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‘I was excited to train, so I didn’t have problems with the coach’: Dual career athletes’ experiences of (dis)empowering motivational climates

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‘I was excited to train, so I didn’t have problems with the coach’: Dual career athletes’ experiences of (dis)empowering motivational climates

In addition to investing in athletic development, adolescent elite athletes are expected to complete their secondary education. As a result of this expectation and the demands of sport and education, they may struggle to sustain high levels of motivation for both domains. Grounded in theoretical tenets of Empowering Coaching (Duda 2013), this study sought to explore student-athletes’ perceptions of empowering and disempowering motivational climates and their possible implications for athletes’ dual career experiences. Semi-structured interviews were conducted with 17 Finnish student-athletes, and the data were thematically analyzed. The analysis indicated that a majority of the athletes had experiences of disempowering coaching climates due to coaches’ exclusive emphasis on athletic performance. It is concluded that the perception that obtaining an education is less important than sport may potentially decrease athletes’ motivation to pursue an academic track and thus challenge their exploration of future vocations outside the sporting context.

Keywords: motivational climate, youth athletes, empowering coaching, dual careers, Finland

Introduction

In addition to investing in athletic development, adolescent elite athletes are increasingly expected to complete their secondary education. This combination of sport and education, defined as a dual career pathway, aims to ensure that young athletes receive educational and/or vocational training alongside their athletic career, thereby safeguarding their employability and adaptation to life after athletic retirement (European Commission 2012). Recent research on dual careers has emphasized the importance of dual career developmental environments (DCDEs) in facilitating athletes’ successful combination of sport and education (ECO-DC 2018). Interpersonal climates play an especially critical role in the life choices of student-athletes attempting to combine athletic and academic demands (Fuchs et al. 2016; Knight, Harwood, and Sellars 2018). For example, DCDEs offering greater reinforcement of athletic goals than

academic ones may encourage athletes to invest in their sport careers while ignoring their education (Adler and Adler 1985; Meyer 1990). Moreover, while secondary education is commonly pursued in most Western countries, adolescent athletes may find it challenging to persist at school if their life goals, dreams and career aspirations are disconnected from their education (Ryba et al. 2017).

During their adolescent years, many athletes experience changes in their interpersonal environments. They may move away from home to student housing and need to adapt to a different psychosocial environment in which coaches become the most important socializing agents instead of parents (Horn 2008; Wylleman, Reints, and De Knop 2013). Indeed, the social psychological environment the coach creates, referred to as the coach-created motivational climate, is likely to influence athletes' motivations and experiences in sport (Duda and Appleton 2016; Smith, Smoll, and Cumming 2007).

Previous research has mostly investigated coach-created motivational climates using contemporary theories of motivation, such as achievement goal theory (AGT; see Ames 1992; Nicholls 1989) and self-determination theory (SDT; see Deci and Ryan 1985, 2000). AGT outlines that the coach-created motivational climate consists of everything the coach says and does as well as how he/she structures the sport environment regarding training and competitions (Duda 2013). According to AGT, the environment can shape individuals' interpretations of and responses to activities such as sport that reward achievement by contributing to the use of task- and/or ego-involving criteria to judge competence (Newton, Duda, and Yin 2000). Task-involving criteria emphasize personal effort and mastery as well as individual improvement, and these are assumed to be fostered by a task-involving climate. Conversely, ego-involving criteria value being the best compared to others and are likely to be fostered in an ego-involving

climate (Newton, Duda, and Yin 2000). In addition to AGT, researchers have used SDT to describe coach-created motivational climates in sport. SDT proposes that the psychological environment can support or hinder the fulfilment of the three basic psychological needs, which are competence, autonomy and relatedness (Ryan and Deci 2000a).

Greater need satisfaction may be linked to more autonomous goals and to more adaptive and healthful engagement, which are conducive to sustained behaviour (Ryan and Deci 2000a, 2000b). Conversely, diminished or actively thwarted autonomy, competence and relatedness are likely to lead to more controlled reasons for engagement, ill-being and the compromised welfare of the participants involved (Bartholomew et al. 2011; Ryan and Deci 2000a, 2000b). As outlined by SDT, an autonomy supportive sport environment is likely to contribute to the satisfaction of basic psychological needs (Deci and Ryan 2000a, 2000b). In an autonomy supportive environment, athletes can have a sense of choice, self-endorsement and volition as well as experience support from coaches for their self-initiated goals (Bartholomew, Ntoumanis, and Thogersen-Ntoumani 2010). In contrast, in a controlling sport environment, coaches may act as an authoritarian in order to force athletes to behave or think in a certain preconceived way (ibid). The external pressures applied by the coach may be perceived by athletes as the origin of their behavior, and the resultant loss of control may undermine athletes' psychological needs as well as their sense of self-determination (Deci and Ryan 1985).

Duda (2013) proposed a conceptualization of the motivational climate in which she integrated the major social environmental dimensions from SDT and AGT. According to this conceptualization, a motivational climate that is task-involving, autonomy supportive and socially supportive can be considered empowering. An

empowering coaching climate is likely to satisfy athletes' basic psychological needs, and many studies have shown its positive influence on athletes' engagement in sport and their overall health (e.g., Appleton and Duda 2016; Jaakkola, Ntoumanis, and Liukkonen 2016; Reinboth, Duda, and Ntoumanis 2004). Conversely, a climate characterized by ego-involving and controlling features is disempowering and likely to thwart the athletes' need satisfaction as well as overall functioning (Duda 2013). Several studies have demonstrated that a disempowering climate is associated with athletes' lowered enjoyment of sport (e.g., Leo et al. 2009) and increases the possibility of burnout (e.g., Bartholomew et al. 2011).

