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Walking the line: How young athletes balance academic studies and sport in international competition

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#### **Abstract**

Focused on the Norwegian squad for the 2015 European Youth Olympic Festival, the aims of this study are to identify (a) the perceived role of important stakeholders such as coaches, schools, parents, federations, and the national Olympic committee for the young athletes in the weeks leading up to the festival; and (b) the young athletes' festival experiences with a focus on perceived stressors by using the transactional framework. The findings of the study revealed that pursuing a dual career is often a challenging balancing act for the young student-athletes.

Additional results identified the importance of supportive parents, schools that adapt the workload for the student-athletes, and a federation that recognizes the important role of parents and schools. While the rhetoric for the festival was that it was a "learning experience" for the young athletes, the young athletes perceived the event as a serious sporting competition and were aware of factors which might cause stress and thus interfere with optimal performance. This investigation offers implications for sport management and psychology researchers gaining insight into young athletes and youth sport festivals.

*Keywords:* Dual careers, coping with stressors, European Youth Olympic Festival, Norway, young athletes

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Young elite athletes progress in their development by coping successfully with the challenges they meet at their present stage (Wylleman et al. 2007). When reaching 16-17 years of age, the athletes are confronted with a major overlap between their dual careers<sup>1</sup>. To combine high level sport together with education is challenging, and research into problematic aspects of this combination has been highlighted since the 1990s (De Knop et al. 1999). While the successful management of a dual career previously was the athlete's own responsibility, ensuring that young athletes receive a good education has recently been highlighted as a priority by the International Olympic Committee (IOC) (IOC 2014). The establishment of specialized sport schools have made this easier for many athletes (De Knop et al. 1999; Radtke and Coalter 2007; Way, Repp, and Brennan 2010; Kristiansen and Houlihan forthcoming). The present investigation provides an insight into how young athletes perceive an "Olympic" competition by an analysis of the opinions of the Norwegian qualified squad for the 2015 European Youth Olympic Festival (EYOF). In particular, the research examines the perceived role of important stakeholders for the young athletes, e.g., coaches, school, parents, federations and the National Olympic Committee (NOC), in the weeks leading up to the festival, and the athletes experiences of stressors during the festival.

EYOF is a biennial multisport event which was hosted in Vorarlberg (Austria) and Liechtenstein in January 2015 on behalf of the European Olympic Committee (EOC). This

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<sup>&</sup>lt;sup>1</sup> According to the EU Guidelines: "*Dual careers* in sport encapsulates the requirement for athletes to successfully initiate, develop and finalise an elite sporting career as part of a lifelong career, in combination with the pursuit of education and/or work as well as other domains which are of importance at different stages of life, such as taking up a role in society, ensuring a satisfactory income, developing an identity and a partner relationship. Dual careers generally span a period of 15 to 20 years". (EU 2012, 6)

version had 45 participating nations and 900 athletes aged between 14 and 18 who competed for six days (EYOF2015 2015). The staging of EYOF, started in 1991 with the intention of bringing young people from Eastern and Western Europe together (Wong 2011). For many young athletes, EYOF is their first involvement in international competition (Kristiansen and Roberts 2010), and according to Wong (2011) EYOF has proved to be a competition that produces future Olympians. At the same time as they are introduced to the elite events and consequently putting extra effort into their training, the participating athletes will normally have entered high school and face a heavier academic work load. The emphasis on fun and playfulness are slowly replaced by sport specialization (Bloom 1985). The contextual background and theoretical framework is presented as a context for understanding the dual roles and perception of stressors among the young athletes.

# Contextual Background

In order to qualify and succeed at the youth events, young elite athletes go through timeintensive training regimes. Hence, many *young* elite athletes compromise their educational
development in favor of a potential sporting career (Giulianotti 2004). At the high school level
(age 16-19 in Norway), parents are often the main supporters that help the young student-athletes
with their dual careers by contacting schools over time schedules, and the deferring tests and
exams as well as helping them study and complete assignments that have been neglected due to
training and competitions (Donnelly 1993). A more recent development is the establishment of
sport schools, which represent a more systematic and strategic approach to the development of
elite athletes (De Bosscher et al. 2006), and which also fulfill a liaison function in the coachparent-athlete triad (Smoll, Cumming, and Smith 2011). To capture the transitions athletes face
throughout their careers, Wylleman and Lavallee (2004) formulated a lifespan model, reflecting:

(a) The concurrent, interactive, and reciprocal nature of athletes' development in four domains (athletic, psychological, psychosocial, academic/vocational), (b) normative transitions in each of the four domains of development, and (c) a developmental or "whole career" approach (i.e. from young to former-elite athlete) as well as a holistic or "whole person" approach (i.e. development in different domains) perspective.

(Wylleman and Reints 2010, 89)

Moreover, Wylleman et al. (1993) found that elite athletes transited into the initiation stage at the average age of 6-9 years, into the development stage at age 15, and into the mastery stage at 18.5 years of age. The age range between transitions may vary from country to country depending on the sport system and the sport (see Wylleman and Lavallee 2004). According to the life-span model and the Norwegian system, the qualified squad under scrutiny are in the development stage; are adolescents at their psychological level; are aware of the importance of parents, coaches, and peers at the psychosocial level; and finally, are in secondary education (i.e., high school) at the academic level (Wylleman and Lavallee 2004). Most important here is the overlap between academic and athletic development in this phase (De Knop et al. 1999). The athletes have started their perfection of performance and transition to the mastery stage – here represented by participation in EYOF – while at the same time coping with extensive academic challenges and workload – many of them by entering a sports school (see Kristiansen and Houlihan forthcoming). Previous research has reported the transition to high school as a significant stressor due to the fact that it coincides with maturational changes, family system changes, and changes in the nature of peer relations (e.g., Newman et al. 2000). In this mixture, sport is given a more prominent role. Consequently, the importance of the established sport schools was pointed out for European athletes to develop their talent (De Knop et al. 1999). The

athletes need help coping with the concurrent changes, and thus the EU Guidelines on dual careers for athletes (EU 2012) clearly states that the success of

... dual career arrangements often depends on the goodwill of persons in key positions of an organisation or institute, while in fact a systematic approach based on general and sustainable financial and legal arrangements is needed. The increasing trend that athletes regularly train and/or compete abroad makes the combination with study more complex. (2012, 4)

As such, the cooperation of the different stakeholders academically and athletic-wise, besides parents, is vital for success (Doll-Tepper 2013; Stambulova et al. 2009). In Europe, athletes at this age still depend extensively on parents for example for driving them to training at least until the age of 18 (De Knop et al. 1999). Hence, family life is often strongly focused on the young athletes' needs (Durand-Bush and Salmela 2002). As the competition level increases concurrently with athletic demands (and the often compulsory attendance at school), how the young athletes cope with the organizational demands and workload is of central importance and is discussed in the next section.

