



Contents lists available at ScienceDirect

## Psychology of Sport and Exercise

journal homepage: [www.elsevier.com/locate/psychsport](http://www.elsevier.com/locate/psychsport)

## Searching for an optimal balance: Dual career experiences of Swedish adolescent athletes

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## ARTICLE INFO

Article history:  
Available online xxxKeywords:  
Adolescent athletes  
Athletic identity  
Dual career  
Student identity  
Transition

## ABSTRACT

**Objectives:** The paper presents a national level Swedish project aimed at examining adolescent student-athletes' dual career experiences (including sport, studies, and private life) during their first year at national elite sport schools (Swedish abbreviation RIGs will be used) with a particular focus on development of their athletic and student identities. The developmental model of transitions faced by athletes (Wylleman & Lavallee, 2004) and the athletic career transition model (Stambulova, 2003) served as underlying frameworks.**Design:** A longitudinal mixed-method research design was used with autumn-to-spring quantitative and qualitative parts.**Method:** Sixteen year old student-athletes, representing 27 sports and 33 RIGs ( $n = 261$  in the first and  $n = 250$  in the second measurement), completed three quantitative instruments. Additionally, in-depth interviews were conducted with 10 participants.**Results:** Results revealed (a) significant changes in the participants' transition/adaptation variables from the first to the second measurement accompanied by rather high perceived quality of adjustment at RIG both at the beginning and at the end of the educational year; (b) significant contributions of the transition variables to the perceived quality of adjustment with personal resources as a key predictor; (c) significantly higher athletic than student identity in both quantitative measurements, but with inter- and intra-individual differences with regard to balancing the two shown by the qualitative data.**Conclusions:** The study contributes to deeper understanding of dual career experiences of Swedish adolescent athletes; the authors provide recommendations for psychological dual career support services at RIGs and outline future research in the Swedish dual career model.

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The basic idea of the Swedish sports system is that elite athletes should be able to proceed with a normal life in society once their sporting careers are over.

Swedish government bill, Prop. 1998/99:107.

Athletes invest into athletic careers during several decisive periods of their age-related and life career development (Stambulova

& Wylleman, 2014; Wylleman & Lavallee, 2004) and therefore they should be assisted with maximizing benefits of their sport participation (e.g., physical, psychological, social) and compensating for its potential costs (e.g., one-sided development, sacrifices in other spheres of life, injuries). Dual career (i.e., combining sport and education, sport and work) has proven to be a good solution for balancing sport and other spheres of athletes' life and preparing them for the life after sport. In athlete career literature searching for (and obtaining) an optimal balance between sport and other spheres of life is shown (directly or indirectly) to be a factor in preventing athletic dropout and athletic identity foreclosure (e.g., Lally, 2007; Lavallee & Robinson, 2007; Lindner & Johns, 2004; Warriner & Lavallee, 2008) and a strategy in coping with the junior-to-senior transition (e.g., Bruner, Munroe-Chandler, & Spink, 2008; Pummell, Harwood, & Lavallee, 2008; Stambulova, 1994,

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2009; Stambulova, Franck, & Weibull, 2012), the transition to higher level training environments (Poczwadowski, Diehl, O'Neil, Cote, & Haberl, 2013; Verkooijen, Van Hove, & Dik, 2012), and the transition to the post-athletic career (see an overview in Park, Lavallee, & Tod, 2013). In addition, in talent development research it is emphasized that successful athletic talent development environments and their organizational cultures highly support and facilitate athletes' sport-education balance (Henriksen, 2010).

Analysis of career research in 19 countries around the world undertaken in the recent book "Athletes' careers across cultures" and a critical review of international career research through the cultural lens (Stambulova & Ryba, 2013, 2014) led the authors to formulate a cultural praxis of athletes' careers paradigm as a set of six major challenges for the future career projects. Among them the two challenges – a holistic perspective (i.e., combining a whole person, a whole career, a whole environment approaches) and careful positioning of the projects in relevant socio-cultural contexts – are of particular importance for the dual career research to avoid narrow focused (e.g., only on student-athletes' athletic identity) and culture blind projects. The authors (2014) also analyzed various cultural discourses in career research and found the dual career topic being visible in the North American and Australian, and now also in the European career research traditions. Increased interest in the dual career topic in Europe has been stimulated by the recent document "The EU Guidelines on Dual Careers of Athletes" (2012). In these Guidelines, national stakeholders are provided with a minimal standard for athletes' dual career arrangements in the EU countries (e.g., cross-sectorial and inter-ministerial approach at national level, dual career support services on all the dual career stages) and encouraged to develop national dual career guidelines adapted to their respective cultures and based on national research exploring current dual career system and ways for its further development. Keeping in mind that a focus of this paper is on the national level Swedish project dealing with student-athletes' dual career experiences, several issues relevant to Swedish dual career research, practice and policies are briefly outlined below.