Although previous studies have focused on the coach-created motivational climate in relation to sport, it is likely that these climates also have implications for athletes' educational pursuits. Yet, research on this aspect of coaches' influence on athletes' lives is limited. Previous studies have not investigated coach-created motivational climates among dual career athletes. Moreover, earlier research investigating coaches' attitudes towards athletes' dual careers revealed diverse results. Knight and Harwood (2015) found that coaches in different youth sport environments were consistently supportive of athletes' dual careers. However, it seems that although coaches may embrace the official rhetoric of school being a priority over sport, they may still be unable to provide practical examples of how this view informs their coaching practices (Ronkainen et al. 2018). Moreover, it seems that coaches who are concerned about athletes' holistic development across various contexts create task-involving climates to support athletes' academic achievement (Papaioannou et al. 2008; Poux and Fry 2015). Indeed, it may be that when coaches foster athletes' interests beyond athletic endeavors, these athletes will be better prepared and engaged for their future vocational careers (Poux and Fry 2015).

In contrast, other studies have found that coaches may also have negative views regarding athletes' education, as they may believe that education distracts athletes from focusing on their athletic careers (Meyer 1990; Aunola et al. 2018; Papaioannou et al. 2008). Indeed, it has been suggested that a strongly ego-involving coaching climate may be linked with athletes' decreased academic achievement (Papaioannou et al. 2008). Importantly, coaches who consider education as a back-up plan may actually lure young athletes into dreams of professional athletic careers and may not encourage them to engage with education or find intrinsic value in it (Ronkainen et al. 2018).

The current study extends the literature on the coaches' role in athletes' dual career experiences by examining athletes' perceptions of coach-created motivational climates in their upper secondary sport schools. The majority of the previous research examining empowering coaching climates was conducted in recreational sport among children (e.g., Smith et al. 2016; Duda 2013) and adult athletes (e.g., Appleton and Duda 2016); therefore, this study can provide the applicability of Duda's (2013) framework to the dual career context.

With this background, this study sought to examine the following research questions:

- (1) What kind of coach-created motivational climates did the athletes experience in upper secondary sport schools?
- (2) How did the perceived coach-created motivational climates impact athletes' dual career experiences?

Methods

Epistemological positioning

This qualitative study was designed to examine athletes' subjective experiences of coach-created motivational climates and their possible implications for athletes' dual career behavior. To answer the stated research questions, we situated our research within the constructivist epistemological position. Essentially, the constructivist position assumes that knowledge production is always theory-laden and situated, and it cannot access an objective reality of a phenomenon (Hansen 2004). As researchers' values and lived experiences cannot be divorced from the research process, it was necessary for the first author to reflect and acknowledge on her own researcher position as a former student-athlete who had graduated from an upper secondary sport school. She had struggled with challenges when constructing a dual career pathway as a student, and later she reflected on her experience in an upper secondary sport school as a pivotal developmental period influencing later life choices. The other authors of this paper worked as critical peers challenging the first author's interpretations and offering an opportunity for dialogue.

Participants

Participants of the present study were 17 Finnish cross-country skiers, six females and 11 males, ages 23–34 (Mean = 27 years) at the time of the interview. They studied in eight different upper secondary sport schools across Finland, and in total they were coached by 16 different upper secondary sport school coaches. The first author used her personal network to recruit the participants. In Finland, cross-country skiing is a national sport with more than 6500 competitive youth participants from 600 ski clubs (Suomen Hiihtoliitto 2019). Finland also has four upper secondary sport schools in which cross-country skiing is the principal sport. In the Finnish educational system, after completing nine years of compulsory education, students decide on their secondary education. Secondary education comprises upper secondary (considered to be an

academic track preparing students to apply for higher education at a university) or vocational (professional preparation) high school. After completing their upper secondary education, students often apply to universities or polytechnic universities. Likewise, after vocational school, students may transition to the labor market or continue in polytechnic universities.

Participants for the present study pursued secondary education within the national talent development program that structurally enables the construction of a dual career pathway. These specific upper secondary sport schools (*urheilulukiot* in Finnish) collaborate with national sport academies and sport federations to arrange training and support services for athletes as well as assist with dual career planning. Coaches working in youth sport environments, such as in sport schools, often have limited formal training (Schlechter et al. 2017). Despite the structural agreements between sport and education in upper secondary schools, there appears to be no formal job description for coaches to outline goals and responsibilities associated with athletes' dual career pursuits (Finnish National Agency for Education, n.d.)

All the participants in the present study competed in National Junior Championships in cross-country skiing and were considered talented or elite athletes. Moreover, all of them graduated from upper secondary school after spending 3–4 years there. At the time of the interview, three of the participants were competing at the international level and were considered professional athletes, seven participants were competing at the national level and seven had retired from elite sport. Additionally, nine of the participants were university students and one participant was receiving a vocational education. One participant had a university degree, and four of them had a degree from a polytechnic university. One participant had a degree from a vocational

school, and one of them had not continued his studies after graduation from upper secondary school.

Procedure

After ethical clearance, we invited the participants to take part in semi-structured interviews. They were informed that the focus of the interviews was their subjective upper secondary sport school experiences. After explaining the purpose of the study, participants were informed about their rights to withdraw from the research at any point without any consequences or prejudice. All invited athletes agreed to be interviewed and signed the informed consent form prior to the interview. After a brief introduction to the topic, the athletes were asked to recall their career development experiences in both sport and school during their years at a upper secondary sport school. Probing and follow-up questions were developed from participants' stories to understand their experiences and contexts. For example, many participants wanted to reflect on their transition from comprehensive education to an upper secondary sport school, as this had been challenging for most of them.