### Theoretical background: coping with dual careers on international sport festival

Previous research has highlighted the potentially stressful nature of being involved in sport (Giacobbi Jr., Foore, and Weinberg 2004; Noblet and Gifford 2002) because the ability to deal systematically with the many everyday factors in preparation such as training, school and competition is vital (Chambliss 1989). Moreover, a stressful situation starts with a set of circumstances in the socio-physical environment, when there is a mismatch between an individual's resources and the perceived challenge that the athlete has to cope with. In its

simplest form, *coping* is the way athletes attempt to deal with demands such as choking, injury, high expectations and demands on time. Coping consists of learned behavioral responses that successfully lower arousal by neutralizing or minimizing the importance of a threatening condition (Lazarus and Folkman 1984). In a dynamic process, an athlete will interact with the environment during performances and evaluate any given situation according to personal goals, situation intentions and so forth while attempting to cope with the situation if necessary (Hanton, Fletcher and Coughlan 2005). The transactional perspective of coping is the dominant model in contemporary research (Hardy, Jones and Gould 1996; McKay et al. 2008; Nicholls and Polman 2007; Fletcher, Hanton and Mellalieu 2006; Kristiansen, Murphy and Roberts 2012) and recognizes the recursive principle that a person, the environment and psychological reactions mutually affect each other (Lazarus 1981).

There is an immense number of stressors that are experienced by an elite athlete. Fletcher and colleagues (2006) suggested that recognizing and clearly differentiating between the main types of stress in sport may be useful and proposed three major categories of stress including competitive, organizational, and personal stress. When defining these three major types of stressors, it is the individual's ongoing transaction with environmental demands associated with "competitive performance", "the organization which he or she operates within" and finally "personal life events" that is of central importance for analysis (see McKay et al. 2008, p. 144). Previous research has revealed that the organizational category contained considerably more dimensions than the competitive and personal ones (Hanton, Fletcher and Coughlan 2005). Furthermore, in a competitive event, an athlete may face both competitive and organizational stressors that they have to cope with using a variety of coping strategies (Nicholls and Polman 2007). When pursuing dual careers as these athletes do, the extra load of education and following

up on their careers in the period when they are expected to perform at the top become additional organizational stressors for the young athletes.

In order to have a positive festival experience and then pursue a professional sports career (Holt and Dunn 2004) young athletes must learn to cope with all the perceived stressors. Lazarus and Folkman (1984) made a basic distinction between the widely used problem-focused and emotion-focused coping categories (Hardy, Jones and Gould 1996). These two fundamental types of coping are based on the intention or function of coping efforts (Compas et al. 1991). The problem-focused strategies manage or alter the problem in the person-environment relationship by acting on the environment or on oneself (Lazarus 1993). In contrast, the emotion-focused strategies help the athlete to maintain hope and optimism by, in some way, denying both fact and implication (by use of denial, avoidance and distancing). Nestled in Lazarus and Folkman's (1984) theoretical framework, *social support* is considered to be a coping resource intended to facilitate problem-focused and emotion-focused coping (Bianco and Eklund 2001). Used in the sport setting, Bianco and Eklund define it as "social interactions aimed at inducing positive outcomes" (2001, 85). There is not a single coping method that will successfully serve all athletes in all situations, although the more diverse an athlete's repertoire of coping skills are, the better. Also, older athletes are more prepared to cope with adversity due to their use of problemfocused strategies (Bebetsos and Antoniou 2003; Madden and Kirkby 1989; Madden, Summers, and Brown 1990), and they are better at controlling their negative emotions following stressful events (Goyen and Anshel 1998).

This study directs the attention to the festival experience and organizational challenges in the development of young elite athletes – more specifically the Norwegian national squad at the 2015 European Youth Olympic Festival. The purposes of this study were to (a) identify the

perceived role of important stakeholders such as coaches, school, parents, federations and the NOC for the young athletes in the weeks leading up to the festival; and (b) the young athletes' festival experiences with a focus on perceived stressors by using the transactional framework.

#### **Methods**

A mixed method case study approach (Yin 2003) was used when collecting data from the 2015 EYOF. According to Stake (2005), the choice of using a case study is not a choice of methodological technique in itself, but a choice of which unit to be studied. In this case, the Norwegian team qualified for the EYOF 2015 is the unit of analysis. Two weeks before the competition started, the Norwegian NOC released a press statement that included the 34 qualified athletes representing six sports (Olympiatoppen 2015). Overall, 19 of the athletes attended a private sport school, ten athletes a sports program at public schools and four were still in lower secondary school (ski jumping and figure skating had the youngest participants). Interestingly, only one of the 34 athletes came from a regular state/public high school which made no allowances for the athletes' commitments in their schedule. This athlete is identified with a \* in Table 1. Data collection and analysis techniques are described below.

[\*\*\*Table I near here\*\*\*]

## Participants and procedure

After obtaining approval from the Norwegian Social Science Data Services, informed consent was obtained from participants before sending out the Questback survey. The Norwegian qualified squad was recruited with the help of the Norwegian NOC. The survey was sent to 34 athletes and altogether 26 athletes responded which is a response rate of 76.5 %. The participants were eleven female and 15 male athletes ranging in age from 15-18 (M=16.65, SD=0.91) and they competed in cross-country skiing, biathlon, alpine skiing, ski jumping, figure skating and

Nordic skiing respectively.

#### **Observations**

The author took part in the three precamps hosted by Olympiatoppen before the festival started. After being introduced and explaining the research project, my role as a researcher during the festival was clarified to this group. Observations were also made during the competition in January 2015. All competition venues where the Norwegian athletes competed were visited; alpine skiing (Malbun, Liechtenstein), biathlon (Burserberg, Austria), cross-country skiing (Malbun, Liechtenstein), figure skating (Dorbin, Austria), Nordic combined (Gaschurn, Austria) and ski jumping (Tschagguns, Austria). In addition, the opening ceremony, flower ceremonies and medal ceremonies were visited every evening. These observations helped contextualize and understand the athletes' experiences and perceptions – and also observe their interactions with important stakeholders (Wylleman et al. 2007).

#### Survey

Altogether, the survey included 37 questions and was a mixed method survey in order to answer both of the research questions guiding this investigation. To keep the questionnaire anonymous, participant demographics only included the competition venue, gender and age. Furthermore, the athletes also responded to six short questions related to the type of school they attend, previous experience with major competitions, and if their family was present. There were eleven open-ended questions giving more room for participants to elaborate on some issues related to the competition and their roles as student-athletes (see appendix 1). Most of them were reflective and wrote extensive and quotable sentences. This supports the use of this methodological technique when investigating young elite athletes' experiences.

