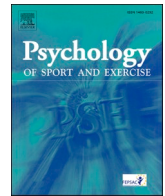


Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Psychology of Sport & Exercise

journal homepage: www.elsevier.com/locate/psychsport

A longitudinal transitional perspective on why adolescents choose to quit organized sport in Norway

Marte Bentzen^{a,*}, Mats Hordvik^a, Magne Hem Stenersen^b, Bård Erlend Solstad^{b,c}

^a Norwegian School of Sport Sciences, Department of Teacher Education and Outdoor Studies, Postboks 4014 Ullevål Stadion, 0806, Oslo, Norway

^b Norwegian Research Centre of Children and Youth Sports, Postboks 4014 Ullevål Stadion, 0806, Oslo, Norway

^c University of Agder, Department of Sport Science and Physical Education, Postboks 422, 4604, Kristiansand, Norway

ARTICLE INFO

Keywords:

Career transition
Diverse development
Dropout
Meaning
Participation
Sport attrition.

ABSTRACT

The present study used a prospective cohort design to explore the reasons why young athletes decided to quit playing handball. The theoretical underpinnings were drawn from the fields of career transition, motivation, and meaningful experiences in organized youth sport. Thirty-four athletes were included in a larger research project exploring the complex interplay of psychosocial factors during the transition period from lower-to upper-secondary school in Norway. In this study, the data collection involved three sources: individual interviews with the 10 athletes who decided to leave their teams during the study period (five girls and five boys), and individual open-ended questionnaires for these 10 participants collected five times over two seasons, aligned with their participation in focus group interviews. The data analysis involved a three-step process of inductive content analysis of the total corpus of the data. A core finding indicates that all adolescents had gone through a decision-making process over time to determine whether they should continue or quit. It was a process of accumulating reasons that resulted in the final decision. However, the results reveal a broad variation within individual perception and interpretation of what each adolescent experienced as meaningful. Of equal importance, the adolescents not only took their experiences in sport into account when considering quitting organized youth sport, but these were considered in light of their evaluation of meaningfulness in other areas of life. Overall, findings indicate that “dropping out of organized youth sport” should not be regarded as unambiguously negative.

Several systematic reviews of youth sport attrition have been published in the last decade (Balish et al., 2014; Crane & Temple, 2015; Schlesinger et al., 2018). Overall, the empirical evidence comes from correlational studies and indicates that youth sport attrition is largely psychosocial in nature (e.g., poor relationships with teammates and coaches; Balish et al., 2014; Crane & Temple, 2015; Temple & Crane, 2016). This finding is unsurprising, considering that the psychosocial crisis in early adolescence (ages 12–18 years) is related to the fit, or lack of fit, between adolescents' personal needs and the norms and values of relevant social groups in their environments (i.e., group identity versus alienation; Newman & Newman, 2018). As a result, it is unsurprising that a recent systematic review (e.g., Evans et al., 2017) identified that young athletes experienced desirable psychosocial outcomes (e.g., enhanced developmental experiences and self-esteem) when involved in sport groups with greater interdependence. Indeed, Evans and

colleagues suggested that future research should pay special attention to the study of different sport types, settings, and patterns of individual involvement. The authors also argued, “most effects uncovered in this review were dependent on moderating factors (e.g., age or gender), were inconsistent across studies, or had only been examined in a limited number of studies” (Evans et al., 2017, p. 174). Hence, considering the great diversity among adolescents and the evidence of past sport attrition research, it seems crucial to delimit the boundaries of future research. In this instance, we chose to focus on a timespan in which a young athlete's environment changes – namely, the transition from lower- (ages 13–16 years) to upper-secondary (ages 16–19 years) school (Schmid et al., 2020). Therefore, the present longitudinal study explored the multiple reasons why young athletes, belonging to two teams from the same sport club, decided to quit playing club-based handball (hereinafter referred to as handball) for their team.

* Corresponding author. Department of Teacher Education and Outdoor Studies, Norwegian School of Sport Sciences, PB 4014 Ullevål Stadion, 0806, Oslo, Norway.

E-mail address: marte.bentzen@nih.no (M. Bentzen).

<https://doi.org/10.1016/j.psychsport.2021.102015>

Received 4 November 2020; Received in revised form 1 July 2021; Accepted 8 July 2021

Available online 9 July 2021

1469-0292/© 2021 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

1. The link between sport participation and transitions in education

Organized youth sport participation is an integral part of growing up in Norway, with participation rates showing that around 93% of Norwegian teenagers in the 13-to-19-year age range are or have been active members of sport clubs (Bakken, 2017; Persson et al., 2020). In general, it seems plausible to argue that the high participation rates are due to the regulations and guidelines for organized youth sport in Norway, which emphasize that young people are entitled to a safe, diverse, and inclusive sporting environment. Further, the most popular sports that young people in Norway participate in are soccer, handball, cross-country skiing, gymnastics, and swimming (Breivik, 2011). In 2019, for instance, the numbers in the annual report of the Norwegian Olympic and Paralympic Committee and Confederation of Sports showed that 63,953 children (ages 6–12 years) and 40,912 young people (ages 13–19 years) participated in handball. These numbers show a decrease in membership in the Norwegian Handball Federation (around 36%) in the transition phase between children's and youth sports. Indeed, both national and international research (Balish et al., 2014; Breivik, 2011; Skille, 2011) has shown that attrition rates increase dramatically in organized youth sport as children grow older, which is mainly due to increased competitiveness, more ambitious coaches, increased training load, and an increased focus on win-loss records (Collins & Barcelona, 2018; Persson et al., 2020; Waldron et al., 2020). Moreover, many young athletes experience adolescence as a time where they expand their social networks, gain new interests, make new friends, and experience increased school pressure (Bergeron et al., 2015; Dahl et al., 2018; Persson et al., 2020; Sawyer et al., 2018). Balancing sport and other spheres of a young athlete's life has therefore been shown to be an important factor in coping with transitions and reducing youth sport attrition (Baron-Thiene & Alfermann, 2015; Solstad et al., 2021; Stambulova et al., 2015).