First, dual career practice in Sweden has started much earlier than related research, and was initially stimulated by media narratives about elite athletes who experienced adaptation difficulties upon retirement (Eriksson, 2007). To decrease the risk of athletes' retirement crises, the Swedish Sports Confederation established national elite sport schools (RIGs) where talented adolescent athletes of about 16–18 years old could practice sport, go to school, and live on campus<sup>5</sup>. Since the 1970s when the first RIGs were established, the Swedish RIG-system has expanded and was complemented by a number of regional and local certified sport schools that are closer to the athletes' homes and allow them to live with their families and stay in their sport teams/clubs. Currently, the RIG-system consists of 51 RIGs across the country (Stambulova & Johnson, 2013) with some RIGs being specific to one sport and others covering several sport disciplines. The RIG-system is a main avenue for athletes to reach the Swedish national/Olympic teams. For example, eight Swedish Olympic gold medalists in Sochi-2014

(men's and women's skiing relay teams) are former RIG student-athletes. All RIGs also provide educational programs allowing the students to proceed to the university level after graduation. Therefore, the RIG-system can be defined as a network of dual career programs facilitating adolescent Swedish athletes' combination of sport and studies.

Second, the dual career research in Sweden that has been "delayed" compared to the dual career practice at RIGs is aimed at the evaluation of the existing RIG-system and providing recommendations on how to improve it. This research has progressed in relation to the *winning in the long-run* philosophy developed by the Swedish Sports Confederation. In this philosophy the *long-run* implies athletes' future when retiring from sports and the *winning* means to retire being well prepared for it. The basic tenet of the *winning in the long-run* is to facilitate athletes' careers in sport and life in a socially responsible manner. That is, to provide idiosyncratic, flexible, and competent support to talented athletes, so that they can realize their potential not only as athletes, but also as individuals to become competent and valued members of the society (Lindahl, 2011; see also the epigraph). Currently, *winning in the long-run* can be seen as an underlying philosophy of the RIG-system in Sweden.

Third, the particular importance of research on athletes' dual careers at the RIG-level can be explained by the stage in adolescent athletes' athletic careers as well as in their psychological, psychosocial and academic development (Wylleman & Lavallee, 2004; Wylleman, Reints, & De Knop, 2013). In sport, 16–18 year old athletes approach or begin their junior-to-senior transition. This transition is known for its challenging nature and high dropout rate partly due to a difficulty in combining sport with other roles and activities in life (e.g., Pummell et al., 2008; Stambulova, 2009; Stambulova et al., 2012; Stambulova & Wylleman, 2014; Vanden Auweele, De Martelaer, Rzewnicki, De Knop, & Wylleman, 2004). In their psychological development adolescent athletes face exploring and constructing their self-identities and planning for the future (e.g., Lally & Kerr, 2005). In their psychosocial development they learn about how to maintain and benefit from their relationships with peers, coaches, and parents (e.g., Smith, 2007; Wylleman, De Knop, Verdet, & Cecić Erpić, 2007). In academic development they make a transition to a higher and more challenging level in education. Therefore, the RIG-system is seen as a solution to keeping the talented athletes in sport, while providing them with an opportunity to get good education and become *winners in the long-run* able "to proceed with a normal life in society once their sporting careers are over" (see the epigraph).