In the quantitative part of the survey, many questions were based on the questionnaire created earlier by MacIntosh and Nicol (2012), and later used when investigating the YOG by Parent and colleagues (Parent, Kristiansen and MacIntosh 2014). As this version of the EYOF did not include an Olympic Village etc. (Kristiansen, Strittmatter and Skirstad Submitted), some items were deleted in order to examine, and more accurately reflect, the athletes' experiences at this particular event. Hence, in total, there were 17 questions measured on a 5-point Likert scale (1 = excellent, 3 = satisfactory, 5 = very poor) and split into 7 categories (e.g., Food, Competition venue, Travel, Communication, Ceremonies, Medical and Overall impression). *Analysis* 

Several procedures were undertaken in order to analyze the qualitative and quantitative questions in the survey. To analyze the open-ended questions, question-focused analyses were used as the starting point when organizing the raw data (Patton 2002). Meaning units were created in the first stage of the analysis by identifying main categories such as the importance of the different stakeholders (e.g. federation, school, parents and coach). As these functioned as main categories, associated sub-categories were placed in this deductive analysis (Kondracki, Wellman and Amundson 2002) and a frequency count was conducted. The answers have been grouped together in tables, which keeps the athletes anonymous.

Missing data was replaced with the series mean in the 17 quantitative items in the survey. As the overall sample was too small to do advanced statistics, only basic statistics were utilized, which included frequencies, descriptive statistics and simple correlation (Pearson's product moment correlation).

#### **Findings and Discussion**

The discussion of the findings will be divided into two sections. First I will elaborate upon the young participants and the important stakeholders such as national federations, schools and parents in the athletes' preparations for this major event. Next, the athletes' actual festival experience will be presented and discussed in relation to their learning experience from the EYOF – followed by a highlighting of the implications in the conclusion.

## Dual Careers: Walking the line

The Norwegian 2015 EYOF team was relatively young and only four of them had participated internationally before - none of them in a multisport event. Hence, the Norwegian NOC used the three precamps to prepare the athletes and the coaching team of the respective sports before departure to the festival. The key message was to see the competition as a "learning experience and that the participating athletes are in a process where this experience may garner them later on in their careers" (Norwegian NOC Representative). A metaphor frequently used by the NOC was to see the participation as a bank deposits which earns interest and later may be taken out. Or, related to sport, senior athletes must cope with many stressors, and experience is vital in order to be successful when it matters the most. This focus was underscored during the festival as well.

Only the coaches were invited to the first precamp two months before the EYOF. Already at the first meeting the distance between the athletes' hotel and their venues was discussed extensively as the coaches felt this might become a major organizational stressor that might affect the athletes' performance negatively. As this was a host organizer decision and was out of the control of the individual NOCs (Kristiansen, Strittmatter and Skirstad Submitted), the coaches decided to accept the fact and make the bus ride as comfortable as possible for the

athletes. However, during the festival, private cars were used in order to help some of the athletes with the two-hour journey. Both coaches and athletes were invited to the second and third precamp and, while there, a lecture was given on nutrition, doping control procedures, what to expect during a multi-international competition and information about the event. The athletes from the federations which had decided their eligibility were obviously the ones benefiting the most from the educational precamps, especially by comparison to those athletes who were qualified just two weeks before the festival.

#### The federations' role

While the Norwegian NOC has the overall responsibility for the event, the different national federations were responsible for qualification of the athletes, selecting the coaching team and choosing the clothes/equipment the athletes needed for the actual sport performance. As with the YOG (Kristiansen 2015), the different federations had different procedures for qualification. While one used last year's result which enabled early qualification, another federation used the results from one qualification event count. The participants represented three different federations (ski, biathlon and skating), and all the federations chose to send their best athletes for the event.

Altogether, 15 of the athletes reported that they felt that their federation had a good plan for optimal performance during the festival, four had no idea, while six did not respond on this question. When asking the athletes, ideally, what they would like the federations' role to be, the results revealed a variety of interesting suggestions among the 20 athletes that responded. Four said they were happy with the work undertaken by the federations, and three felt that it functioned well by stating, for example, "we are in a learning process and what they do for us

now is sufficient." Two responded that they had no suggestions for optimizing for performance of the federations (see table 2 for a summary by the other 18 athletes).

Worth noting is that the young athletes want to be seen, valued and supported. As such, this event made it apparent that the different federations have dissimilar strategies for support (and equipment) provided to their respective young talents. Furthermore, it might seem as though they would prefer to know early on that the federation considers them talented and that they are given the necessary support and "follow-up" to develop even during their psychologically or emotionally down times.

The sports schools role in the athletes' dual careers

All the Norwegian participants pursued a dual career in private or public schools (see Table 1). While some stayed in their hometown, others chose to move to another city because, as one participant noted, "I believe my school is the best one for the combination in my sport." They had different experiences with the way in which their academic workload was adapted to their competitive schedule, and "flexible teachers" were highly appreciated. However, the athletes would also like increased flexibility when it matters the most – i.e., around major competition. In addition, "we need teacher contact even when we are away for weeks," the school should "show understanding and respect," "I cannot always have the same test as the others," and also "timetables during the year adapted to our training periods" would be beneficial. To be able to use "an extra year" was also mentioned. Table 3 reveals what the student-athletes perceived as major challenges for pursuing a dual career.

[\*\*\*Table 3 near here\*\*\*]

The data in the table clearly supports the fact that a dual career may become an organizational stressor for these young athletes, and that the schoolwork may easily be an interference for some of them during major competitions. This does not mean that the schools do not understand their needs – but it is hard to be a top performer at two arenas no matter how hard the schools try to adapt the workload. School was also on the mind of many of the young athletes during the competition. Although some athletes had a day when they could sit down and catch up with their school assignments, the process of making time for school work was rather unorganized. Research has found that the perceived availability of social support (from coaches, friends and family) "would work in the face of acute stressors, but not in the face of on-going chronic strains" (Cohen and Wills 1985, 349). Hence, more problem-focused strategies such as to learn how to manage or alter the problem in a person-environment relationship by acting on the environment or oneself (Lazarus 1993) is needed. To get some of the work done, so you do not have to catch up in all the classes on your return, may be one example of this. In concord with experienced demands, previous research has also pointed out that older adolescents have a greater range of coping strategies than younger ones (Reeves, Nicholls, and McKenna 2009). As young people mature they increasingly draw upon both behavioural and cognitive strategies, and by the age of 19-21 years old they are able to regulate and monitor their own emotional states (Skinner and Zimmer-Gembeck 2007). This leaves out many of the athletes in the sample under scrutiny; they continue to depend on social support as their major coping strategy – a strategy that is considered to be a coping resource intended to facilitate problem-focused and emotionfocused coping (Bianco and Eklund 2001).