After that, we asked participants to elaborate on their upper secondary sport school environments with a specific focus on the interactions with school coaches. We asked both general questions (e.g., How did you experience coaching in your upper secondary sport school?) and more specific ones as follow-up questions (e.g., What kind of athletic goals did you have while at a upper secondary sport school?). For dual career, we asked questions regarding combining athletic and academic demands (e.g., Could you explain how you managed to combine sport and school while at a upper secondary sport school? What were the things that helped you to combine sport and school? What did not help?).

At the end of the interview, participants were asked to reflect on their overall

experiences at an upper secondary school based on their current situation in life (e.g., Do you think that your experiences in a upper secondary sport school affected your later life choices? What were the most critical moments/experiences?). The interviews proceeded differently every time, and as our interview guide was semi-structured, there was flexibility within to allow greater depth of exploration. The interviews lasted between 30 and 75 minutes and were conducted by the first author, digitally recorded, and transcribed verbatim.

Data analysis

Thematic analysis as explained by Braun and Clarke (2006) was used to analyze the data. In the first stage, all of the interviews were transcribed verbatim and read through several times by the first author to become familiar with the data. Our analytic procedure involved a succession of inductive and deductive processes, which can be described as an abductive approach (Ryba et al. 2012). Abductive reasoning involves a dialectical movement between everyday meanings and theoretical explanations, recognizing the creative process of interpretation when applying a theoretical framework to explain participants' experiences (Atkinson and Delamont 2005). This procedure was followed because the aims of the study were to understand athletes' experiences (inductively) and determine whether these experiences could be understood in the theoretical framework of Empowering Coaching (Duda 2013) (deductively).

After noting the initial ideas and impressions, the process of sorting codes took place; similar excerpts from the transcripts were inductively segmented into raw themes. Each raw theme was collected as quotes expressing athletes' subjective experiences with coach-created motivational climates (Patton 2002). Next, the raw themes were deductively categorized into the different motivational climates as explained in Empowering Coaching (task-involving, autonomy supportive, socially

supportive, ego-involving and controlling) (Duda 2013). In the analysis, we identified an additional climate that was not included in the original theory. This climate was defined as socially unsupportive and characterized by athletes' experiences of coaches who lacked concern, care and relationships (Van den Berghe et al. 2013). Within each theme we identified the subthemes. For example, for an autonomy supportive motivational climate, the subthemes were giving athletes options and choices and emphasizing athletes' own excitement for sport. The first and the second authors had weekly discussions during the analysis phase, and the emerging results were presented several times to other members of the research group.

Results

We identified five themes – autonomy supportive, socially supportive, ego-involving, controlling and socially unsupportive – that could be further categorized under empowering and disempowering coaching (Duda 2013). All the categories and the number of participants that mentioned them are presented in Table 1. Quotes from the interviews are offered with pseudonyms.

Table 1 near here.

Experiences with autonomy supportive coaching climates

Three athletes recalled experiences with autonomy supportive coaching climates. They explained how the coaches had taken their athletic level into consideration and thus provided additional and more challenging training options for them:

I liked to train in the group with all the other skiers, but I also did a lot of workouts by myself or with the other top skier girls. My training intensity and pace were quite different from most of the other girls, and I really wanted to focus on my workout. It was good that the coach allowed me and the other top skier girls to modify the training

plans once in a while. We attended the group trainings, but we also had a chance to do other, more intense workouts. (Silja)

Eemeli had a similar experience with coaches offering him possibilities to train harder after reaching athletic success in skiing:

When I was in high school, I first did both cross-country skiing and orienteering. During my last year in high school, I achieved very good results in skiing, and thus I really wanted to focus more on skiing. Coaches offered possibilities for more ski-related workouts such as roller skiing and upper body strength. I also did more workouts on my own than with the group, and the coaches agreed with that. (Eemeli)

In addition, athletes stated how some coaches created fun and enjoyable training environments:

When I entered high school, I didn't have any special athletic goals that I should achieve. However, in sport high school, my athletic development started to rock. Everything worked out well; we really had fun and we enjoyed life and trainings with the coach. In the trainings, our focus was not on the athletic development at all. It almost felt like we developed that by accident. We had a high-quality coach who didn't put pressure on us, and that's the reason we achieved such good results. The following winter I won the Junior Nationals for the first time. (Jesse)

Experiences with socially supportive coaching climates

Four athletes experienced support from coaches regarding social matters. Participants recalled the closeness of their coach–athlete relationship and how they were able to trust their coach to take care of them:

Our coach was really good; he was like our high school parent, and we respected him a lot. He supervised us in our student dormitory, and without his help, things wouldn't have worked out for us. If someone had problems and needed help, we always let the coach know about it. We trusted our coach, unlike the other adults, such as teachers for example. All of us skier boys lived quite far from home. (Aleksi)

Silja had a similar experience:

Our coach was interested in us more than just as athletes. We had a great team spirit and we sometimes spent our free time with our coach. I felt that you could count on him to care; he didn't leave us alone. (Silja)

Moreover, some athletes stated how sharing ideas and having conversations with the coach was important to them:

Our coach was a rather holistic one. We had a lot of group meetings; he was never in a hurry, and he always had time to talk if needed. For me, he was the first adult to really discuss sport with. He was very approachable and easy to talk to. I think the coach did a good job, and the skiing program worked very well. (Lassi)

Experiences with ego-involving coaching climates

Nine athletes stated their experiences with ego-involving coaching climates. From the athletes' perspectives, the coaches' priority seemed to be to ensure their athletic development. For example, Juho felt that 'The coach was passionate to help drive us forward in our athletic career'. However, this athletic development did not seem to concern aspects such as learning or developing new skills; instead, it meant achieving better performance outcomes. Teemu offered, 'Our coach had the aim that each of us must be able to reach better performance outcomes by the end of high school'. Indeed, participants remembered how coaches had set guidelines for the rankings that the athletes should achieve to be considered successful. According to Ville, 'The coach requested that we should qualify at least in the top three at Junior Nationals.'