International dual career research (e.g., Aquilina, 2013; Elbe & Beckmann, 2006; Emrich, Fröhlich, Klein, & Pitsch, 2009; Gaston-Gayles, 2004; Jonker, Elferink-Gemser, & Visscher, 2009; Wylleman, Reints, & Wanter, 2007) and relevant Swedish studies (e.g., Engström, 2011; Gustavsson, Kenttä, Hassmén, & Lundqvist, 2007; Lund & Olofsson, 2009; Uebel, 2006) have examined adolescent athletes' dual career experiences and demonstrated both the benefits and the costs of combining sport and studies during the adolescent years. Among the benefits the authors mentioned balanced lifestyle, reduced life stress, multiple personal identities protecting athletes from one-sided development, positive effects on athletes' self-regulation, positive socialization effects, better career/retirement planning, and higher employability after sports, to name a few. At the same time, many situational conditions (e.g., financing, quality of coaching and teaching staff involved, organizational policies and cultures) influence whether dual career programs actually provide these benefits or contribute to potential dual career costs (e.g., student-athletes' overload and an increased risk of injuries, overtraining

<sup>5</sup> Living conditions for student-athletes at RIGs vary: some students live on campus in single or double rooms, and others live in rented apartments alone or together with other students (all necessary equipment is available in the apartments or on the campus). School lunch in Sweden is free for all and organized by schools, whereas breakfasts and dinners can be the students' own responsibility. RIGs are financed by the Swedish Sports Confederation, Sport Federations, the Swedish School authority organization (Skolverket), and local communities. Parents don't pay (i.e., money is not an issue) but they traditionally keep in touch with the student-athletes. Distance from home varies from student to student.

and burnout, premature dropout from sports or education). Therefore, more studies on athletes' dual careers are needed to account for the socio-cultural context and local conditions of dual career programs.

One Swedish study (Engström, 2011) is particularly relevant to the project presented in this paper. Engström's study contained two longitudinal survey measurements of 91 student-athletes in the South of Sweden and showed that in the second measurement (separated from the first one by three months) the student-athletes perceived the demands in sport, studies and private life as higher and the degree of adjustment to, and satisfaction with, their dual career as lower than in the first measurement. Research instruments (description forthcoming) developed and validated in Engström's study contributed to the planning for this larger, national level project, with organizational and financial support provided by the Swedish Sports Confederation.

The study presented in this paper is focused on adolescent athletes' transition to RIG, and dual career experiences during their first year at RIGs. It is inspired by central ideas of the cultural praxis of athletes' careers (i.e., the holistic perspective and the cultural sensitivity), and is based on the two complementing theoretical frameworks. The first one is the developmental model of transitions faced by athletes (Wylleman & Lavallee, 2004) that brought in the holistic perspective on athletes' development and encouraged the authors to consider sport, studies, private life<sup>6</sup>, and identity development of athletes as "whole persons". The second framework is the athletic career transition model (Stambulova, 2003, 2009) that stimulated the authors to investigate the process of athletes' transition to a RIG environment by means of tracing the dynamics of transitional variables, such as the transition demands, coping strategies, internal and external resources and barriers (in sport, studies and private life), as well as the transition outcomes (perceived degree of adjustment at RIG and satisfaction with sport, studies and private life). This study is in line with the EU Dual Career Guidelines in which "athletes' transitions between adjacent levels of dual career programs" are featured among "the most pertinent" research areas (p. 38). No less important, the study responds to the Swedish Sports Confederation's need to evaluate the existing RIG-system, especially at the initial period of the student-athletes' adaptation and to further improve dual career programs at RIGs.

More specifically, three objectives have been addressed in this study: (1) to investigate the dynamics of student-athletes' transitional variables in regard to sport, studies, and private life during the first year at RIG, (2) to examine the contributions of the transitional variables to the participants' perceived degree of adjustment at RIG, and (3) to explore how participants balance their student and athlete roles and identities during their first year at RIG.

## Method

The project is designed as a mixed-method (Yardley & Bishop, 2008) longitudinal study with two quantitative measurements and two interview series conducted at the beginning and at the end of the educational year at RIG. This design allowed for involving many participants and observing major tendencies in student-athletes' transition and adaptation process at RIGs (through quantitative part), but also to create a deeper understanding of the participants' idiosyncratic dual career experiences (through qualitative part).

<sup>6</sup> In this study "private life" covered student-athletes' independent living, leisure time activities, and contacts with family, friends and coaches outside RIG.