The importance of parents for managing dual careers

With this age group, parental support is important due to the entourage of the young athlete being rather small compared to that of the elite athlete (Kristiansen, Roberts, and Lemyre 2015). At the EYOF 2015, 18 of the 26 Norwegian respondents had members of their family present at the competition site. Whether present or not, all participants emphasized their parents as "their major supporters and it would be hard to do it without them" (statement in the survey). "It" here would mean balancing both careers and getting help for practical issues such as fathers (and mothers) functioning as coach, manager, and chauffeur – in other words typical tangible and informative support roles (e.g., Kristiansen and Parents 2014). This type of help is necessary at this age as the young athlete's need this help to cope with their situation: "They help me with everything so I am able to focus on doing sport –and not how to get to practice, waxing, finance, etc." Another stated, "They are vital for my persistence in doing sport. Without them I would not be able to come to practice! [because I am too young to drive myself]". There are many examples of parents trying to help out so that the young athletes can focus on their dual career. As one young athletes wrote: "They are my major supporters – both in ups and downs". Some of the athletes also underlined that there is no "pushing" in this: "My parents have always supported me, but never pressured me to do sports. I have been the one who wanted to pursue this sport; however, they have always taken an interest and been present at training and competitions".

For many of the young athletes to have their parents present during the EYOF was important. Several added that "they come with me to events and that is very important for me." A more mature version of this was the following response: "It is important that I have them when I need them, but it is not necessary that they are present before, during or after the competition". When in competition, younger athletes have a greater need to gain access to their entourage than older athletes.

#### The Festival Experience

When answering research question number two concerning the athletes' festival experience, I will first present the quantitative results before comparing them with the qualitative ones in the survey. The athletes had a positive experience of the EYOF 2015 with average score of 4.58 out of a possible 5.00. This is higher than the mean score on 4.41 found among the Norwegian athletes during the YOG in 2012 (Parent, Kristiansen, and MacIntosh 2014). Table 4 provides descriptive statistics with means and standard deviations for each variable. The athletes were satisfied with the snow conditions, the opportunities to meet family, the ceremonies, the information they received before they left and the Norwegian medical staff. The last point is interesting as the team had several incidents of sickness and had to isolate some of the young athletes.

# [\*\*\*Table 4 near here\*\*\*]

In order to maintain brevity, I have chosen to present the significant findings that have relevance with the athletes' total event experience. Pearson's product moment correlations were used and only a few significant associations were revealed. *Accommodation* correlated positively with overall experience  $(.634 \ p<.01)$ , told family and friends (.399, p<.05), compare experience (.400, p<.05), opening and closing ceremony (.442, p<.05), overall sporting venues (.482, p<.05), and training facilities (.397, p<.05). This means that a positive experience of the accommodation was related to a whole set of other positive experiences as well. Even though cause and effect is not possible to verify, this finding signifies that positive living experiences while at the games are important for the athletes. In addition, *training facilities* correlated negatively with their evaluation of their own performance (-.410, p<.01). Training facilities were also positively associated with competition venues (.491, p<.05), medical issues (medical staff

(.549, p<.01), and anti-doping (.418, p<.05). This may relate to facilities that also accommodate training in venues and provision of medical help at the venues. Another interesting bivariate correlation was found between the opportunity to communicate with family and friends and previous competitive experience (.685, p<.01). This may be related to experience and the need to feel secure (Kristiansen and Roberts 2010). The most interesting finding here may be the importance of housing facilities (Kristiansen, Andersen, and Hanstad 2013). If the athletes feel that their housing is satisfactory, then the general impression of the event is usually more positive.

The quantitative results were supported by the qualitative data from the open questions in the survey regarding research question number 2. Although, six athletes mentioned that they did not perceive any stressors of the ones that perceived that something might have affected their performance (n=20), the quantitative pattern was repeated. One athlete summed it up very well in the following statement:

The travel back-and-forth between the hotel/venue might have had a negative influence when we had to take the shuttle. The food was good, but there were few meals and they were very heavy. I need to eat more often and not always big dinners.

The distance to the venue was mentioned as a stressor by 11 athletes; though one also reflected that it was "the same for all participants", which also means that the message from the precamps was understood, as one athlete used problem-focused reframing to cope with the stressor (Lazarus and Folkman 1984). Two participants mentioned weather issues (wind or snow), while one mentioned the early start of their event as something to which they had to adapt. Three also highlighted the issue that, due to the sickness in the team, several of them had to be in bed instead of competing. Finally, three cited competitive stressors such as "I was too nervous"; or "I

tried not to think too much..." As such, these findings are in consonant with previous studies on young athletes (Kristiansen and Roberts 2010; Nicholls, Holt, and Polman 2005; Reeves, Nicholls, and McKenna 2009; Kristiansen 2015).

In order to cope with stress and for the athletes to perform at their best, coach support has previously been underlined as important for a good festival experience (e.g., Kristiansen and Roberts 2010). When asked about how the support team, and in particular the coach, functioned during the event, the athletes in unison stated, "it was great" and "I got all the support I needed." Also pointed out was the fact that the coaches communicated well with each other in addition to the athletes. In addition,

I think the set-up functioned great, both socially and also that we were given the opportunity to perform well. Though, as I got sick, I also had the opportunity to test out the medical support system – and it was great and I got all the support I needed.

Not only coaches, but parents also contributed to the athletes' coping process by making social support available. When reviewing the parental role during the YOG 2012, Kristiansen and Parent (2014) found that the prevalence of the type of parental support changed over time, with tangible support dominating pre-Games, emotional support dominating during Games-time. Informational support (i.e., comments on the athletes actual performance/acting as "coaches") was limited because of the team officials/coaches' interaction guidelines. In contrast to the YOG, the security levels were low at the EYOF, so parents had no problem gaining access to the athletes on the venue and giving them both emotional and informational support if needed.

The quality of support provided by the different national federations was perceived differently depending on the athlete's sport. Eleven perceived the federations as unsupportive: "If

they [the federations] wanted us to perform at an optimal level, they would have given us new clothing and equipment, and they did not", was stated by one. Four others supported this sentiment. In addition, the athletes felt that supporting them meant more than sending coaches, and "I think it is silly that in our sport we were the only ones that had to pay a contribution to the cost-of attending the event". Being part of one team (i.e. The Norwegian EYOF squad), this payment requirement was perceived as unfair – and the federations might be considered a stressor for the athletes. Two athletes complained about the hard training leading up to the EYOF and that this was not optimal for performance. This comment reflects that athletes might have put more into performing well at EYOF than the federation did. Another issue was the preparation of skis: "The parents had to prep eight pairs of skis and they had to use their own wax". As an observer, the parents present seemed more than happy to help out; however, what the athlete is saying is that the support team lacked professionalism – and that they probably expected more at an "Olympics" and the opportunity to win their first medals, which obviously was important for them in this learning process! The athletes want to be treated like Olympians also when attending an "Olympic" event such as the EYOF and the YOG. As they have made a choice to pursue a dual career, they simply do not buy into the rhetoric about participation being a "learning experience" for them. Or, more specifically, their learning experience is solely related to becoming an elite athlete (see table 5).