Career transition scholars have suggested an integrated career change and transition framework (ICCT), which stipulates that “the transition process begins with a change-event that compromises an athlete's current status quo and initiates a pre-transition situation” (Samuel et al., 2020, p. 4). Applying this framework, the transition phase from lower- to upper-secondary school could be seen to represent a change-event compromising adolescents' perceptions of a competing set of demands pertaining to progression in education, athletic performance, and personal and social development (Opstoel et al., 2020; Stambulova & Samuel, 2020). This emphasis is in line with the foundational definition of career transitions, which is “turning phases in career development involving appraisals of, and coping with, transition demands leading to successful or less successful outcomes and relevant changes in an individual's career trajectory” (Stambulova et al., 2020, p. 4).

In Norway, for instance, researchers have explored young female handball players' transition into, and subsequent three years in, a sport academy lower-secondary school (Kristiansen & Stensrud, 2017, 2020). Findings showed that the young players experienced several demands (appraised as stressors) due to a significant increase in training volume, reduction in sleeping time, as well as development of severe and long-lasting injuries. Moreover, despite the lack of difference in physical development or prevalence of injuries between players who were successful and continued with handball, and those who chose to quit, players who were classified as successful had parents with sport knowledge who helped them to cope with perceived challenges and intervened when they found it necessary (Kristiansen & Stensrud, 2020). To keep adolescents involved in organized youth sport, adults (e.g., sport professionals, coaches, and parents) should therefore pay special attention to their needs and preferences (Bergeron et al., 2015; Deelen et al., 2018). Although existing evidence from youth sport attrition research is based on common patterns or themes across many small-scale studies (Balish et al., 2014; Crane & Temple, 2015), one way

of dealing with this ongoing challenge of supporting young athletes in their many athletic endeavours, through various career transitions (Samuel et al., 2020; Stambulova et al., 2020; Stambulova & Samuel, 2020), is to create more meaningful experiences for them while they are involved in organized youth sport (Beni et al., 2017; Martela et al., 2018; Ryan & Deci, 2000, 2017).

2. Career transition and meaningful experiences in organized youth sport

One of the elements of the ICCT framework is the consideration of a range of transition experiences, thereby relying on the individual's appraisal of and ability to cope with transition demands (Samuel et al., 2020; Stambulova & Samuel, 2020). Whether or not a new transition leads to successful or less successful outcomes depends solely on young athletes' perceptions, interpretations, and decision-making, and whether they feel in control (i.e., a change in perceived locus of causality) and assume responsibility for the initiated change and the functional significance of the change-event (Ryan & Deci, 2017; Stambulova & Samuel, 2020). Motivation is broadly defined as the process that influences the initiation, perseverance, and continuation of goal-directed behaviour (Roberts, 2012). Hence, we must attempt to understand the constructs that drive the process of motivation (Ryan & Deci, 2000, 2017). From a self-determination theory (SDT) perspective, scholars postulate that meaning can be “understood in terms of the processes of internalization and integration, which involve assimilating values, regulations, emotions, and initiatives to one's self” (Ryan & Deci, 2000, p. 325). As such, an activity becomes meaningful and coherent with respect to the individual when they feel a sense of personal agency in their endeavours (e.g., developing athletic ability), thereby reflecting the individual's core values (Ryan & Deci, 2000, 2017).

A recent literature review identified five overarching themes as important influences on young people's meaningful experiences in organized youth sport (and physical education): (a) social interaction, (b) fun, (c) challenge, (d) motor competence, and (e) personally relevant learning (Beni et al., 2017). Based on the SDT perspective (Ryan & Deci, 2000, 2017), one may argue that when adolescents reflect on aspects of life that convey meaning (i.e., sport participation and inherent transition demands), they are often focused on experiences of autonomy, competence, and relatedness in a deep and personal manner. Hence, meaningful experiences in organized youth sport (i.e., having fun) are likely to have different meanings from childhood to young adulthood via adolescence (Dahl et al., 2018; Ryan & Deci, 2017; Sawyer et al., 2018). Considering that researchers have been encouraged to conduct more detailed investigations regarding the influence of different sport types, settings, and activity patterns on adolescents' psychosocial experiences in organized youth sport (Evans et al., 2017), there is a need to explore how meaningful experiences in organized youth sport develop during specific transition phases in adolescence (Beni et al., 2017; Schmid et al., 2020; Stambulova & Samuel, 2020).

The theoretical underpinnings for this research are the ICCT framework (e.g., Samuel et al., 2020) and the SDT (e.g., Ryan & Deci, 2017). The purpose of the present study was to explore the multiple reasons why young athletes, belonging to two teams from the same sports club, decided to quit playing handball for their team during the transition phase from lower- (ages 13–16 years) to upper-secondary (ages 16–19 years) school in Norway.

3. Methodology

3.1. Study design, participants and procedures

The current study was part of a larger research project, which employed a prospective cohort design (Mann, 2003) with the overall aim to explore sport attrition among Norwegian adolescents. The prospective cohort design was also chosen for the current study, as we

wanted to follow the potential participants over time until they decided to quit playing handball for their team. This design gave us the opportunity to capture their ongoing reflections regarding participation in organized youth sport while playing, and subsequently follow up with individual interviews as soon as possible after the decision to quit, to buffer for recall bias (Althubaiti, 2016). Subsequently, we positioned the research project within an interpretational paradigm (that is, a constructivist ontological stance and an interpretivist epistemological stance), meaning that we are concerned with how the young athletes made sense of their team handball experience (Bryman, 2016). Our understanding of young athletes' sport experiences, and the athletes' individual meaning making, is that they are continuously being co-constructed through social interactions with others (Bryman, 2016).

In the larger research project, 34 young athletes playing handball were included (17 girls and 17 boys) by convenience sampling. These athletes were included because they were part of two handball teams in the same sports club located in a larger city in the south-eastern part of Norway. The general population of this area has a higher socio-economic status. The two handball teams competed in the regional series at the second of three competitive levels. All participants were followed over a two-year period (i.e., for the last year of lower-secondary school when they turned 15, and the first year of upper-secondary school when they turned 16). A total of 10 athletes (five girls and five boys) were purposefully selected for inclusion in the current study based on their decision to leave their teams for any reason during the study period (Patton, 2014). Ethical approval was obtained for the research project from the Norwegian Centre for Research Data. Information about the research project as a whole, as well as this specific study, was given to all participants and their parents at a meeting, including the aim of studying attrition in youth sport, requirements of parental permission, ethical considerations, and issues of confidentiality. Both athletes and parents were encouraged to ask questions if something was unclear. Lastly, each athlete and one of their parents signed an informed consent to participate in the project, which included all the information mentioned in written format.