## Participants

Study participants were the first year RIG student-athletes of about 16 years old, males and females, representatives of 27 different individual (e.g., track-and-field, tennis, cycling, golf) and team (e.g., basketball, handball, hockey) sports and 33 RIGs across Sweden. In the first quantitative measurement at the beginning of the educational year 261 participants took part, and in the second measurement at the end of the year 250 participants continued in the study. Nine student-athletes dropped out from RIGs during the year and, therefore, dropped out from the study, and two students chose not to participate in the second measurement. In the qualitative part of the study, ten student-athletes from the main sample (selected as fifty–fifty in terms of gender and individual or team sports representation) were recruited for interviews in parallel with the quantitative measurements at the beginning and at the end of the educational year. The interviewed athletes represented badminton, track-and-field, golf, handball, and volleyball.

## Instruments

In the quantitative part of the study three instruments were used.

### *The Dual Career Survey (Engström & Stambulova, 2011a)*

The Dual Career Survey (DCS) fulfilled the first and the second objectives. The DCS was developed based on the Transition Monitoring Survey (Stambulova et al., 2012) and the two theoretical frameworks mentioned in the introduction. The instrument consists of three parts. The first part "Introduction" includes a set of questions about personal and athletic background, current situatedness in the junior-to-senior transition, living conditions (i.e., at home or at RIG), and motivation to pursue a dual career. The second part "The transition process" includes six 10-point (from "not at all" to "very much") scales examining: (1) perceived demands in the transition to RIG (e.g., "to improve performance at school tests", "to improve preparations for competitions/games"), (2) coping strategies used (e.g., "I have a clear goal", "I plan my time", "I try to learn from others", "I try to give 100%"), (3) support provided to the RIG student-athletes by other people (e.g., teachers, coaches, peers, family) and organizations (e.g., sport clubs), (4) perceived pressure from other people and organizations, (5) personal resources helping student-athletes to pursue their dual careers at RIG (e.g., motivation, self-confidence, communication skills), (6) sources of stress and need of additional help/support. All the items in these six scales are designed to be evaluated by participants in regard to sport, studies and private life (i.e., each scale has three subscales). The third part of the DCS "Current situation in studies, sport and private life" includes three 10-point scales: (1) perceived adjustment at RIG in terms of studies, sport, friends, family, and living outside home (total score was then used for further analyses), (2) perceived importance of studies, sport, friends and family, and (3) student-athletes' satisfaction with studies, sport, friends and family. The DCS was created in Swedish language, tested, and showed acceptable internal consistency (see details in Table 1).

### *The Athletic Identity Measurement Scale (Brewer, Van Raalte, & Linder, 1993)*

The Athletic Identity Measurement Scale (AIMS) consists of 10 items (e.g., "I consider myself as an athlete", "I have many goals related to sport") and is evaluated through a 7-point scale. The Swedish version of AIMS has been tested in several studies (e.g., Engström, 2011; Richard, 2008). In this study the AIMS (see Table 1 for the Cronbach Alpha) was used to fulfill the third objective.

**Table 1**

Number of Items, Cronbach Alphas, Means and Standard Deviations for the DCS Subscales, the AIMS and the SIMS (Measurement 1;  $N = 261$ ).

Variables	Items	$\alpha$	$M$	$SD$
Transition demands	18	0.93	4.17	1.53
Coping strategies (studies)	16	0.88	6.64	1.25
Coping strategies (sport)	16	0.89	7.39	1.22
Coping strategies (private life)	16	0.88	6.86	1.23
Social support (studies)	8	0.81	7.09	1.51
Social support (sport)	8	0.77	7.72	1.21
Social support (private life)	8	0.85	6.73	1.50
Social pressure (studies)	8	0.84	5.33	1.57
Social pressure (sport)	8	0.89	5.56	1.81
Social pressure (private life)	8	0.94	4.39	2.05
Personal resources (studies)	11	0.92	6.80	1.55
Personal resources (sport)	11	0.89	7.77	1.22
Personal resources (private life)	11	0.93	7.28	1.47
Stress level	10	0.91	4.97	1.68
Perceived need in additional help/support	10	0.92	3.85	1.79
Perceived degree of adjustment to dual career at RIGs	5	0.81	7.56	1.41
Importance of different aspect of studies, sport, and private life	4	0.66	8.71	1.10
Satisfaction with different aspects of studies, sport, and private life	4	0.71	7.87	1.38
SIMS	10	0.83	4.25	1.02
AIMS	10	0.82	5.87	0.72

### *The Student Identity Measurement Scale (Engström & Stambulova, 2011b)*

The Student Identity Measurement Scale (SIMS) was developed based on the AIMS with 10 items (e.g., “I consider myself as a student”, “I have many goals related to my studies”, etc.) evaluated using a 7-point scale. In this study the SIMS (see Table 1 for the Cronbach Alpha) was used to complement the AIMS in fulfilling the third objective.