Athletes stated how being the best and demonstrating superiority over their competitors was not limited to competitions. Intra-team rivalry was also encouraged in their daily training routines:

In our trainings, our coach often challenged us to beat him the coach. If you were able to do that, you got respect. Our coach participated in competitions himself and he was in good shape. When we participated in the same competitions with him, we really had to beat him. (Ville)

Furthermore, athletes described how their athletic achievements and successfully reaching the goals coaches set for them influenced coaches' interest towards them:

It was clear from the very beginning that better athletes will get more attention from the coach. I was not the best, but when I achieved my first top three result in Junior Nationals, I noticed how the coach was more motivated to spend time with me. (Teemu)

Petra had a similar experience: 'My friends talked about coaches favoring the best athletes. I was one of the best, so it may be that I was favored. However, I didn't mind being in such a position; I just focused on my workouts'.

However, many athletes reflected that coaches invested less time in athletes who were not as successful. Petra also stated, 'I think the coaches had an idea of the potential of the athlete. It seemed that this affected the coaches' motivation to coach the athletes. Those athletes with less potential received less attention than those considered as talented athletes'. Anniina supported this view: 'Our coach was performance-oriented. He was more supportive of those athletes who really wanted to develop as athletes and to achieve good performance outcomes. Those athletes who didn't have the passion for sport were often left without attention'.

Finally, a few athletes even recalled coaches who only focused on the most successful athletes:

If you hadn't reached a certain level in your results, this coach wasn't interested in coaching you at all. He didn't have the passion to make us all better. He spent his time with the athletes who had qualified the best in competitions. (Juho)

Experiences with controlling coaching climates

Nine athletes explained their experiences with controlling motivational climates.

Athletes stated how the coaches were only accepting those athletes who demonstrated the desired behaviors. Kiia offered an example:

Our coach doesn't like me anymore because I left the sport high school. He has always favoured the best athletes and those who are ready to invest the most in the sport. I didn't agree with his methods; I told him my opinion, and he didn't accept that. (Kiia).

Furthermore, many participants recalled how, in order to get along with the coach, it was important to demonstrate high levels of motivation and dedication for training. Eemeli stated, 'I know that the way the coach treated us was dependent on our dedication to sport. For example, if someone missed the practices, the coach wouldn't invest as much attention to you in the future anymore'. Ville explained:

I was very excited to train so I didn't have problems with the coach. Conversely, athletes with less commitment to sport had problems with the coach. He was more controlling for athletes with less motivation, and this resulted in them having a poor relationship. However, my experience of working with the coach was only positive. (Ville).

Teemu felt similarly:

I was very active in the training, and I had a feeling that our coach was interested in my training and competitions. However, you could tell that he didn't care about all of us. This ended up with us having quite a poor team spirit in our training group. (Teemu).

In addition to receiving more attention, athletes stated that coaches were more supportive of the autonomy of those athletes whom the coaches perceived as motivated and invested in their athletic careers:

I think it was good that the coach gave more freedom to the athletes who had earned his trust because he knew that they are investing in the sport. For example, the coach allowed them to miss the compulsory group workouts once in a while without consequences. Conversely, if those athletes whom the coach didn't trust skipped training sessions, the coach became annoyed. (Ville)

Finally, some athletes had experiences with coaches who controlled every aspect

of their daily training:

Most of our training sessions were with other individual athletes from different sports. Our coach didn't allow skiers to go to the ski track by themselves. Therefore, we didn't have ski-specific training in high school. You can say that he was a control freak. He always wanted to see that we really trained instead of just lazing around. After achieving podium results in Junior Nationals in the first year of high school, the coach began to believe that we did take our sport seriously. (Kalle)

Moreover, some participants recalled how, regardless of their situation, the coaches requested them to execute coach-planned training programmes. Kiia offered:

Our coach always wanted us to do as many high-intensity workouts and as many hours of training as possible. Often, that was a poor decision. For example, once when I was sick, he forced me to complete a high-intensity interval workout. With his training plans, he was not realistic at all. (Kiia).

Experiences with unsupportive coaching climates

Finally, eight athletes recalled experiences with socially unsupportive coaching climates. Participants stated how coaches were often concerned about their athletic performance and yet did not demonstrate any additional interest in the athletes as individuals:

I think the coaches only cared about our sport performance. This was not good at all because if you needed help with non-ski related problems, it felt like there was no one helping you. From my experience, it would be really important for coaches and athletes in sport high school to have a good relationship outside the training time. Being able to trust the coaches and interact with them would most certainly reduce the problems athletes encounter in their daily life. Athletes may live far away from home, and they may get easily lured into bad habits, such as drinking. Having a good relationship with a coach would really help the athletes to stay focused and to avoid such situations. (Juho)

Matias felt similarly:

I had the feeling that no one cared about me. Of course, there were many athletes, but supporting us in other aspects of life didn't seem to belong to coaches' list of duties. Their job seemed to have been to organize the group trainings. At the beginning, I thought that the coaches would be really interested in me and my training, as they were the best junior coaches in Finland. However, I ended up having issues with my health which resulted in me having difficulties when training. The coaches had no idea of what should be done. I was very disappointed as I thought that it would have been coaches' responsibility to take care of us there. (Matias).