3.2. Data collection

The data collection for the current study included: (a) focus group interviews consisting of four or five participants in each group of the same gender; (b) an open-ended questionnaire that was individually answered at the end of each focus group interview; and (c) one individual interview with each of the participants who decided to quit playing handball for their team during the project period. This could be described as a rigorous data collection, as the data were collected over several time points, using multiple methods (Culver et al., 2012; Smith & Sparkes, 2016). A chronological overview of the data collection, showing time and type of data collected, both for the larger research project and specifically for each participant included in the current study, is found in Table 1. The multiple methods and longitudinal nature of the data collection provided different perspectives on the participants' experiences. This data triangulation allowed for a deeper

understanding of their experiences, thereby adding to the study's trustworthiness (Bryman, 2016).

The semi-structured interview guide for the five focus group interviews, and aligned open-ended individual questionnaires, were developed and based on topics shown to be of importance for sport attrition for adolescents in previous research and aligned with the frameworks of ICCT and SDT. Overall, the focus group interviews included the following topics: the coach-athlete relationship, perception of the sporting environment, perception of sport enjoyment, a focus on development versus performance, win-loss records, reflection about continuing versus quitting organized sport, injuries, training load, and life outside handball (i.e., school and leisure-time). Each focus group interview covered a maximum of two topics each time, to facilitate a more in-depth discussion of each topic (the interview guides from the focus group interviews can be obtained by contacting the first author). After each focus group interviews, each participant answered a short open-ended questionnaire regarding the same topics covered in the respective focus group interviews with only two main questions each time. Examples of the two questions at T3 were: How does your experience of the relationship between school and handball influences your desire to continue playing handball (both positive and negative reflections)/Why do you now want to continue or quit playing handball? This was done to allow the participants to express their individual reflections regarding the same topics covered in the focus group. In addition, one closed question was included at the bottom of the questionnaire: "At this point in time, are you considering quitting handball?" (Yes or no).

If an athlete decided to quit playing handball for their team during the project period, they were invited to participate in an individual interview. This interview guide was open, centered around letting the participants freely share their experiences related to participation in handball and their reflections regarding the process that resulted in their decision to quit. In essence, three core questions were asked: a) their sports experience (when started/what type of sports); b) what they have enjoyed/not enjoyed about being on this team; and c) their process and reasons leading to their decision to quit the team. In addition, probe questions and questions related to specific topics from previous discussions we had in focus group interviews were asked when naturally related to each participant's story (e.g., life outside school, winning vs. developing). In this way, the individual interviews complemented the focus group interviews and questionnaires and provided deeper insight into the individual's continuous meaning making process. There was some variation in duration from the point at which each participant decided to quit playing, to the occurrence of the individual interview ($M = 1.8$ months, Range = 0–8 months) due to the practical arrangements needed to enable a meeting between participants and researcher. All interviews, both focus-groups and individual, were carried out by the first author, audio-recorded (approximately 30 min per interview), and later transcribed verbatim by the third author (resulting in 79 pages of raw data, using Calibri, font 12, line spacing 1.15). When transcribing the focus group interviews, ID numbers for each participant were noted. This gave the research group the opportunity to trace back and tease out

Table 1

Overview of data collections in the study.

Nb Data collection (Month of project)	Participants Month quitting team/Month individual interview									
	Sara	Emma	Nancy	Robin	Lisa	Brian	Axel	Chris	Jacob	Mia
	10/12	11/12	19/20	15/17	20/28	20/20	20/24	20/20	20/20	20/20
T1: Focus group interview (1)	X	–	X	X	X	X	X	X	X	X
T2: Focus group interview (4)	X	–	X	X	X	X	X	X	X	X
T3: Focus group interview (7)	X	–	X	X	X	X	X	X	X	X
T4: Focus group interview (13)	–	–	X	X	X	X	X	X	X	X
T5: Focus group interview (17)	–	–	X	–	X	X	X	X	X	X

Note: Month project counted from first data collection: 1 = first month of the project, 2 = second month of the project etc.; "X" = participated in focus group interview; "–" = did not participate in focus group interview.

individual responses for the specific participants in the current study. Lastly, the transcribed data from the open-ended questionnaires from each participant in the current study were also included in the entire data set that was analyzed (resulting in 10 pages of raw data, using Calibri, font 12, line spacing 1.15).

3.3. Data analysis

With the aim of understanding the reasons why participants had decided to quit playing handball for their team, the data analysis involved a three-step process of inductive content analysis (Miles & Huberman, 1994).

To begin with, the second and third author read and re-read the individual interviews, and the participants' statements in the focus group interviews and questionnaires, to ensure that they were fully immersed in the data. During this phase, they noticed how the questionnaires and focus groups allowed a glimpse into the players' ongoing concerns and considerations, while the individual interviews provided rich accounts of the players' continuous decision-making process. Hence, they decided to focus on the data from the individual interviews of those that decided to quit and used the focus group interviews and open-ended questionnaires to both cross-check and add further perspective to the data from the interviews. Second, in relation to the research question, they independently used content analysis and constant comparison (Corbin & Strauss, 2008) to identify concepts, themes, and ideas (e.g., "relationships in multiple contexts", "different notions of fun", "changing conditions", "various commitments"). Third, they critiqued and discussed their individual interpretations, during which data were moved between the evolving themes until a level of agreement was reached. Reinforcing the trustworthiness of the analysis, the final stage of analysis involved the first author engaging in a process of checking their interpretations. In this phase, themes were further developed, and data were moved between themes until a level of agreement was reached.

For the presentation of the results, direct quotations have been translated into English. A native English-speaking proofreader was consulted during the translation of quotations to enhance validity by ensuring the quality of translation to minimize possible loss of meaning (Van Nes et al., 2010). The direct quotations come from the individual interviews. However, they also reflect and represent the content of the responses from the participants' answers in the open-ended questionnaires.

3.4. Research rigor and quality

In line with our interpretive position and analytic approach, we acknowledge that our background (e.g., white privileged), experiences (e.g., former athletes, coaches, and teachers) and knowledge (e.g., research expertise on sport participation, attrition, and coaching) inevitably influence the research and knowledge construction. Methodological integrity has, therefore, been employed as the methodological foundation of rigor and quality for the overall project (Levitt et al., 2017). We have provided insights into the research process through our outline of the study design, participants and procedures data. Furthermore, we spent extensive time engaged in reflexivity through discussion and critique of our individual and collective analyses. The results were also subjected to scrutiny in several research group meetings including all four authors and by peers in presentations to a research group connected to the Norwegian Research Centre for Children and Youth Sports.