### *Interview guides*

Two interview guides were created to better understand inter- and intra-individual variations in the student-athletes' dual career experiences at RIGs. Both interview guides were structured as having three main parts addressing the participants' near past, present situation, and perceived future. The first interview also included background questions (e.g., age, years in sport and level achieved). In the first interview ‘near past’ included open questions about the participants' previous experiences with combining sport and studies as well as with the selection process into RIG. Further, the ‘present situation’ questions were about their positive and less positive experiences at the beginning of the year at RIG, challenges they tried to meet, coping strategies they used to pursue dual careers at RIG, and satisfaction with their present situation in sport, studies and private life. The student-athletes were also asked about how they combined their two major roles (i.e., being a student and being an athlete) and which one (if any) they prioritized and why. The ‘future’ part in the first interview guide addressed the participants' expectations about their first year at RIG. In the second interview the ‘near past’ open questions investigated the participants' dual career experiences during their first year at RIG (positive and less positive experiences, living situation, attitudes to sport and studies, roles/identities, challenges they tried to meet, resources and coping strategies used). The ‘present situation’ questions addressed mainly the student-athletes' satisfaction (the most and the least) with sport, studies and private life and lessons they learned during that year. The ‘future’ questions dealt with the participants' expectations for the second year at RIG and also recommendations they could provide for the next generation of RIG

students and for the RIG staff. Data from the interviews were used to fulfill the first and the third objectives.

### *Procedure*

Participants of the study were recruited via a multi-step process. First, a liaison person from the Swedish Sport Confederation contacted RIGs' administrations to explain the idea of the project and welcome participation. RIGs that demonstrated an interest then received more detailed information about the project, and informed consent forms were signed on the organizational level. At each RIG, a staff member was assigned to the project to facilitate organizational issues. Before the quantitative data collection, the research group members explained the idea of the project to the participants, informed them about ethical issues (e.g., voluntary participation, confidentiality, and the right to dropout at any time) and explained how to complete the DCS, the AIMS and the SIMS online. Before the data collection, all the participants signed informed consent forms. To encourage the participants to complete the online surveys, the research group sent them reminding e-mails with instructions. The first measurement was conducted in October–November, and the second one during the end of March–beginning of May. Interviews were conducted during November and April–May. Two research group members competent in qualitative research visited RIGs and conducted interviews with participants on-site. Interviewees were informed about ethical issues and also signed informed consent forms. All interviews were recorded with participants' permission and lasted between 20 and 45 min.

### *Data analyses*

Analyses of the quantitative data included: (a) calculating descriptive statistics (means and standard deviations) for all the DCS items and also for all DCS scales and subscales, the AIMS and the SIMS scales, (b) *t*-test for all the DCS items, scales and subscales, the AIMS and the SIMS scales to identify differences between the first and the second measurements (changes were deemed significant when  $p \leq .05$ ), (c) two multiple regression analyses to clarify how the transitional variables (the list is forthcoming) contributed to the student-athletes' perceived adjustment at RIG at the beginning and at the end of the year, and (d) cross-lagged panel analysis (Selig & Little, 2012) to explore how the transitional variables (the list is forthcoming) at Time 1 (i.e., in the first measurement) predicted transitional variables and, especially, the perceived adjustment at RIG at Time 2 (i.e., in the second measurement). To conduct the cross-lagged panel analysis Mplus (version 7.2) with full maximum likelihood estimation (FIML) was used. In the cross-lagged panel model autoregressive-, correlational, as well as cross-lagged paths between the variables were included. To evaluate model fit, the following fit indices were used: (1) Chi-square statistics, (2) the Bentler Comparative Fit Index (CFI), (3) Root Mean Square Error of Approximation (RMSEA) and, (4) Standardized Root Mean Square Residual (SRMR) (e.g., Fan, Thompson, & Wang, 1999).