### [\*\*\*Table 5 near here\*\*\*]

"I feel that I have learned more about what it takes to be an international elite athlete and how to participate in major championships" is a statement that is consistent with previous research (Kristiansen 2015) and was supported by a second athlete commenting that "I learned a lot about

relaxing and how to recover for optimal performance. Of course a lot of this was not new to me, but I learned how it should be done in practice." The team was successful and held a high competitive level with four gold, four silver and three bronze medals.

## **Conclusion and Implications**

To pursue a dual career is a choice which involves extensive commitment and support from the family. The young student-athletes may be struggling for a period before being more comfortable with the dual load – in so doing they are "walking the line." Or, as one sports leader said with a sigh, "of course they are tired when committed to both sport and school." It is tough to maintain the fragile balance between the two extremes of athletics and academics, and the participants of the present investigation have just started their "walking." At the psychological level the young Olympians are adolescents on the edge of entering adulthood (Wylleman and Lavallee 2004). Moreover, depending on the sport and ambition among the young participants, some of the athletes seems to have entered the mastery stage – and feel that participation is more than a *learning* process. The report of the lack of support from their respective federations is an example of this. However, the relationships with the coaches were highlighted as positive, in large part because many of the selected coaches held their regular positions in the sport schools that the participants attended. Consequently, the schools seem to have a more visible role in the preparations than the respective federations (Kristiansen and Houlihan forthcoming). This supports Csikszentmihalyi et al. (1993) that the schools are a valuable resource due to the young athletes' access to coaches and teachers who create a positive environment for talent development. The role of the parents was also underlined as important by the young athletes, and in particular their help in managing their dual careers particularly during competitions. This supports previous research among successful elite athletes and they partly credit their success to

the optimal parental support they received prior and during this period of transition, experiencing the backing of their parents without additional pressure and receiving adequate activity-related advice and emotional support (Bloom 1985; Mageau et al. 2009). Furthermore, to make it to an "Olympics" is, for both athletes and parents, a stepping stone (Hanstad, Parent, and Kristiansen 2013; Kristiansen 2015), and may have a long lasting effect on their motivation as well (Gould et al. 1999). For the NOCs, it is also important to remember that at the psychosocial level (Wylleman and Lavallee 2004), peers, coaches and parents are important stakeholders in the athletes' development. That the NOCs consider the athletes to be old enough to manage without too much contact with their parents (Kristiansen 2015) might not be equally easy for all the participants.

Informed by the transactional framework (Lazarus and Folkman 1984), the second aim of the study was to extend organizational stress research by examining how young athletes perceived and coped with organizational stressors during the EYOF. In both the quantitative and qualitative part of the survey, the athletes expressed satisfaction with their hotel (see Table 4). The quantitative findings also imply that, simply put, if the athletes feel that their accommodation is satisfactory – then the general impression of the event will be positive. In a study on Olympic teams, Gould et al (1999) found that the teams which failed to meet performance expectations were likely to report distractions associated with the Athletes' Village. The main organizational stressor was, as expected, from the precamps; the distance between the hotel and the athletes' respective venues (all sports took place at different venues). On the positive side, the athletes got the "learning" message as some pointed out that all athletes had to travel equally long distances. The travel distance is often perceived as a stressor at major multievents (Kristiansen 2015) and the sooner they learn to cope with it, the better. Learning to

perform at sporting events is an important aspect of sport expertise development, and social support represents an important facilitator of this skill (Cutrona and Russell 1990). Parents, coaches and peers were all perceived as valuable in this process (Wolfenden and Holt 2005; Wylleman and Lavallee 2004; Kristiansen and Parent 2014). Their importance must be emphasized as the student-athletes need to invest their available time and energy into developing their potential in two areas of achievement (De Knop et al. 1999).

Elite athletes often describe their careers in terms of events (Wylleman and Reints 2010), as events might reveal a mixture of emotions and behaviours which then lead to a developmental challenge. For several of the participants, participating in EYOF was perceived as a "game changer", and the mixture of perceptions in Tables 3 and 5 support this. All the stakeholders involved in the young athletes dual work load (both academic and sport), need more information about the dual pressure on athletes in order to be sensitive to their needs and provide social support (Olusoga et al. 2010). Participation may, for example, lead to a couple of weeks absence from school, and for these athletes, the stressor from pursuing a dual career should be considered in addition to the competitive stressors from participating at the festival. In addition, lifestyle management services to help the athletes balance their dual careers may be useful (Wylleman and Reints 2010) as a number of studies indicate that this period is a time when many talented athletes terminate their sport career (Wylleman and Lavallee 2004; e.g., Petitpas, Brewer, and Van Raalte 1996). Furthermore, this investigation adds to the event literature (MacIntosh and Nicol 2012; Parent, Kristiansen, and MacIntosh 2014), by providing youth athletes' perceptions and stressors at major multi-sport (youth) events; it highlights the impact of parents and choice of school in the preparation phase in order to achieve their Olympic dream; and it offers implications for sport management and psychology researchers to examine young athletes and

youth sport festivals, as well as for individuals and organizations working with young athletes and/or planning and hosting youth events.

#### References

- Bebetsos, E., and P. Antoniou. 2003. "Psychological Skills of Greek Badminton Athletes." *Perceptual & Motor Skills* 97 (3 Part 2): 1289–96.
- Bianco, T, and R. C. Eklund. 2001. "Conceptual Considerations for Social Support Research in Sport and Exercise Settings: The Case of Sport Injury." *Journal of Sport & Exercise Psychology* 23 (2): 85–107.
- Bloom, B. S. 1985. Developing Talent in Young People. New York: Ballantine.
- Chambliss, D. F. 1989. "The Mundanity of Excellence: An Ethnographic Report on Stratification and Olympic Swimmers." *Sociological Theory* 7 (1): 70–86.
- Cohen, S, and T. A. Wills. 1985. "Stress, Social Support, and the Buffering Hypothesis." *Psychological Bulletin* 98: 310–57.
- Compas, B. E., G. A. Banez, V. Maclarne, and N. Worsham. 1991. "Perceived Control and Coping with Stress: A Development Perspective." *Journal of Social Issues* 47: 23–34.
- Csikszentmihalyi, M., M. Rathunde, K. Whalen, and M. Wong. 1993. *Talented Teenagers: The Roots of Success and Failure*. New York: Cambridge University Press.
- Cutrona, C. E., and D. W. Russell. 1990. "Type of Social Support and Specific Stress: Toward a Theory of Optimal Matching." In *Type of Social Support and Specific Stress: Toward a Theory of Optimal Matching*, edited by B. R. Sarason, I. G. Sarason, and G. R. Pierce, 319–66. New York: Wiley.
- De Bosscher, V., P. De Knop, M. van Bottenburg, and S. Shibli. 2006. "A Conceptual Framework for Analyzing Sports Policy Factors Leading to International Success." *European Sport Management Quarterly* 6: 185–215.
- De Knop, P., P. Wylleman, J. Van Houcke, and L. Bollaert. 1999. "Sports management—A European Approach to the Management of the Combination of Academics and Elite-Level Sport." In *Perspectives The Interdisciplinary Series of Physical Education and Sport Science. Vol. 1. School Sport and Competition*, edited by S. Bailey, 49–62. Oxford: Meyer & Meyer Sport.