4. Results

The analytical process enabled us to construct an understanding of why adolescents decide to quit playing handball for their team as they transition from lower- to upper-secondary school. Specifically, we identified three processes that together influenced the participants' decisions to quit: (a) Change from an emphasis on flexibility and fun toward

seriousness and development, (b) struggles with balancing team handball, school, and other leisure-time activities, and (c) richness of upper-secondary school. While these processes appeared throughout the study, they also illustrate a process of accumulating reasons for quitting over time.

4.1. Change from an emphasis on flexibility and fun toward seriousness and development

Several of the participants said that during their first years in handball in children's sport, the emphasis was on "play" and "fun". The focus changed, however, toward seriousness and development when they moved from children's sport to youth sport and began working with a part-time paid coach. Nancy summarized the way several of the participants experienced their current youth sport context following the arrival of a new part-time paid coach the previous year (who replaced a volunteer parent-coach):

I feel that handball has become more serious because we have a much better coach and he focuses very much on us improving and doing well and is very concerned with [creating a good] environment, and that we feel good [about ourselves and with each other].

With a much clearer focus on improvement, the athletes experienced their team handball participation becoming considerably more serious. The athletes remarked that this new emphasis on the goal of developing into a serious handball team had consequences for what the athletes expected from one another and what the coach expected of the athletes in training and matches, including for example higher intensity training and required attendance at practices and matches. The data analysis conveyed how this context produced an emerging tension between the athletes who wanted more flexible participation and to have fun with their friends, and those who wanted to improve and win handball matches. While most of the study participants represented the athletes who wanted flexibility and a focus on having fun, they did not think that the handball activity should only be about having fun. Chris expressed the (lack of) balance between seriousness and fun:

... we should of course not only be joking at practice, but we should not be so "bloody" serious that we must attend all practices and matches. I should be allowed to take a weekend off if I want to, that they ask me if I want to take part in this and that, and not [just be told that:] "you have to take part in it, because we are going to win."

Many of the participants said that the requirement to participate in every practice and match added to the feeling of team handball becoming too serious. This, along with the focus on becoming better athletes and high intensity at practice, together with many realizing that they did not aim to be elite handball players, made them consider if it was worth playing handball anymore. While Sara still experienced team handball as fun, her feelings were similar to many of the other participants:

I have always thought it was fun. I still think it is fun. But I just feel like I could not keep up practicing that way [i.e., high demands and expectations], ... I did not feel it was worth it in a way. Because I did not aim to be an elite handball player, I did it mostly because I thought it was fun.

The data illustrate that because Sara and many of the participants' main aim was to have fun while practicing and not become elite handball players, the emphasis on seriousness and development resulted in them experiencing team handball as less relevant. On the other hand, Jacob, whose experiences and views contrasted with the other study participants, felt that team handball was fun and relevant when they were serious and focused on development, and that his teammates were not taking the game seriously enough and not contributing to the team's development. Hence, contrary to the other participants, Jacob decided to quit the team to start playing for another "more serious" team. This

decision was mainly due to what he perceived in many of his teammates as a lack of seriousness and eagerness to improve. Jacob shared his frustration:

In practice, so ... many are not motivated, and we are in addition very few at practice and there is little effort ... it is like they are only attending training to be there [to hang around], not to train [with an aim to improve] ... I do not think it is very fun. I think it is much more fun when we play proper handball and have a higher intensity.

While many of the other participants experienced team handball becoming too serious and therefore not fun or relevant, Jacob experienced it becoming less fun, challenging, and relevant because it was not serious enough. The data convey how these diverse experiences of what was fun, challenging, and relevant created a tension between players perceived as serious and those perceived as not serious. Over time, this tension influenced the way several of the participants experienced being able to balance team handball, school, and other leisure-time activities.

4.2. Struggles with balancing handball, school, and other leisure-time activities

While several study participants said that they generally enjoyed being with their teammates, several of whom they considered friends, and that they saw team handball as a valuable break from school, these participants also had a large social network outside of team handball. Axel shared how he felt that his team handball participation resulted in a reduced social life: "I did not have a smaller circle of friends, but I had a restricted social life. Even though I was social on the handball court, I was not social with my other classmates". Furthermore, the fact that team handball matches predominantly are played on weekends increased the participants' feelings of "losing" valuable time with friends and family. Robin shared his feelings about not finding time to be with friends outside of school and the team:

I mean that is the worst [matches on the weekends], because that is when things happen. That is when friends have time, those outside of school, those you want to see. And then there are always some family visits, so you only have time to meet one or two friends during a weekend. You get a bit sad that you do not have enough time with them.

With increasing age, several participants explained that they did spend more time on school and homework, which consequently created a feeling that they had to choose between team handball and a social life with their other friends. The data convey that, as they experienced team handball becoming too serious and demanding and, therefore, less fun and relevant, they no longer experienced team handball as a break but rather something that they needed a break from. This is how Chris expressed the tension between different aspects of her life and how "fun" guided this decision-making process, resulting in prioritization of her social life:

I am starting to get tired of the fact that [team handball] takes so much time, and when I spend time on it, I neither look forward to it, nor think it is fun. Before it was okay that it took all my time, because then I thought it was super fun. But now that I have lost some interest and I do not want to be an elite athlete, ... I feel that I spend my time in a bad way. I could spend it on something else that I think is more fun or more productive.

The fun and productive time with different friends involved multiple activities, such as going to a cafe, watching movies, playing in the park, or going to a soccer game. Mia said that, after quitting the handball team, she experienced having greater autonomy (personal agency) over her leisure-time and this allowed her to spend more enjoyable time with her friends:

It is very different. Now we go swimming and to parks and we are at people's homes. I exercise with someone. We go to parties. We do everything. I think it is very fun ... We just ask: "do you want to go exercising?" and then we exercise when we want.

In summary, several of the participants struggled to find a balance between the team handball demands and their personal reasons for participating, increasing school requirements, and consequently, reduced leisure-time with other friends.