Deductive-inductive content analyses of interview data (Patton, 2002) consisted of: (a) transcribing full texts of the interviews and reading the texts several times to become familiar with the content, (b) reducing the data and identifying raw data units, (c) deductively arranging raw data units along the categories derived from the athletic career transition model (e.g., demands, coping strategies, resources), (d) deductively arranging raw data units within each category using three main domains of the participants' life in focus (sport, studies, and private life) as higher order themes, (e) inductively creating lower order themes within each higher order theme.



**Table 2**

Dynamics of the Student-Athletes' Transition Variables: Means (M), Standard Deviations (SD), *t*-value (*t*), Degrees of Freedom (df) and *p*-value (*p*) for Measurement 1 (M1) and Measurement 2 (M2).

Variables	M1 M (SD)	M2 M (SD)	<i>t</i>	df	<i>p</i>
Transition demands	4.10 (1.47)	4.65 (1.70)	4.893	239	.000
Coping strategies (studies)	6.62 (1.23)	6.75 (1.42)	1.355	239	.177
Coping strategies (sport)	7.40 (1.19)	7.48 (1.28)	0.938	239	.349
Coping strategies (private life)	6.85 (1.21)	6.93 (1.52)	0.821	239	.412
Social support (studies)	7.09 (1.50)	6.79 (1.71)	3.023	239	.003
Social support (sport)	7.70 (1.21)	7.31 (1.49)	4.430	239	.000
Social support (private life)	6.73 (1.49)	6.45 (1.75)	2.554	237	.011
Social pressure (studies)	5.31 (1.59)	5.10 (1.72)	1.734	238	.084
Social pressure (sport)	5.54 (1.83)	5.35 (1.82)	1.616	238	.107
Social pressure (private life)	4.35 (2.03)	4.23 (2.06)	0.813	223	.417
Personal resources (studies)	6.81 (1.54)	6.64 (1.57)	1.935	235	.054
Personal resources (sport)	7.77 (1.21)	7.61 (1.41)	2.126	236	.035
Personal resources (private life)	7.28 (1.47)	7.22 (1.58)	0.753	229	.452
Stress level	4.89 (1.66)	5.33 (1.74)	3.940	234	.000
Perceived need in additional help/support	3.81 (1.78)	4.21 (2.07)	2.943	231	.004
Perceived degree of adjustment to dual career at RIGs	7.60 (1.36)	7.56 (1.45)	0.235	235	.722
Importance of different aspect of studies, sport, and private life	8.69 (1.36)	8.64 (1.15)	0.776	235	.439
Satisfaction with different aspects of studies, sport, and private life	7.87 (1.35)	7.65 (1.56)	2.220	234	.027
Motivation	8.78 (1.58)	8.35 (1.80)	3.980	239	.000

Additionally, adopting ideas of Hiles and Čermák (2008) about a holistic content analysis, short stories based on the first and the second interview were constructed using only the participants' own words to contribute to the understanding of the third objective of the study.

## Results

### *Dynamics of the student-athletes' adaptation at RIG*

In this section, the dynamics of the student-athletes' transition to and adaptations at RIG (the first objective) is traced based on the quantitative data (major trends<sup>7</sup> are shown in Table 2), supported by the interview data emphasizing lower order themes relevant to various aspects of the student-athletes' adaptation in sport, studies, and private life.

### *RIG pre-conditions and expectations*

The student-athletes' pre-conditions and expectations for going into RIGs were investigated in the introductory part of the DCS and in the interviews. At the time of entering RIGs, the participants (*n* = 261) took part in their sports for 7.65 (±2.85) years on average and competed at local (*n* = 21), national (*n* = 106) and/or international (*n* = 134) level. Upon entering RIGs, the majority of the participants (*n* = 212) moved away from home and started independent living.

Interviews showed that all the interviewees had more or less successful experiences of combining sport and studies before they entered RIGs. To be accepted into RIGs many participants went through a selection process (e.g., physical tests, interviews) that also allowed them to meet potential classmates, teachers, and coaches as well as to receive information about the RIG's regulations. The student-athletes' expectations about their first year at

RIGs were "to have good school grades", "to develop as an athlete", "good conditions for training", "good coaches and training partners", "to develop as a person", "avoid injuries" and "to have fun".