Moreover, participants recalled how coaches did not seem to acknowledge or support their educational pursuits. However, the participants felt that because of their position of authority, the coaches could have influenced their motivations and choices regarding studying if they had intervened:

We had a good coach, but of course he only focused on the sport classes. He didn't pay any attention to our educational pursuits. From my experience, sport and school were quite separate. If they had been better integrated, the coach might have asked how we are doing at school for example. His interest in our educational pursuits would have helped because he had a lot of authority, and we always did what he told us to do. If he had asked how I was doing at school and advised not to choose that many classes at once, I probably would have believed him. (Niilo)

Furthermore, some participants experienced coaches who ignored their educational pursuits, considering these to be less important than sport. Tiia stated, 'Sometimes it seemed that the coaches forgot that we also went to school and that getting an education is also very important'.

Discussion

In this study, we explored athletes' experiences of coach-created motivational climates in upper secondary sport schools in Finland. This extends the research that has already been conducted on coach-created motivational climates by being the first study to qualitatively explore empowering and disempowering motivational climates among

adolescent elite athletes. Our analysis revealed how a majority of the participants had experiences of disempowering coaching climates characterized by ego-involving, controlling, and socially unsupportive features. In contrast, only a few athletes recalled experiences of empowering climates with autonomy supportive and socially supportive features. Based on these experiences, it is likely that coaches' main concerns in upper secondary sport schools are to ensure athletes' athletic development without giving much consideration to their holistic development across various contexts.

For further insights, there seems to be a need to consider how the coaching context, in this case working in an upper secondary school, might have influenced coaches' behaviors. Indeed, because sport settings are often rather competitive, it may be that coaches had the pressure of performing well and bringing medals and glory to their school (e.g., Mageau and Vallerand 2003). For example, it is not uncommon for coaches' jobs to be dependent on their athletes' athletic performance and achievements. Under such pressured circumstances, coaches are more likely to become egotistically involved in their work and, in turn, emit controlling behaviors (Deci et al. 1982).

However, athletes' experiences with coaching climates may also be dependent upon their behaviors and personal characteristics, as coaches did not behave the same with all athletes. A coach-athlete relationship can be seen as a reciprocal process in which both have motivational relevance on each other (Jowett and Ntoumanis 2004). Within our sample, it is notable that athletes who demonstrated high levels of motivation for sport had more experiences with coaches who supported their autonomy than the athletes investing less in their athletic careers (e.g., Rocchi, Pelletier, and Couture 2013). In light of previous research, the adoption of more controlling behaviors for athletes who were incapable of working independently decreased these athletes' intrinsic and self-determined motivation for sport. Ironically, despite coaches' possibly

good intentions to motivate athletes by utilizing ego-involving and controlling behaviors, by doing so they may actually have jeopardized the motivation they wished to increase (e.g., Duda 2013; Leo et al. 2009). This may especially have been the case for athletes who already had decreased motivation for sport.

As a second objective of the study, we sought to examine how the coach-created motivational climates the athletes perceived in upper secondary sport schools might have impacted their dual career experiences. Based on the interviewees' experiences with coaching climates, it seemed that none of the coaches demonstrated active interest in or took into account athletes' educational pursuits in their daily coaching practices. It seems that education was considered to be less important for athletes, and coaches instead encouraged athletes to focus on developing their athletic careers. The potential scenario here is that athletes may adopt the coaches' view of education as unimportant, and as such, they may be discouraged to achieve their academic goals (e.g., Ronkainen et al. 2018; Adler and Adler 1985). Indeed, being immersed in such a performance-oriented environment may facilitate athletes developing a self-identity that is exclusively based on their athletic performance and achievements. If athletes' dreams and career aspirations are mostly connected with athletic endeavors, they may find it difficult to persist at achieving in education (Ryba et al. 2017). Because successful completion of secondary education is crucial in terms of later tertiary educational enrolment, weak academic performance in upper secondary school may compromise athletes' future education and employability (Lally and Kerr 2005).

All of the coaches mentioned in this study worked at upper secondary schools and were considered school staff. However, despite the structural agreements between educational and sporting bodies in upper secondary schools, there seems to be a lack of a formal dual career framework outlining the roles and responsibilities of each actor

involved. Also, the structural agreements do not seem to ensure collaboration between different actors (e.g., coaches and teachers), despite all of them working under the official dual career policy. If upper secondary schools wish to improve their dual career practices, coaches need support in developing these practices in their daily work. For example, coaches would benefit from having a more explicit description of their list of duties outlining the responsibilities regarding athletes' dual careers. Moreover, to advance the integration of the dual career agenda into coaching practices, appropriate content should be included in coach education. In light of this research, dual career athletes might benefit from coaches who foster more empowering coaching climates that support athletes' determination to achieve success in both sport and education. This could be facilitated by helping coaches to develop coaching practices with more focus on athletes' holistic development across various contexts. Our suggestion also coincides with the European Commission's (2012) guidelines for dual career athletes, which states that coaches should have competences to view athletes from a holistic perspective and should also understand risks that are not directly linked to sport training.

As with all research, the present study has its limitations. Our sample was demographically limited, as all of the athletes were drawn from Finnish upper secondary schools with a similar competitive background. As a result, it is likely that their experiences of coach-created motivational climates are by no means exhaustive. Therefore, their perceptions do not represent the experiences of all student-athletes in all different sports and with different cultural backgrounds. Furthermore, our conclusions are based on interviews with athletes only, and complementing these views with observations and coach interviews is needed to gain a more complete picture of the studied phenomenon. Moreover, learning and utilizing the research findings to enhance our understanding of how to create a more sustainable dual career environment is

important. The type of generalization that qualitative research seeks is transferability, which means that instead of searching for correlations, we focus on to what extent the results are transferable to another setting (e.g., Smith and McGannon 2018). Thus, as a reader of the research, it is important to consider whether the research overlaps with the reader's own situation, or if the findings could be transferred to his/her own actions. For future research, we suggest using a quantitative approach to further extend the current literature on the implications of coach-created motivational climates in terms of athletes' academic motivations and achievements.