4.3. Richness of upper-secondary school

The data convey that several of the participants, in the beginning of upper-secondary school, experienced team handball as a safe place where they could meet old friends. However, as they got to know their new upper-secondary school friends and their social network expanded, team handball became more of a stressor that negatively influenced their school results and limited their ability to be social with their new friends. While some of the participants already had decided to quit team handball before starting upper-secondary school, others were largely influenced by upper-secondary school experiences that they characterized as "relevant", "interesting", "fun", and "challenging." Robin shared his exciting upper-secondary school experiences:

Many new friends and an absolutely fantastic environment ... It is an art school and art is something I have been doing for a very long time. The fact that I can meet many others who are doing art in everyday school life is very cool, which I did not experience in my previous lower-secondary school class. There was no one who did art there ... I wanted to focus on art ... I wanted to spend a lot of time on art, but also with friends.

This new, fun, interesting and relevant school experience increased the participants' desire to spend more time on school-related work and spend their leisure-time with (new) friends, which, in contrast, increased their feelings of not having fun or seeing the relevance of team handball. Mia described how her upper-secondary school experience led her to prioritize differently:

One must prioritize school in a way and then I will spend the rest of the time with my new friends and also get to know new people. I feel like I am constantly getting to know new people. Building new relationships with other people, that is what I want to prioritize now. [Going to upper-secondary school], it is in a way very different from lower-secondary school because there are so many different things [happening]. I see and get to know new people all the time ... Yes, it was a big transition ..., and I like the new situation. I like that I get to know people from all over the city.

Consequently, as many of the participants said they prioritized school and/or friends over team handball in upper-secondary school, these new upper-secondary school experiences led to the decision to quit playing handball for their team. Data convey the meaningful nature of these experiences: (a) interesting studies that were relevant to their future career/life, (b) building new relationships with like-minded persons from different parts of the city, and (c) learning and being challenged to try new things. Lisa's lived experience of how multiple interacting elements influenced her decision to quit playing team handball, highlights a relationship between increasingly meaningful social experiences and a lack of meaningful team handball experiences:

I did not have any expectations for upper-secondary school. I had moderate grades at lower-secondary school and did not expect to get better. I was prepared to get worse grades, but then, I only got B's and A's and it gave me the willpower to keep working ... I figured out that I would rather do that [prioritize school and friends], than go to team handball practices. I would rather be with my new friends who were interesting and who I learned something from all the time, than go to team handball practices only to come home crying because it was not fun and I did not feel that I

mastered anything, and really just wanted to pretend I was injured so I could sit on the sidelines because it was not fun.

5. Discussion

The present study used a prospective cohort design to explore the reasons why young athletes decided to quit playing handball for their team. The findings address a gap in the sport attrition literature, as they longitudinally and qualitatively underline the importance of athletes' perceptions, interpretations, and decision making in organized sport participation (Crane & Temple, 2015; Schlesinger et al., 2018). The findings illustrate the processual and relational nature of adolescents' decisions to quit playing handball, in which there was not one, but multiple experiences that resulted in their final decision to quit. Further, the athletes' decisions to quit playing handball were not solely taken on the basis of isolated "non-attractive" sport experiences but rather because they perceived other leisure-time activities as increasingly more meaningful over time (Beni et al., 2017; Martela et al., 2018; Ryan & Deci, 2000, 2017). Despite the relative homogeneity of the sample group (for example, they were members of the same sport club, had the same coach, had similar socio-economic backgrounds, and had relatively similar sport participation history), their perceptions and interpretations might be characterized as heterogeneous because of the diverse ways they constructed meaning from their sport experience. This highlights the need to consider individual patterns of involvement across different sport types and settings (Evans et al., 2017). In the following paragraphs, the main themes that emerged through the analysis will be discussed in relation to the range of variation in the athletes' experiences. Accordingly, individual experiences will be used as a point of departure in order to better understand the complex interplay of psychosocial factors and how these influence athletes' decisions to quit playing handball during the transition phase from lower- (ages 13–16 years) to upper-secondary (ages 16–19 years) school in Norway.

5.1. Structured organized youth sport

Organized youth sport, as compared to children's sport, is characterized by a significantly higher degree of structure and a pronounced focus on performance (Bergeron et al., 2015; DiSanti & Erickson, 2019). This characterization is also evident in the Norwegian organization of youth sport (Breivik, 2011; Persson et al., 2020; Skille, 2011). Indeed, our findings show that the study participants experienced these structural changes in the transition phase from children's to youth sport (from 12 to 15 years of age). These changes included having a new part-time paid coach who was employed by the club and more practices (Lara-Bercial et al., 2017), and thus increased time during the week spent training for and playing handball. The increased competitiveness in organized youth sport during adolescence is in line with recent studies (Kristiansen & Stensrud, 2017, 2020; Somerset & Hoare, 2018). However, a part-time paid coach who focused on individual and team performance improvements is not necessarily synonymous with a performance-oriented sports coaching style. On the contrary, the study participants described a coach who heavily relied on creating a sporting environment that emphasized fun, challenges, and individual and team improvements, which could be aligned with basic psychological needs satisfaction, thereby generating experiences of meaningfulness (Beni et al., 2017; Ryan & Deci, 2000, 2017). However, because improvements also meant concentration, trying harder, and experiencing failure (perseverance) in the process of practicing and performing, these were, for most of the athletes who decided to quit handball, experiences of basic psychological needs frustration/thwarting resulting from actions by the team coach (Ryan & Deci, 2017). This is supported by a recent Norwegian study, which found that 18% of the respondents said organized youth sport had changed in a way that made the sports culture and organization too competitive and serious (Persson et al., 2020).

5.2. A deliberate choice to quit - the complex process of sport attrition

Previous research on youth sport attrition in Norway and elsewhere has mainly focused on the end-product rather than focusing on the decision-making process leading to the decision to either continue or quit participating in organized youth sport (Balish et al., 2014; Persson et al., 2020; Schlesinger et al., 2018). Although the term "drop out" has frequently been used in the literature (Crane & Temple, 2015; Temple & Crane, 2016), this terminology and approach might be considered as less appropriate for understanding a complex phenomenon, particularly when we know what adolescence entails in terms of transition periods and, thus, psychosocial developmental processes (Evans et al., 2017; Newman & Newman, 2018; Sawyer et al., 2018).