### *The dynamics of the student-athletes' dual career demands*

When first transitioning to RIGs, student-athletes perceived their demands in sport, studies, and private life as about moderate (compared to the scale maximum). But as the year progressed the perceived demands increased, especially in terms of school exams and sport competitions, injury rehabilitation, communication with coaches, class- and teammates, time planning and self-discipline, and overall in terms of combining sport and studies.<sup>7</sup> Reflections of the interviewed student-athletes showed that all the three domains addressed in this study (sport, studies and private life) were challenging when they moved to RIG. Interviewees reported that school was "the most demanding and tough" because it required "a lot of time" and "a lot of efforts" to earn good grades. In sport, their main challenges were "to perform well", "to work hard to improve", "to show you can", "to deal with injuries", and "to take own responsibility". The latter refers also to private life. The student-athletes who moved from home needed to organize their own living (e.g., to calculate their budget) and to take care of themselves (e.g., washing, cleaning, cooking) that appeared challenging as well. As one interviewee mentioned, "... before my mom always told me what to do, but now I have to think and do myself".

### *The dynamics of the student-athletes' coping strategies*

To deal with aforementioned dual career demands the student-athletes put more coping efforts into sport than into studies and private life, and no significant differences were found between the first and the second measurements. But the dynamics was obvious in terms of how the student-athletes prioritized various coping strategies at the beginning and at the end of the educational year. For example, at the end of the year the strategy "giving 100%" was prioritized less (especially in private life and studies), and the strategies like "planning activities", "anticipating difficulties and preparing in advance", "focusing on recovery", and "getting negative energy out" were used more. The interview participants also added that in order to adjust at RIG they tried "to be disciplined", "to plan their time", "to do their best in sport and studies" and also "to find time for a good rest in between". They also searched for and relied on external support from their families, home coaches and RIG's staff. In the second interview some participants (e.g., see quotation below) reflected about the difficulty to invest equally into sport and studies and the need to be able to prioritize activities at RIG:

I've realized that ... you invest in your sport on elite level and at the same time you should put down a lot of energy on school and because of that you cannot be the best in everything, it's impossible to be that.

### *The dynamics of the student-athletes' internal and external coping resources*

Internal/personal resources facilitating the coping efforts (e.g., health, communication skills, previous experiences, and motivation) were perceived as above moderate in the first measurement and showed a tendency to drain (e.g., motivation and self-confidence in sport and studies) in the second measurement. External resources (e.g., support from coaches and sport peers) were evaluated as high in the first measurement and decreased in the second one. At the same time, the interviewed participants (mainly in the first interview) reflected on a number of dual career resources provided at RIGs, for example, "school schedule adjusted to sport training", "possibility to travel to training camps and

<sup>7</sup> Table 2 contains only total scores on the DCS scales or sport/studies/private life subscales; in the text more data is used, e.g., related to separate items and their dynamics. These data are available from the first author upon request.

competitions”, “highly qualified coaching staff and good training conditions/facilities”, and also “within-group social support”.

#### *The dynamics of the student-athletes' perceived barriers and need of help*

Among the student-athletes' barriers for the adaptation at RIGs, their stress level, pressures from significant others and organizational/lifestyle difficulties were considered. The total stress level was perceived as rather low at the beginning of the year, but was significantly elevated by the end of the year. This probably influenced a corresponding increase in the student-athletes' need of additional support. Pressures from coaches, teachers and family were perceived as moderate and did not change significantly during the year. Reflecting on the RIG-environments, the interviewed participants mentioned “lack of free time”, “home sickness”, “deficit of life skills” (e.g., housekeeping and time management), and “being surrounded by the same people” as additional barriers they had to overcome to successfully adjust at RIGs.

#### *The dynamics of the student-athletes' perceived adjustment and satisfaction*

Perceived quality of adjustment at RIG was rather high at the beginning of the year ( $M = 7.6 \pm 1.36$ ) and did not change significantly during the year. According to both measurements, student-athletes felt more adjusted in sport than in private life and studies. At the same time the student-athletes' satisfaction (total and, especially, with sport) and motivation to pursue their dual careers at RIG decreased, although both variables were still rather high at the end of the year. Interviews showed that in spite of the fact that not all the expectations shaped at the beginning of the year were met the participants evaluated their dual career experiences at RIG as mainly positive. They were the most satisfied with “school staff”, “own development as a student”, “good training”, “good conditions for injury rehabilitation”, “feedback from coaches and peers”, and “good time with friends”. The factors they were least satisfied with included: “higher demands in school than before”, “difficult to find time for friends and family”, “lost contact with friends from home”, “lack of professional psychological support in sport”. One of the interviewee's concluded in regard of his dual career experiences at RIG: “I am very satisfied because I am having a lot of fun. It is the best choice in life, but a bit stressful at times and boring to do the dishes”.