- Doll-Tepper, G. 2013. "Elite Athletes and Their Entourage: How Can Athletes Be Supported Before, during and after Their Sports Careers?" http://doc.rero.ch/record/31814.
- Donnelly, P. 1993. "Problems Associated with Youth Involvement in High-Performance Sport." In *Intensive Participation in Children's Sports*, edited by B. R. Cahill and A. J. Pearl, 95–126. Champaign, IL.
- Durand-Bush, N., and J.H. Salmela. 2002. "The Development and Maintenance of Expert Athletic Performance: Perceptions of World and Olympic Champions." *Journal of Applied Sport Psychology* 14 (3): 154–71.
- EU. 2012. "EU Guidelines on Dual Careers of Athletes." European Union. http://ec.europa.eu/sport/library/documents/dual-career-guidelines-final\_en.pdf.
- EYOF2015. 2015. "Rock the Alps!" *EYOF2015*. January 20. http://www.eyof2015.org/en-us/news/newsdetail.aspx?shmid=456&shact=62754479&shmiid=ElR74Dxn1HA\_\_eql\_\_.
- Fletcher, D., S. Hanton, and S. Mellalieu. 2006. "An Organizational Stress Review: Conceptual and Theoretical Issues in Competitive Sport." In *Literature Reviews in Sport Psychology*, edited by S. Hanton and S. D. Mellalieu, 321–73. New York: Nova Science Publishers.
- Giacobbi Jr., P., B. Foore, and R. S. Weinberg. 2004. "Broken Clubs and Expletives: The Sources of Stress and Coping Responses of Skilled and Moderately Skilled Golfers." *Journal of Applied Sport Psychology* 16 (2): 166–82.
- Giulianotti, R. 2004. Sport: A Critical Sociology. Cambridge, UK: Polity Press.
- Gould, D., D. Guinan, C. Greenleaf, R. Medbery, and K. Peterson. 1999. "Factors Affecting Olympic Performance: Perceptions of Athletes and Coaches from More and Less Successful Teams." *Sport Psychologist* 13 (4): 371–94.
- Goyen, M. J., and M. H. Anshel. 1998. "Sources of Acute Competitive Stress and Use of Coping Strategies as Function of Age and Gender." *Journal of Applied Developmental Psychology* 19: 469–86.
- Hanstad, D. V., M. M. Parent, and E. Kristiansen. 2013. "The Youth Olympic Games: The Best of the Olympics or a Poor Copy?" *European Sport Management Quarterly* 13: 315–38.
- Hanton, S., D. Fletcher, and G. Coughlan. 2005. "Stress in Elite Sport Performers: A Comparative Study of Competitive and Organizational Stressors." *Journal of Sports Sciences* 23 (10): 1129–41.

- Hardy, L., G. Jones, and D. Gould. 1996. *Understanding Psychological Preparation for Sport:*Theory and Practice of Elite Performers. Chichester; New York: J. Wiley.
- Holt, N. L., and J. G. H. Dunn. 2004. "Toward a Grounded Theory of the Psychosocial Competencies and Environmental Conditions Associated with Soccer Success." *Journal* of Applied Sport Psychology 16: 199–219.
- IOC. 2014. "Agenda 2020." International Olympic Committee. http://www.olympic.org/documents/olympic\_agenda\_2020/olympic\_agenda\_2020-20-20\_recommendations-eng.pdf.
- Kondracki, N. L., N. S. Wellman, and D. Amundson. 2002. "Content Analysis: Review of Methods and Their Application in Nutrition Education." *Journal of Nutrition Education* and Behavior 34: 224–30.
- Kristiansen, E. 2015. "Competing for Culture: Young Olympians' Narratives from the First Winter Youth Olympic Games." *International Journal of Sport & Exercise Psychology* 13 (1), 29-42. (1): 29-42. doi:10.1080/1612197X.2012.756259.
- Kristiansen, E., S. S. Andersen, and D. V. Hanstad. 2013. "The Mundanity of Olympic Housing: Norwegian Athletes at the 2010 Winter Games." *International Journal of Applied Sports Sciences* 25 (2): 147–58.
- Kristiansen, E., and B. Houlihan. Forthcoming. "Developing Young Athletes: The Role of the Private Sport Schools in the Norwegian Sport System." *International Review for the Sociology of Sport*.
- Kristiansen, E., D. Murphy, and G. C. Roberts. 2012. "Organizational Stress and Coping in US Professional Soccer." *Journal of Applied Sport Psychology* 24 (2): 207–23.
- Kristiansen, E., and M. M. Parent. 2014. "Athletes, Their Families and Team Officials: Sources of Support and Stressors." In *The Youth Olympic Games*, edited by D. V. Hanstad, M. M. Parent, and Barrie Houlihan, 106–21. Oxon: Routledge.
- Kristiansen, E., and G. C. Roberts. 2010. "Young Elite Athletes and Social Support: Coping with Competitive and Organizational Stress in 'Olympic' Competition." *Scandinavian Journal of Medicine & Science in Sports* 20 (4): 686–95.
- Kristiansen, E., G. C. Roberts, and P.-N. Lemyre. 2015. "The Sport Parents and Entourage's Perspective." In *Routledge Handbook of Sports Event Management: A Stakeholder Approach*, edited by M. M. Parent and J.-L- Chappelet, 183–202. New York: Routledge.