Moreover, another core finding in this study is that the athletes had engaged in a process of evaluation and reflection over time about whether to continue or quit playing handball (Solstad et al., 2021; Stambulova et al., 2015). During the transition phase between lower- and upper-secondary school (15–16 years of age), significant change-events occurred in the young athletes' lives. These led them to consider the meaningfulness of their sport experiences, as well as the meaningfulness of experiences in other spheres of their daily lives (Baron-Thiene & Alfermann, 2015; Stambulova et al., 2015; Stambulova & Samuel, 2020). The devaluation of meaningfulness in their organized sport participation must therefore be viewed in light of their increased interest in what the athletes described as their "new world" that emerged when they left lower-secondary school and started upper-secondary school a pre-transition situation. Most of the athletes described this "new world" as eye-opening and exciting, which resulted in meeting other interesting adolescents outside their own neighborhood. For instance, increased autonomy (personal agency) in relation to being social with new friends, going to cafés, discussing matters outside organized sport (e.g., art, fashion, politics, social life) was perceived as fascinating and motivating (Persson et al., 2020; Ryan & Deci, 2000, 2017). Making sense of these new situations involved assimilating values, behavioral regulations, and emotions as maturing individuals. The process of deciding how to respond to these new situations revealed that handball had become less important (a lack of functional significance) for several of the study participants (Ryan & Deci, 2017; Stambulova & Samuel, 2020). This, in turn, was pivotal in their decisions to quit playing handball for their team (Gatouillat et al., 2020; Persson et al., 2020; Solstad et al., 2021). However, these adolescents did not want to quit doing sports. Rather, they chose to continue doing sports in a self-organized way. These examples illustrate in depth what recent publications have labeled as competing priorities during adolescence (Crane & Temple, 2015; Persson et al., 2020; Waldron et al., 2020).

One of the athletes, however, decided to quit playing for his team in favor of another team that was more aligned with competitive handball (a more serious and specialized handball team). This decision related to his ambition of increasing his engagement in handball activities with a view to a potential elite sporting career, showing that there can be many transition pathways (with different outcomes) depending on the decision-making process (Baron-Thiene & Alfermann, 2015; Ryan & Deci, 2017; Stambulova & Samuel, 2020). For this particular athlete, it was meaningful to spend more time on handball activities, together with other ambitious athletes with a similar mindset about personal development and performance improvement.

Taking together the above, the concept of "dropping out of organized sport" for these adolescents does not adequately capture their multiple reasons for quitting. These athletes did not "drop out". Instead, they deliberately chose other leisure-time activities that implicitly satisfied their basic psychological needs for autonomy, competence, and relatedness, thereby evaluating these activities as more personally meaningful (Beni et al., 2017; Ryan & Deci, 2000, 2017).

5.3. Practical implications

To the best of our knowledge, we are not aware of any prospective cohort studies that have investigated how young athletes' meaningful experiences in organized youth sport change during a specific transition period (Balish et al., 2014; Beni et al., 2017; Stambulova et al., 2020). This type of study, however, might be helpful for two reasons. First, it can help adults (e.g., sport directors, coaches, and parents) understand how they can assist young athletes in a more purposeful manner so that their needs and preferences are considered in the organizational context. Second, given the degree of early specialization in organized youth sport (DiFiori et al., 2014; DiSanti & Erickson, 2019; Myer et al., 2016, 2015; Waldron et al., 2020), it is important to better understand the relationship between the context of sport performance and young athletes' meaningful experiences in organized youth sport; i.e., their subjective perceptions and interpretations in the decision-making process. Note also that these suggestions are in line with the regulations and guidelines for organized youth sport in Norway.

Our findings indicate that one size does not fit all. Hence, there are implications for sport organizations as well as for coaches (both part-time paid and volunteer coaches). With increasing age, adolescents seem to develop a greater awareness regarding their leisure-time preferences. This includes a negotiation of meaningfulness, involving the perception and interpretation of more or less successful outcomes and relevant changes, in several contexts of their daily lives (Newman & Newman, 2018; Stambulova & Samuel, 2020). Sport organizations and coaches should strive to develop activities based on adolescents' needs and preferences, facilitating the long-term goal of organized sport in Norway to offer a diverse range of sporting activities suitable for all age groups and all sporting levels. Specifically, sport organizations, local sport clubs, and coaches should be aware of individual differences and be open to a dialogue with their young, aspiring athletes. Adolescents are reflecting on these matters and their ideas about what they find important and relevant to thrive in organized youth sport should be considered. Consequently, differentiations in level of development, performance, and time spent on practice and in competition should be implemented. For larger sport clubs this might be easier to put in place, whereas for smaller sport clubs, collaboration among several local clubs might be necessary.

5.4. Limitations and future directions

The participants in the present study were selected because of their experience of going through a process that culminated in a decision to quit playing handball for their team. The findings represent the voices of a small sample of those athletes who participate in organized youth sport. It is also important to acknowledge that the population is drawn from an area with higher levels of socio-economic status within a large city in Norway. This means that the general population of adolescents within this area are likely to have a wide range of activities they can participate in during their leisure-time. Future studies should aim to better understand the voices of both larger and more diverse samples of adolescents with regard to, for instance, sport types, sport settings, and patterns of individual involvement, from areas with a larger range of socio-economic backgrounds and environmental factors, and in relation to different transition phases regarding participation in organized youth sport. Despite collecting data through focus group interviews over a two-year period, only one individual interview was conducted with each participant after they decided to quit playing handball. Future studies might result in a more in-depth and nuanced perspective if the research includes repeated individual interviews over time. In addition, including the voices of stakeholders in organized youth sport (e.g., sport organizations, clubs, coaches, and parents) would likely provide richer data to better understand the complexity of youth sport attrition in the different transition phases (Smith & Sparkes, 2016; Solstad et al., 2021; Stambulova et al., 2020).

6. Conclusions

The present prospective cohort study fills a gap in understanding the complex process involved when adolescents' evaluation of their sport participation results in a decision to quit organized youth sport participation in the specific transition period from lower- (ages 13–16 years) to upper-secondary (ages 16–19 years) school. The overall findings indicate that all adolescents had engaged in a decision-making process over time about whether they should continue or quit playing handball. This involved a process of accumulating reasons that resulted in their final decision to quit. However, our findings reveal a range of experiences, which clearly indicate that adolescents have individual perceptions, interpretations, and decisions of what they find meaningful and relevant in their daily life. The adolescents not only evaluated their sport experiences but considered these experiences in light of their evaluation of meaningfulness in other spheres of their daily life. Indeed, the adolescents chose to quit because they considered other activities to be more meaningful, indicating that “dropping out of organized youth sport” should not be regarded as unambiguously negative in the specific transition phase from lower-to upper-secondary school.