Conclusion

The present study contributes to the limited literature on coach-created motivational climates and their possible implications for athletes' dual career behaviors, with a specific focus on adolescent athletes in Finland. The majority of the participants in this study experienced disempowering coaching climates characterized by ego-involving, controlling, and socially unsupportive features, with coaches focusing on facilitating their athletic development. Athletes' experiences of coaches' involvement in their educational goals were rather limited, and the coaches did not seem to consider obtaining an education or exploring other life experiences as important for athletes. Furthermore, being immersed in such a performance-oriented environment may have limited athletes' possibilities to explore other career options outside the sporting context and thus discouraged them from engaging in academic pursuits. Moreover, supporting coaches with more explicit structural agreements in schools and educating them to implement more sustainable dual career practices seems necessary.

Declaration of Conflicts of Interest

The author(s) declare no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

References

- Ames, Carole. 1992. "Classrooms: Goals, structures, and student motivation." *Journal of educational psychology* 84 (3) 261-271. <https://bit.ly/2UhZq5A>
- Appleton, Paul R. and Joan L. Duda. 2016. "Examining the Interactive Effects of Coach-Created Empowering and Disempowering Climate Dimensions on Athletes' Health and Functioning." *Psychology of Sport & Exercise* 26: 61-70. doi:10.1016/j.psychsport.2016.06.007. <https://www.sciencedirect.com/science/article/pii/S1469029216300747>.
- Aunola, Kaisa, Harri Selänne, Anniina Selänne, and Tatiana V. Ryba. 2018. "The Role of Adolescent Athletes' Task Value Patterns in their Educational and Athletic Career Aspirations." *Learning and Individual Differences* 63: 34-43. doi:10.1016/j.lindif.2018.03.004. <https://www.sciencedirect.com/science/article/pii/S1041608018300475>.
- Atkinson, Paul, and Sara Delamont. 2005. "Analytic perspectives." In *The Sage handbook of qualitative research*, edited by Norman K. Denzin and Yvonna S. Lincoln, 821-840. London: Sage.
- Bartholomew, Kimberley J., Nikos Ntoumanis, Richard M. Ryan, Jos A. Bosch, and Cecilie Thøgersen-Ntoumani. 2011. "Self-Determination Theory and Diminished Functioning." *Personality and Social Psychology Bulletin* 37 (11): 1459-1473. doi:10.1177/0146167211413125. <https://journals.sagepub.com/doi/full/10.1177/0146167211413125>.

Bartholomew, Kimberley J., Nikos Ntoumanis, and Cecilie Thøgersen-Ntoumani. 2010.

"The Controlling Interpersonal Style in a Coaching Context: Development and Initial Validation of a Psychometric Scale." *Journal of Sport & Exercise Psychology* 32 (2): 193-216.

doi:10.1123/jsep.32.2.193.

<https://www.ncbi.nlm.nih.gov/pubmed/20479478>.

Braun, Virginia and Victoria Clarke. 2006. "Using Thematic Analysis in

Psychology." *Qualitative Research in Psychology* 3 (2): 77-101.

doi:10.1191/1478088706qp063oa. <http://www.tandfonline.com/doi/abs/10.1191/1478088706qp063oa>.

Deci, Edward L., Nancy H. Spiegel, Richard M. Ryan, Richard Koestner, and Manette

Kauffman. 1982. "Effects of performance standards on teaching styles: Behavior of controlling teachers." *Journal of educational psychology* 74 (6): 852-

859. <http://dx.doi.org/10.1037/0022-0663.74.6.852>

Deci, Edward L, and Richard M Ryan. 1985. *Intrinsic motivation and self-*

determination in human behavior. New York: Plenum.

Deci, Edward L. and Richard M. Ryan. 2000. "The "what" and "Why" of Goal Pursuits:

Human Needs and the Self-Determination of Behavior." *Psychological Inquiry* 11 (4): 227-268.

doi:10.1207/S15327965PLI1104_01. https://doi.org/10.1207/S15327965PLI1104_01.

Duda, Joan L, and Paul R. Appleton. 2016. "Empowering and Disempowering

Coaching Climates: Conceptualization, Measurement Considerations, and

Intervention Implications." In *Sport and exercise psychology Research: From*

theory to practice, edited by Markus Raab, Paul Wylleman, Roland Seiler, Anne-

Marie Elbe and Antonis Hatzigeorgiadis, 373-388. London: Academic Press.

- Duda, Joan L. 2013. "The Conceptual and Empirical Foundations of Empowering Coaching™: Setting the Stage for the PAPA Project." *International Journal of Sport and Exercise Psychology* 11 (4): 311-318.
doi:10.1080/1612197X.2013.839414. https://www.openaire.eu/search/publication?articleId=dedup_wf_001::b9ba81f0451938adebe3cb3da638e9a9.
- ECO-DC. 2018. *Erasmus+ sport project: "Ecology of dual career: Exploring dual career development Environments across Europe"*. Accessed May 5, 2018.
<https://dualcareers.eu/>.
- European Commission. 2012. "EU guidelines on dual careers of athletes: Recommended policy actions in support of dual careers in high-performance sport." Last modified November 16, 2012.
http://ec.europa.eu/assets/eac/sport/library/documents/dual-career-guidelines-final_en.pdf
- Finnish National Agency for Education. n.d. "General upper secondary education." Accessed April 1, 2019.
https://www.oph.fi/english/curricula_and_qualifications/general_upper_secondary_education
- Francisco Miguel Leo, Pedro Antonio Sanchez, David Sanchez, Diana Amado, and Tomás García Calvo. 2009. "Influence of the Motivational Climate Created by Coach in the Sport Commitment in Youth Basketball Players." *Revista De Psicología Del Deporte* 18 (3): 375-378. <https://doaj.org/article/7cba96cd5fce4aec9c419014bbbb9428>.
- Hansen, James T. 2004. "Thoughts on Knowing: Epistemic Implications of Counseling Practice." *Journal of Counseling & Development* 82 (2): 131-138.
doi:10.1002/j.1556-

6678.2004.tb00294.x. <https://onlinelibrary.wiley.com/doi/abs/10.1002/j.1556-6678.2004.tb00294.x>.