- Kristiansen, E., A. M. Strittmatter, and B. Skirstad. Submitted. "Stakeholders, Challenges and Issues at a Co-Hosted Youth Olympic Event"
- Lazarus, R. S. 1981. "The Stress and Coping Paradigm." In *Models for Clinical Psychopathology*, edited by C. Eisdorfer, D. Cohen, A. Kleinman, and P. Maxim, 177–214. New York: Spectrum.
- ——. 1993. "Coping Theory and Research: Past, Present and Future." *Psychosomatic Medicine* 55: 234–47.
- Lazarus, R. S., and S. Folkman. 1984. Stress, Appraisal, and Coping. New York: Springer.
- MacIntosh, E., and L. Nicol. 2012. "The Athlete's Event Experiences of the XIX Commonwealth Games in Delhi, India." *International Journal of Event and Festival Management* 3 (1): 12–29.
- Madden, C. C., and R. J. Kirkby. 1989. "Coping Styles of Competitive Middle Distance Runners." *International Journal of Sport Psychology* 20 (4): 287–96.
- Madden, C. C., J. J. Summers, and D. F. Brown. 1990. "The Influence of Perceived Stress on Coping with Competitive Basketball." *International Journal of Sport Psychology* 21 (1): 21–35.
- Mageau, G. A., R. J. Vallerand, J. Charest, S.-J. Salvy, N. Lacaille, T. Bouffard, and R. Koestner. 2009. "On the Development of Harmonious and Obsessive Passion: The Role of Autonomy Support, Activity Specialization, and Identification with the Activity." *Journal of Personality* 77 (3): 601–46.
- McKay, Jane, A.G. Niven, D. Lavallee, and A. White. 2008. "Sources of Strain among Elite UK Track Athletes." *Sport Psychologist* 22 (2): 143–63.
- Newman, B., B. J. Lohman, P. R. Newman, M. C. Myers, and V. L. Smith. 2000. "Experiences of Urban Youth Navigating the Transition to Ninth Grade" Youth & Society (31): 387–416.
- Nicholls, A. R., N. L. Holt, and R. C. J. Polman. 2005. "A Phenomenological Analysis of Coping Effectiveness in Golf." *Sport Psychologist* 19 (2): 111–30.
- Nicholls, A. R., and R. C. J. Polman. 2007. "Coping in Sport: A Systematic Review." *Journal of Sports Sciences* 25 (1): 11–31.
- Noblet, A. J., and S. M. Gifford. 2002. "The Sources of Stress Experienced by Professional Australian Footballers." *Journal of Applied Sport Psychology* 14 (1): 1–13.

- Olusoga, P., J. Butt, I. Maynard, and K. Hays. 2010. "Stress and Coping: A Study of World Class Coaches." *Journal of Applied Sport Psychology* 22: 274–93.
- Olympiatoppen. 2015. "Olympiatoppen Har Tatt Ut Troppen Til EYOF 2015 [The Norwegian Squad for EYOF 2015]." Olympiatoppen. http://www.olympiatoppen.no/om\_olympiatoppen/aktuelt/page8067.html.
- Parent, M. M., E. Kristiansen, and E. MacIntosh. 2014. "Athletes' Experiences at the Youth Olympic Games: Perceptions, Stressors and Discourse Paradox." *Event Management* 18: 303–24.
- Patton, M. Q. 2002. *Qualitative Research and Evaluation Methods (3rd Ed.)*. Thousand Oakes, CA: Sage Publications.
- Petitpas, A. J., B. W. Brewer, and J. L. Van Raalte. 1996. "Transitions of the Student-Athlete: Theoretical, Empirical, and Practical Perspectives." In *Counseling College Student-Athletes: Issues and Interventions*, edited by E. F. Etzel, A. P. Ferrante, and J. W. Pinkney. Morgantown, WV: Fitness Information Technology.
- Radtke, S., and F. Coalter. 2007. *Sport Schools: An International Review*. Stirling, UK: University of Stirling.
- Reeves, C. W., A. R. Nicholls, and J. McKenna. 2009. "Stressors and Coping Strategies among Early and Middle Adolescent Premier League Academy Soccer Players: Differences according to Age." *Journal of Applied Sport Psychology* 21 (1): 31–48.
- Skinner, E. A., and M. J. Zimmer-Gembeck. 2007. "The Development of Coping." *Annual Review of Psychology* 58: 119–44.
- Smoll, F. L., S. P. Cumming, and R. E. Smith. 2011. "Enhancing Coach-Parent Relationships in Youth Sports: Increasing Harmony and Minimizing Hassle." *International Journal of Sports Science & Coaching* 6 (1): 13–26.
- Stake, R. E. 2005. "Qualitative Case Study." In *The Sage Handbook of Qualitative Research*, edited by N. K. Denzin and Y. S. Lincoln, 443–66. London, UK: Thousand Oaks.
- Stambulova, N., D. Alfermann, T. Statler, and J. Cote. 2009. "ISSP Position Stand: Career Development and Transitions of Athletes." *International Journal of Sport and Exercise Psychology* 7: 395–412.
- Way, R., C. Repp, and T. Brennan. 2010. *Sport Schools in Canada: The Future Is Here*. Vancouver: Canadian Sport Centre.

- Wolfenden, L. E., and N. L. Holt. 2005. "Talent Development in Elite Junior Tennis: Perceptions of Players, Parents, and Coaches." *Journal of Applied Sport Psychology* 17 (2): 108–26.
- Wong, D. 2011. "The Youth Olympic Games: Past, Present and Future." *The International Journal of the History of Sport* 28 (13): 1831–51.
- Wylleman, P., P. De Knop, H. Menkehorst, M. Theeboom, and J. Annerel. 1993. "Career Termination and Social Integration among Elite Athletes." In *Proceedings of the VIII World Congress of Sport Psychology*, edited by S. Serpa, J. Alves, V. Ferreira, and A. Paula-Brito, 902–6. Lisbon, Portugal.
- Wylleman, P., P. De Knop, M.-C. Verdet, and S. Cecic Erpic. 2007. "Parenting and Career Transitions of Elite Athletes." In *Social Psycology in Sport*, edited by S. Jowett and D. Lavallee, 233–47. Champaign, IL: Human Kinetics.
- Wylleman, P., and D. Lavallee. 2004. "A Developmental Perspective on Transitions Faced by Athletes." In *Developmental Sport and Exercise Psychology: A Lifespan Perspective*, edited by M. R. Weiss, 507–27. Morgantown, W.V: Fitness Information Technology.
- Wylleman, P., and A. Reints. 2010. "A Lifespan Perspective on the Career of Talented and Elite Athletes: Perspectives on High-Intensity Sports." *Scandinavian Journal of Medicine & Science in Sports* 20 (Suppl. 2): 88–94.
- Yin, R. K. 2003. Case Study Research: Design and Methods. Thousand Oaks, CA US: Sage.

## **Appendix**

#### Part 1 (Short questions)

- 1. Which sport do you participate in?
- 2. Gender?
- 3. Age?
- 4. Do you attend a private sport school?
- 5. Does your school adapt for sport at the elite level?
- 6. Have you participated in an event of this size before?
- 7. If yes, which one?
- 8. Was your family present during the EYOF?
- 9. Did local press contact you during the festival?