Funding

None.

Declaration of competing interest

None.

References

- Althubaiti, A. (2016). Information bias in health research: Definition, pitfalls, and adjustment methods. *Journal of Multidisciplinary Healthcare*, 9, 211. <https://doi.org/10.2147/JMDH.S104807>
- Bakken, A. (2017). *Ungdata. Nasjonale resultater 2017. NOVA rapport 10/17*. NOVA/Høgskolen i Oslo og Akershus.
- Balish, S. M., McLaren, C., Rainham, D., & Blanchard, C. (2014). Correlates of youth sport attrition: A review and future directions. *Psychology of Sport and Exercise*, 15, 429–439. <https://doi.org/10.1016/j.psychsport.2014.04.003>
- Baron-Thiene, A., & Alfermann, D. (2015). Personal characteristics as predictors for dual career dropout versus continuation – a prospective study of adolescent athletes from German elite sport schools. *Psychology of Sport and Exercise*, 21, 42–49. <https://doi.org/10.1016/j.psychsport.2015.04.006>
- Beni, S., Fletcher, T., & Chróinín, D. N. (2017). Meaningful experiences in physical education and youth sport: A review of the literature. *Quest*, 69, 291–312. <https://doi.org/10.1080/00336297.2016.1224192>
- Bergeron, M. F., Mountjoy, M., Armstrong, N., Chia, M., Côté, J., Emery, C. A., Faigenbaum, A., Hall, G., Jr., Kriemler, M. L., Leglise, M., Malina, R. M., Pensgaard, A. M., Sanchez, A., Soligard, T., Sundgot-Borgen, J., van Mechelen, W., Weissensteiger, J. R., & Engebretsen, L. (2015). International Olympic Committee consensus statement on youth athletic development. *British Journal of Sports Medicine*, 49, 843–851. <https://doi.org/10.1136/bjsports-2015-094962>
- Breivik, G., Hanstad, I. D. V., Breivik, G., Sisjord, M. K., & Skaset, H. B. (2011). Norges idrettsforbund som ideologisk maktfaktor og aktivitetskaper. In *Norsk idrett: Indre spenning og ytre press* (s. 11–27). Akilles.
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- Collins, K., & Barcelona, R. (2018). Keep 'em playing: Strategies for building positive sport experiences. *Strategies*, 31, 8–14. <https://doi.org/10.1080/08924562.2018.1490231>
- Corbin, J. M., & Strauss, A. (2008). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Sage.
- Crane, J., & Temple, V. (2015). A systematic review of dropout from organized sport among children and youth. *European Physical Education Review*, 21, 114–131. <https://doi.org/10.1177/1356336X14555294>
- Culver, D. M., Gilbert, W., & Sparkes, A. (2012). Qualitative research in sport psychology journals: The next decade 2000–2009 and beyond. *The Sport Psychologist*, 26, 261–281. <https://doi.org/10.1123/tsp.26.2.261>
- Dahl, R. E., Allen, N. B., Wilbrecht, L., & Suleiman, A. B. (2018). Importance of investing in adolescence from a developmental science perspective. *Nature*, 554, 441–450. <https://doi.org/10.1038/nature25770>
- Deelen, I., Ettema, D., & Kamphuis, C. B. (2018). Time-use and environmental determinants of dropout from organized youth football and tennis. *BMC Public Health*, 18, 1–15. <https://doi.org/10.1186/s12889-018-5919-2>
- DiFiori, J. P., Benjamin, H. J., Brenner, J. S., Gregory, A., Jayanthi, N., Landry, G. L., & Luke, A. (2014). Overuse injuries and burnout in youth sports: A position statement from the American medical society for sports medicine. *British Journal of Sports Medicine*, 48, 287–302. <https://doi.org/10.1136/bjsports-2013-093299>

