies of success (Eccles, 2005; Mudrak et al., 2020; Wigfield & Cambria, 2010). As suggested by Eccles (2005), to exhibit achievement-motivated behavior, people have to answer positively two fundamental "motivational questions" – "Do I want to do the activity?" and "Can I do the activity?". Even high-achieving individuals tend to disengage or drop out of sports and other domains during adolescence when they are unable to answer these questions positively (Mudrak & Zabrodska, 2015). One possible explanation may be that these individuals lack a sense of agency, self-efficacy, and identification with the sport that is necessary to sustain their long-term engagement when encountering obstacles or weighing other developmental options which arise during adolescence (Mudrak, 2010; Mudrak & Zabrodska, 2015). Jackson et al.'s (1993) internal balance proposition has been disrupted in this case.

To uncover the ways in which dropout can be prevented, we should explore primarily the interactions between interpersonal and intrapersonal constraints, in other words, how social environments shape the athletes' motivational beliefs in a manner that facilitates athletes' decisions to drop out. In this context, it may be useful to approach the athletes' attrition from a systemic perspective and focus on mutual interactions between the developing athletes, their motivation, and the proximal environment which provides them with developmental resources and demands (Godbey et al., 2010; Mudrak et al., 2020). Our results support such a systemic perspective and suggest that the role of the coach and the team climate is paramount in the athletes' dropout. This is well-supported by other studies in which sport environments, including excessive performance pressures and control, emphasis on competition and low support of mastery goals, or a lack of challenge, have been found to undermine athletes' motivation and support athletes' dropout (Mudrak & Zabrodska, 2015; Sarrazin et al., 2002). In this context, Duda (2013) provides an argument for the importance of "empowering coaching" that "strengthens the focus on the task, promotes autonomy and provides social support" (p. 314); while a negative "disempowering" motivational climate promotes values and practices that are "controlling and ego-focused" (p. 314).

Relationships with peers are another important systemic influence that shape the decisions of adolescent athletes to drop out of competitive sports. As suggested by our analysis, peer relationships can be considered a key interpersonal constraint, as well as a factor affecting intrapersonal constraints, especially athletes' low level of interest. This is supported by other studies suggesting that peer acceptance, opportunities to spend time with friends, peer task-oriented motivational climate, meeting new friends, having a best friend participating in the same sport, or

developing a sense of belonging represent key reasons why adolescents participate in sports, whereas deficits in these aspects of peer relationships support athletes' decisions to drop out (Fraser-Thomas et al., 2008; Jõesaar et al., 2011).

Understanding the relationship between the athletes' proximal environments and their decision to drop out must take into account the demands based on age and the level of competition (Molinero et al., 2006). Butcher et al. (2002) found that dropping one sport to pursue another occurred most often in the "sampling years", (i.e., till the age of 12), while Molinero et al. (2006) observe that quitting sport to pursue other activities is more common in the early and mid-teenage years. Fraser-Thomas et al. (2008) found that athletes might grow weary of pressure from parents to succeed which was often coupled with pressure from peers to engage in more social activities. Those activities have a tendency to increase in the later teenage years, which interfere with training and competition (Fraser-Thomas et al., 2008). This is supported by our results, which showed that a large majority of our participants dropped out during their late teens. At the same time, our results suggest that some intra- and interpersonal constraints related to team climate, lack of fun or practice pressures may be related to dropping out at younger ages. Additionally, dropping out at a higher level of competition was related to some structural constraints in our participants, such as injury and lack of resources. These structural constraints may create increasing complexity as athletes advance to more elite levels of sport performance, which increase training time (and consequent injury), increase equipment needs and participation fees, and increase distances traveled in order to find comparable competition.

While almost four decades have passed since the development of the instrument to measure youth attrition from competitive sport by Gould et al. in 1982, sadly, the top salient reasons for sport attrition do not appear to have developed further. Items identified by Czech youth football players, Lack of fun or enjoyment, Perceived low skills, Poor relationships with teammates or coaches, and having other things to do, are the most common reasons given for youth sport dropout in many studies using Gould's survey (Butcher et al., 2002; Molinero et al., 2009; Salguero et al., 2003). These inter-related constraints, primarily on the intrapersonal and interpersonal levels, can largely be empowered by coaches. Renshaw et al. (2019) propose that coaches must be guided by a theoretical framework of ecological dynamics which takes into account the athlete in an environment. This interpersonal approach considers the development of the athlete intrapersonally, over time, in a context. Such an approach requires coaches to be willing to change their method based on the values and goals of the athlete, which can also be stated as demand. Côté, among others, has been emphasizing this for years (Côté & Hay, 2002; Fraser-Thomas et al., 2008; Wall & Côté, 2007), but many coaches are too convinced of their traditions of success to make the changes needed to hold onto their athletes (Denison & Avner, 2011; Ross et al., 2018). Thus, if we are serious about decreasing sport dropout, a systematic approach that includes intrapersonal, interpersonal, and structural constraints is needed at both the club and federation levels.

The battle for youth athletes is played out between sports and teams at both the club and federation levels. The predominance of early sport specialization has not only increased the need to treat athletes differently as they progress through the age and competition pyramid, but has raised the stakes of youth sport dropout. Gould et al.'s, Questionnaire of Reasons for Attrition from 1982 revealed similar results with North American youth swimmers to those we found with Czech youth football players in 2020. The top reasons for dropout were Having other things to do, Lack of fun or enjoyment, Perceived low skills, and Poor relationships with teammates or coaches. Examining these results through the framework of hierarchical leisure constraints (Crawford & Godbey, 1987; Crawford et al., 1991), we found that interpersonal constraints (Team climate and the coach, Peer relationships) and structural constraints (Lacking family resources, External costs/low rewards) predicted the intrapersonal constraints (Low interest and Perceived low skills).

Limitations and future directions

There are several limitations to the study which should be taken into consideration. First, the study employed a cross-sectional design, which does not allow the assessment of causal relationships and should be considered when interpreting the results of the SEM model. Second, the data sample was relatively moderate, and the response rate cannot be estimated based on the data collection method. However, despite the majority of athletes surveyed having last played at lower competition levels, the sample appeared to be sufficiently heterogeneous for the conducted analyses. Third, the fit indices of the SEM model were only acceptable, which may be partially explained by the size of our sample.

It would be beneficial to conduct this study with a larger sample and across multiple sports. Significantly competitive female athletes who have dropped out of Czech sport have not been adequately studied to date. And lastly, the use of multiple tools comparing sporting motivations with reasons for attrition would aid in understanding supply and demand factors relating to leisure constraints.

Conclusions

Our results indicate that structural constraints are largely fulfilled in the system of Czech youth football, leaving intrapersonal constraints and interpersonal constraints related to the team climate as the most significant reasons for dropout. The SEM analysis revealed that the relationship to the coach and peers are the most proximal factors influencing Perceived low skills and Low interest. It appears that Czech coaches fail to understand the motivations of a not insignificant percentage of players who are dropping out of the sport during key transitional stages. This problem needs to be further researched in the Czech context, to further aid sport federations and clubs, so they can properly empower the coaches who maintain the most influence over the intra/inter-personal leisure constraints.

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Conflict of interest

The authors report no conflict of interest.

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