Horn, Thelma S. 2008. "Coaching effectiveness in the sport domain." In *Advances in sport psychology*, edited by Thelma S Horn, 239-267. Champaign, IL: Human Kinetics.

Jaakkola, T., N. Ntoumanis, and J. Liukkonen. 2016. "Motivational Climate, Goal Orientation, Perceived Sport Ability, and Enjoyment within Finnish Junior Ice Hockey Players." *Scandinavian Journal of Medicine & Science in Sports* 26 (1): 109-115.
doi:10.1111/sms.12410. <https://onlinelibrary.wiley.com/doi/abs/10.1111/sms.12410>

Jowett, Sophia and Nikos Ntoumanis. 2004. "The Coach–Athlete Relationship Questionnaire (CART-Q): Development and Initial Validation." *Scandinavian Journal of Medicine & Science in Sports* 14 (4): 245-257. doi:10.1111/j.1600-0838.2003.00338.x. <https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1600-0838.2003.00338.x>.

Knight, Camilla J. and Chris G. Harwood. 2015. *The Role of the Entourage in Supporting Elite Athlete Performance and Educational Outcomes*. https://www.openaire.eu/search/publication?articleId=od_____805::e41d262f4cbe56df690b030b2670f79c.

Knight, Camilla J., Chris G. Harwood, and Paul A. Sellars. 2018. "Supporting adolescent athletes' dual careers: The role of an athlete's social support network." *Psychology of Sport and Exercise* 38: 137-147.
<https://doi.org/10.1016/j.psychsport.2018.06.007>.
<https://www.sciencedirect.com/science/article/pii/S1469029217304697?via%3Dih>

ub

Lally, Patricia S. and Gretchen A. Kerr. 2005. "The Career Planning, Athletic Identity, and Student Role Identity of Intercollegiate Student Athletes." *Research Quarterly for Exercise and Sport* 76 (3): 275-85.

doi:<http://dx.doi.org/10.1080/02701367.2005.10599299>.

<https://search.proquest.com/docview/218564363?accountid=11365>.

Mageau, Geneviève A. and Robert J. Vallerand. 2003. "The Coach-Athlete Relationship: A Motivational Model." *Journal of Sports Sciences* 21 (11): 883-904.

doi:10.1080/0264041031000140374. <http://www.tandfonline.com/doi/abs/10.1080/0264041031000140374>.

Meyer, Barbara Bedker. 1990. "From Idealism to Actualization: The Academic Performance of Female Collegiate Athletes." *Sociology of Sport Journal* 7 (1): 44-57. doi:10.1123/ssj.7.1.44. <https://search.proquest.com/docview/1293230872>.

Newton, Maria, Joan L. Duda, and Zenong Yin. 2000. "Examination of the Psychometric Properties of the Perceived Motivational Climate in Sport Questionnaire - 2 in a Sample of Female Athletes." *Journal of Sports Sciences* 18 (4): 275-290.

doi:10.1080/026404100365018. <http://www.tandfonline.com/doi/abs/10.1080/026404100365018>.

Nicholls, John G. 1989. *The competitive ethos and democratic education*. Harvard University Press.

Papaioannou, Athanasios G., George Ampatzoglou, Periklis Kalogiannis, and Alexandros Sagovits. 2008. "Social Agents, Achievement Goals, Satisfaction and Academic Achievement in Youth Sport." *Psychology of Sport & Exercise* 9 (2):

122-141.

doi:10.1016/j.psychsport.2007.02.003. <https://www.sciencedirect.com/science/article/pii/S1469029207000192>.

Patton, Michael Quinn. 2002. *Qualitative research and evaluation methods*. Thousand Oaks, CA: Sage.

Peter Adler and Patricia A. Adler. 1985. "From Idealism to Pragmatic Detachment: The Academic Performance of College Athletes." *Sociology of Education* 58 (4): 241-250. doi:10.2307/2112226. <https://www.jstor.org/stable/2112226>.

Poux, Kiira N. and Mary D. Fry. 2015. "Athletes' Perceptions of their Team Motivational Climate, Career Exploration and Engagement, and Athletic Identity." *Journal of Clinical Sport Psychology* 9 (4): 360-372.
doi:10.1123/jcsp.2014-0050.

PX Fuchs, H Wagner, H Hannola, N Niemisalo, A Pehme, R Puhke, M Marinsek, et al. 2016. "European Student-Athletes' Perceptions on Dual Career Outcomes and Services/Pogled Evropskih Studentov Sportnikov Na Rezultate in Storitve V Podporo Dvojni Karieri." *Kinesiologia Slovenica* 22 (2): 31. <https://search.proquest.com/docview/1846293467>.

Reinboth, Michael, Joan Duda, and Nikos Ntoumanis. 2004. "Dimensions of Coaching Behavior, Need Satisfaction, and the Psychological and Physical Welfare of Young Athletes." *Motivation and Emotion* 28 (3): 297-313.
doi:MOEM.0000040156.81924.b8. <https://search.proquest.com/docview/757931980>.