- DiSanti, J. S., & Erickson, K. (2019). Youth sport specialization: A multidisciplinary scoping systematic review. *Journal of Sports Sciences*, 37, 2094–2105. <https://doi.org/10.1080/02640414.2019.1621476>
- Evans, M. B., Allan, V., Erickson, K., Martin, L. J., Budziszewski, R., & Côté, J. (2017). Are all sport activities equal? A systematic review of how youth psychosocial experiences vary across differing sport activities. *British Journal of Sports Medicine*, 51, 169–176. <https://doi.org/10.1136/bjsports-2016-096725>
- Gatouillat, C., Griffet, J., & Travert, M. (2020). Navigating the circles of social life: Understanding pathways to sport drop-out among French teenagers. *Sport, Education and Society*, 25, 654–666. <https://doi.org/10.1080/13573322.2019.1643300>
- Kristiansen, E., & Stensrud, T. (2017). Young female handball players and sport specialisation: How do they cope with the transition from primary school into a secondary sport school? *British Journal of Sports Medicine*, 51, 58–63. <https://doi.org/10.1136/bjsports-2016-096435>
- Kristiansen, E., & Stensrud, T. (2020). Talent development in a longitudinal perspective: Elite female handball players within a sport school system. *Translational Sports Medicine*, 3, 364–373. <https://doi.org/10.1002/tsm2.143>
- Lara-Bercial, S., North, J., Härmäläinen, K., Oltmanns, K., Minkhorst, J., & Petrovic, L. (2017). *European Sport Coaching Framework*. Human Kinetics.
- Levitt, H. M., Motulsky, S. L., Wertz, F. J., Morrow, S. L., & Ponterotto, J. G. (2017). Recommendations for designing and reviewing qualitative research in psychology: Promoting methodological integrity. *Qualitative Psychology*, 4(1), 2. <https://doi.org/10.1037/qup0000082>
- Mann, C. J. (2003). Observational research methods. Research design II: Cohort, cross sectional, and case-control studies. *Emergency Medicine Journal*, 20, 54–60. <https://doi.org/10.1136/emj.20.1.54>
- Martela, F., Ryan, R. M., & Steger, M. F. (2018). Meaningfulness as satisfaction of autonomy, competence, relatedness, and beneficence: Comparing the four satisfactions and positive affect as predictors of meaning in life. *Journal of Happiness Studies*, 19, 1261–1282. <https://doi.org/10.1007/s10902-017-9869-7>
- Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. Sage.
- Myer, G. D., Jayanthi, N., DiFiori, J. P., Faigenbaum, A. D., Kiefer, A. W., Logerstedt, D., & Micheli, L. J. (2015). Sport specialization, Part I: Does early sports specialization increase negative outcomes and reduce the opportunity for success in young athletes? *Sport Health: A Multidisciplinary Approach*, 7, 437–442. <https://doi.org/10.1177/1941738115598747>
- Myer, G. D., Jayanthi, N., DiFiori, J. P., Faigenbaum, A. D., Kiefer, A. W., Logerstedt, D., & Micheli, L. J. (2016). Sports specialization, Part II: Alternative solutions to early sport specialization in youth athletes. *Sport Health: A Multidisciplinary Approach*, 8, 65–73. <https://doi.org/10.1177/1941738115614811>
- Newman, B. M., & Newman, P. R. (2018). *Development through life: A psychosocial approach* (13th ed.). Cengage Learning.
- Opstoel, K., Chapelle, L., Prins, F. J., Meester, A. D., Haerens, L., Tartwijk, J. V., & Martelaer, K. D. (2020). Personal and social development in physical education and sports: A review study. *European Physical Education Review*, 26, 797–813. <https://doi.org/10.1177/1356336X19882054>
- Patton, M. Q. (2014). *Qualitative research & evaluation methods: Integrating Theory and practice*. Sage.
- Persson, M., Espedalen, L. E., Stefansen, K., & Strandbu, Å. (2020). Opting out of youth sports: How can we understand the social processes involved? *Sport, Education and Society*, 25, 842–854. <https://doi.org/10.1080/13573322.2019.1663811>
- Roberts, G. C. (2012). Motivation in sport and exercise from an achievement goal theory perspective: After 30 years, where are we? In G. C. Roberts, & D. C. Treasure (Eds.), *Advances in motivation in sport and exercise* (3rd ed., pp. 5–58) Human Kinetics.
- Ryan, R. M., & Deci, E. L. (2000). The darker and brighter sides of human existence: Basic psychological needs as a unifying concept. *Psychological Inquiry*, 11, 319–338. https://doi.org/10.1207/S15327965PLI1104_03
- Ryan, R. M., & Deci, E. L. (2017). *Self-determination theory: Basic psychological needs in motivation, development, and wellness*. The Guilford Press. <https://doi.org/10.1521/978.14625/28806>
- Samuel, R. D., Stambulova, N., & Ashkenazi, Y. (2020). Cultural transition of the Israeli U18 national handball team migrated to Germany: A case study. *Sport in Society*, 23, 697–716. <https://doi.org/10.1080/17430437.2019.1565706>
- Sawyer, S. M., Azzopardi, P. S., Wickremarathne, D., & Patton, G. C. (2018). The age of adolescence. *The Lancet Child & Adolescent Health*, 2, 223–228. [https://doi.org/10.1016/S2352-4642\(18\)30022-1](https://doi.org/10.1016/S2352-4642(18)30022-1)
- Schlesinger, T., Löbig, A., Ehnold, P., & Nagel, S. (2018). What is influencing the dropout behaviour of youth players from organised football? *German Journal of Exercise and Sport Research*, 48, 176–191. <https://doi.org/10.1007/s12662-018-0513-4>
- Schmid, J., Gut, V., Conzelmann, A., & Yanagida, T. (2020). Who stays on? The link between psychosocial patterns and changes in exercise and sport behaviour when adolescents make transitions in education. *Applied Psychology: Health and Well-Being*, 12, 312–334. <https://doi.org/10.1111/aphw.12186>
- Skille, E.Å. (2011). Sport for all in scandinavia: Sport policy and participation in Norway, Sweden and Denmark. *International Journal of Sport Policy and Politics*, 3, 327–339. <https://doi.org/10.1080/19406940.2011.596153>
- Smith, B., & Sparkes, A. C. (Eds.). (2016). *Routledge handbook of qualitative research in sport and exercise*. Taylor & Francis.
- Solstad, B. E., Granerud, M., Haraldsen, H. M., Gustafsson, H., & Knight, C. J. (2021). An exploration of reciprocity between female athletes and their coach in elite junior swimming: A shared reality theory perspective. *Qualitative Research in Sport, Exercise and Health*. <https://doi.org/10.1080/2159676X.2021.1941211>
- Somerset, S., & Hoare, D. J. (2018). Barriers to voluntary participation in sport for children: A systematic review. *BMC Pediatrics*, 18, 1–19. <https://doi.org/10.1186/s12887-018-1014-1>
- Stambulova, N., Engström, C., Franck, A., Linnér, L., & Lindahl, K. (2015). Searching for an optimal balance: Dual career experiences of Swedish adolescent athletes. *Psychology of Sport and Exercise*, 21, 4–14. <https://doi.org/10.1016/j.psychsport.2014.08.009>
- Stambulova, N. B., Ryba, T. V., & Henriksen, K. (2020). Career development and transitions of athletes: The international society of sport psychology position stand revisited. *International Journal of Sport and Exercise Psychology*, 1–27. <https://doi.org/10.1080/1612197X.2020.1737836>
- Stambulova, N. B., & Samuel, R. D. (2020). Career transitions. In D. Hackfort, & R. J. Schinke (Eds.), *Routledge encyclopedia of sport and exercise psychology* (pp. 119–134). Routledge.
- Temple, V. A., & Crane, J. R. (2016). A systematic review of drop-out from organized soccer among children and adolescents. *Soccer and Society*, 17, 856–881. <https://doi.org/10.1080/14660970.2015.1100901>
- Van Nes, F., Abma, T., Jonsson, H., & Deeg, D. (2010). Language differences in qualitative research: Is meaning lost in translation? *European Journal of Ageing*, 7(4), 313–316. <https://doi.org/10.1007/s10433-010-0168-y>
- Waldron, S., DeFreese, J. D., Register-Mihalik, J., Pietrosimone, B., & Barczak, N. (2020). The costs and benefits of early sport specialization: A critical review of literature. *Quest*, 72, 1–18. <https://doi.org/10.1080/00336297.2019.1580205>