# Part 2 (Open ended questions)

- 10. Did you experience anything that negatively affected your performance (food, weather, housing, etc.)?
- 11. Did you get needed support in particular from the coaching team?
- 12. What did you experience as positive and what can be improved?
- 13. Did your federation plan for optimal performance?
- 14. How can your federations optimize for young athletes to perform at the elite level?
- 15. How important are your parents for pursuing a dual career (and sport at this level)?
- 16. What are the three major challenges of being a student-athlete?
- 17. Has the fact that you are an elite athlete been important for your choice of school?
- 18. How can school adapt for athletes doing sport at the elite level?
- 19. What have you learned from your participation here at the EYOF?
- 20. What made the biggest impression on you during the EYOF?

# Part 3 (Revised Athlete Experience Questionnaire)

Please rate the following areas with a $\sqrt{}$	Excellent	Good	Satisfactory	Poor	Very Poor	Not Applicable
Housing						
Overall housing experience						
Food Services						
Food at competition venue						
Overall dining experience						
Sport Venues						
Training facilities (schedule for training, distance to travel, amenities) meets your needs						
Snow condition and tracks						
Overall the sporting venues meet your needs						
Travel						
Your overall travel experience to Austria has been						
Communications						
Opportunity to talk to family and friends if present						
Ceremonies						
Opening Ceremony and Closing Ceremony						
Medal Ceremonies						
Medical		ſ				
Please rate the information provided to you before the Games about anti-doping						
In the event of an accident, please rate your confidence in medical procedures						
Confidence in medical staff						
Overall Games Experience						
I would assess my overall experience as the following:						
I have let my family and friends know my overall experience as the following:						
I would compare this experience to another like sport event experience as:						
Own Performance						
I would evaluate my own performance as the following:						

Tables 1-5

**Table 1**The Norwegian team (N=34) arranged after gender, type of school they attend and sport.

	Female athletes and type of school	Male athletes and type of school	Female Coaches	Male coaches
Cross country skiing	3 (2 public*, 1 private)	4 (2 public, 2 private)	1	3
Alpine skiing	<b>4</b> (2 public, 2 private)	4 (3 public, 1 private)		3
Ski jumping	4 (2 lower secondary, 1 public, 1 private)	4 (1 lower secondary, 3 private)	1	3
Biathlon	3 (1 public, 2 private)	3 (1 public, 2 private)	1	2
Figure skating	1 (lower secondary)			1
Nordic combine		<b>4</b> (4 private)		2

**Table 2**Responses to "How can your federations optimize for young athletes to perform at the elite level? 20 of 26 athletes responded on this question, and of the 18 that had suggestions for improvement, nine had more than one suggestion.

Theme	Mentioned Number	Examples of Quotes
Athlete centered focus	6	"Dialogue one on one – not just bigger groups"  "Take our perspective and secure an individual development plan"  "Follow-up on the best athletes"  "They should follow up on us more closely, also when we are feeling down."
International matching	4	"Give us the opportunity to compete internationally"  "Need more experience in competing against the best in the world"  "More competitions like the EYOF"
Increase number of camps	4	"Invite young athletes to camps abroad more often"  "Invite to open training camps, not just for the national teams"  "Let the best in the country practice more together"  "Increase the level on each practice; let us train with better athletes"
Economical support	2	"Economical support" "Spend more money of the total budget for the juniors"
Team climate	2	"More camps with other sports to increase the team climate"  "Athletes need to be in a supportive climate in order to develop"
Equipment	2	"Help us buy cheap equipment that we can use in competitions" "The federations should, to a larger degree, help out with equipment so we can participate at this elite level"
Venues	1	"Venues need to be at a certain standard and prepped"
Dual career	1	"Adapt so we get enough rest and recovery"
Coach and support team	1	"We should have experienced coaching team and support, and it should be easy to get in touch with them"

**Table 3**The student-athletes' perceptions of the three major challenges of pursuing a dual career

	Stressor	Number
Two arenas (n=33)	Total workload (school and training)	10
	Planning and staying on top of things	6
	Travels and catch up with school	6
	Perform well at both arenas	4
	Less time to be social (and in a relationship)	5
	Lack of time to do everything	2
School related issues (n=21)	Test on return of travels	5
	Type of schoolwork when absent	2
	Keep up with schoolwork	2
	Falling out of the social aspects and feeling part of the class	3
	School and relationships to teachers	3
	How much energy to put into every class in order to avoid failing	2
	Motivation for school when struggling in sport	1
	Be present in class for better learning	1
	Lack of acceptance for sport	1
	Lack of adaption to schedule for athletes	1
Sport related issues (n=10)	Following a development plan and not train too hard too early	1
	Enough time to rest	5
	Stay healthy	3
	Food	1

 Table 4

 Descriptive statistics of the athletes' satisfaction with elements of the festival

Category	Variable		Mean	Std. Deviation
Accommodation	Overall_accommodation	26	3.92	0.89
Food	Food_competition_venue	26	3.92	0.80
	Overall_dining_experience	26	3.84	1.07
Venues	Training_facilities	26	3.88	0.16
	Snow_condition_tracks	26	4.24	0.78
	Overall_sporting_venues	26	3.27	1.04
Travel	Overall_travel_experience	26	3.50	1.10
Communication	Opportunity_com_family	26	4.04	0.68
Ceremonies	Opening_and _closing_ceremony	26	4.36	0.57
	Medal_ceremony	26	4.29	0.55
Medical	Anti_doping	25	4.21	0.78
	Medical_staff	25	4.54	0.51
Overall	Overall_experience	26	4.58	0.58
Game experience	Told_family_overall_experience	26	4.65	0.49
·	Compare_experience_to_other	26	4.64	0.49
	Evaluate_own _performance	26	3.63	0.89

**Table 5**Responses to what the athletes felt they learned during their participation at the EYOF.

Theme	Mentioned	Quote
	6	
International experience Multi-sport event team experience	2	You learn a lot about competing at this high international level You learn to be part of a multi-sport event national team and how it is to compete at such an event I have learned to travel, cooperate and live with people that I did not know well before leaving
Cope with pressure	6	There is increased pressure at such a major event I need more experience to better cope with pressure because that is important at this level You learn the routines with a major event, to stick to them and to be cynical I cracked a code and realized what to do in order to perform optimally
Cope with disappointments	4	To forget disappointments and focus on an upcoming event Being an athlete is more than racing, you need to be patient and cope with disappointments Be positive and accept the situation when you get sick You are able to learn from the first event and get better!
Recovery and enough sleep	5	Enough sleep is important It is important to relax Consider the total load better, some days were exhausting To be egotistical and make sure that you get need rest before events – especially with travel distance, ceremonies etc.
Hygiene	3	Hygiene is important when someone in the team gets sick
Independence	2	I have learned to become more independent and cope better with varied results during a meet
Focus	2	You learn to focus when it matters
Support personnel	1	It is important with an experienced support personnel The importance of support personnel and coach for performance
Interviews	1	New experience to give many interviews
Team climate	1	I learned how to create a good climate in the group
Elite level	1	I learned that I am at an excellent level compared to the rest of the world