Rocchi, Meredith A., Luc G. Pelletier, and A. Lauren Couture. 2013. "Determinants of Coach Motivation and Autonomy Supportive Coaching Behaviours." *Psychology of Sport & Exercise* 14 (6): 852-859.

doi:10.1016/j.psychsport.2013.07.002. <https://www.sciencedirect.com/science/article/pii/S1469029213000745>.

Ronkainen, Noora J., Tatiana V. Ryba, Martin Littlewood, and Harri Selänne. 2018.

"‘School, Family and then Hockey!’ Coaches’ Views on Dual Career in Ice Hockey." *International Journal of Sports Science & Coaching* 13 (1): 38-45.

doi:10.1177/1747954117712190. <https://journals.sagepub.com/doi/full/10.1177/1747954117712190>.

Ryan, Richard M. and Edward L. Deci. 2000a. "The Darker and Brighter Sides of Human Existence: Basic Psychological Needs as a Unifying

Concept." *Psychological Inquiry* 11 (4): 319-338.

doi:10.1207/S15327965PLI1104_03. http://www.tandfonline.com/doi/abs/10.1207/S15327965PLI1104_03.

Ryan, Richard M. and Edward L. Deci. 2000b. "Self-Determination Theory and the Facilitation of Intrinsic Motivation, Social Development, and Well-

Being." *American Psychologist* 55 (1): 68-78. doi:10.1037/0003-

066X.55.1.68. <https://www.ncbi.nlm.nih.gov/pubmed/11392867>.

Ryba, Tatiana V., Saara Haapanen, Shwiko Mosek, and Kwok Ng. 2012. "Towards a Conceptual Understanding of Acute Cultural Adaptation: A Preliminary

Examination of ACA in Female Swimming." *Qualitative Research in Sport, Exercise and Health* 4 (1): 80-97.

doi:10.1080/2159676X.2011.653498. <http://www.tandfonline.com/doi/abs/10.1080/2159676X.2011.653498>.

Ryba, Tatiana V., Natalia B. Stambulova, Harri Selänne, Kaisa Aunola, and Jari-Erik

Nurmi. 2017. "'Sport has always been First for Me' but 'all My Free Time is

Spent Doing Homework': Dual Career Styles in Late Adolescence." *Psychology*

of Sport & Exercise 33: 131-140.

doi:10.1016/j.psychsport.2017.08.011. <https://www.sciencedirect.com/science/article/pii/S1469029217300596>.

Schlechter, Chelsey R., Richard R. Rosenkranz, George A. Milliken, and David A.

Dzewaltowski. 2017. "Physical Activity Levels during Youth Sport Practice: Does Coach Training Or Experience have an Influence?" *Journal of Sports Sciences* 35 (1): 22-28.

doi:10.1080/02640414.2016.1154593. <https://doi.org/10.1080/02640414.2016.1154593>.

Smith, Brett and Kerry R. McGannon. 2018. "Developing Rigor in Qualitative

Research: Problems and Opportunities within Sport and Exercise

Psychology." *International Review of Sport and Exercise Psychology* 11 (1): 101-121.

doi:10.1080/1750984X.2017.1317357. <http://www.tandfonline.com/doi/abs/10.1080/1750984X.2017.1317357>.

Smith, N., D. Tessier, Y. Tzioumakis, P. Fabra, E. Quested, P. Appleton, P. Sarrazin, A.

Papaioannou, I. Balaguer, and J. L. Duda. 2016. "The Relationship between

Observed and Perceived Assessments of the Coach-Created Motivational

Environment and Links to Athlete Motivation." *Psychology of Sport &*

Exercise 23: 51-63.

doi:10.1016/j.psychsport.2015.11.001. <https://www.sciencedirect.com/science/article/pii/S1469029215300236>.

Smith, Ronald E., Frank L. Smoll, and Sean P. Cumming. 2007. "Effects of a

Motivational Climate Intervention for Coaches on Young Athletes' Sport

Performance Anxiety." *Journal of Sport and Exercise Psychology* 29 (1): 39-59.

doi:10.1123/jsep.29.1.39.

Suomen Hiihtoliitto. 2019. *Hiihdon kiinnostavuus kasvoi jälleen, nousi Suomen kiinnostavimmaksi urheilulajiksi naisten keskuudessa*. Last modified March 27, 2019. <https://www.hiihtoliitto.fi/uutiset/hiihdon-kiinnostavuus-kasvoi-jalleen/>

Van den Berghe, Lynn, Bart Soenens, Maarten Vansteenkiste, Nathalie Aelterman, Greet Cardon, Isabel B. Tallir, and Leen Haerens. 2013. "Observed Need-Supportive and Need-Thwarting Teaching Behavior in Physical Education: Do Teachers' Motivational Orientations Matter?" *Psychology of Sport & Exercise* 14 (5): 650-661.

doi:10.1016/j.psychsport.2013.04.006. <https://www.sciencedirect.com/science/article/pii/S1469029213000459>.

Wylleman, Paul, Anke Reints, and Paul De Knop. 2013. "A developmental and holistic perspective on athletic career development." In *Managing high performance sport*, edited by Popi Sotiaradou and Veerle De Bosscher, 159-182. New York, NY: Routledge.

Table 1. Athletes' experiences categorized as empowering and disempowering coaching climates

No. of Participants Citing the Category	Main Category	Subcategories	Subjective Experiences
4	Empowering	Autonomy supportive	Giving athletes options and choices; emphasizing athletes' own excitement for sports
		Socially supportive	Helping and caring for athletes as individuals; providing conversational support
13	Disempowering	Ego involving	Emphasizing performance outcomes and intra-team rivalry; favoring the best athletes
		Controlling	Requiring certain behaviors for acceptance; imposing strict rules for training
		Socially unsupportive	Lacking concern and care for athletes as individuals; lacking involvement in athletes' educational pursuits