#### *Contributions to the student-athletes' perceived adjustment at RIG*

Addressing the second objective of the study, a multiple regression analysis was conducted for each the first and the second quantitative measurement. The variables were selected based on the athletic career transition model and entered into the regression analysis using the backward method. In both, the criterion variable was the perceived quality of adjustment to dual career at RIG and predictor variables were transition demands, stress level, need of additional help/support (total scores), coping strategies, social support, social pressure, and personal resources (total scores for sport, studies and private life). In both regression analyses significant relationships were found between the criterion variable and the set of predictors. In the first measurement with  $R^2 \text{ adj.} = .456$ ,  $F(7, 244) = 31.002$ ,  $p < .001$  the significant predictors were transition demands ( $\beta = -0.124$ ,  $p = .020$ ), coping strategies in sport ( $\beta = 0.162$ ,  $p = .002$ ), social support in studies ( $\beta = 0.217$ ,  $p < .001$ ), social pressure in studies ( $\beta = -0.109$ ,  $p = .032$ ), and personal resources in terms of private life ( $\beta = 0.386$ ,  $p < .001$ ). This set of predictors explained 45.6% of student-athletes' perceived quality of adjustment at RIG at the beginning of the year (see Table 3). In the second measurement with  $R^2 \text{ adj.} = .540$ ,  $F(10, 218) = 27.785$ ,

**Table 3**

Multiple Regressions for Contribution of the Dual Career Transition Variables to the Student-Athletes' Perceived Degree of Adjustment at RIGs (Measurement 1).

Predictors	$\beta$	$t$	$p$
Transition demands (total)	-0.124	-2.335	0.020
Coping strategies (sport)	0.162	3.090	0.002
Social support (studies)	0.217	4.105	<0.001
Social pressure (studies)	-0.109	-2.163	0.032
Personal resources (private life)	0.386	6.894	<0.001
Stress level (total)	-0.078	-1.380	0.169
Perceived needed in additional help/support (total)	-0.102	-1.824	0.069

$R^2 \text{ Adj} = 45.6\%$ .

$p < .001$  the significant predictors were transition demands ( $\beta = -0.107$ ,  $p = .049$ ), coping strategies in sport ( $\beta = 0.179$ ,  $p = .001$ ), social support in sport ( $\beta = 0.298$ ,  $p < .001$ ), social support in private life ( $\beta = -0.164$ ,  $p = .030$ ), social pressure in sport ( $\beta = -0.162$ ,  $p = .020$ ), personal resources in terms of studies ( $\beta = 0.215$ ,  $p = .002$ ), personal resources in private life ( $\beta = 0.216$ ,  $p = .001$ ), and total stress level ( $\beta = -0.113$ ,  $p = .029$ ). This set of predictors explained 54.0% of student-athletes perceived adjustment in the end of the year (see Table 4).

To explore contributions of the transition variables (total scores on demands, coping, personal resources and social support) at the beginning of the educational year (T1) to the adjustment and estimates of the transition variables at the end of the educational year (T2) the cross-lagged panel analysis was conducted. The cross-lagged model showed good model fit ( $\chi^2 = 0.042$ ,  $df = 1$ ,  $p = .84$ ; CFI = 1.00; RMSEA = 0.001; SRMR = 0.001). Selected parameter estimates are presented in Table 5.

All variables in the model were specified to correlate with each other at T1 and T2, respectively. All correlations at T1 were statistically significant ( $\beta = 0.13\text{--}0.59$ ,  $p < .05$ ). For the correlations at T2, all except the correlation between personal resources and dual career demands ( $\beta = -0.04$ ,  $p = .56$ ), as well as between demands and social support ( $\beta = -0.12$ ,  $p = .06$ ) were statistically significant ( $\beta = 0.13\text{--}0.48$ ,  $p < .05$ ).

In the model, the following paths between the variables at Time 1 and Time 2 could be discovered: (a) all the autoregressive regression weights were statistically significant ( $\beta = 0.25\text{--}0.58$ ), (b) adjustment at T2 was significantly predicted not only by adjustment at T1 ( $\beta = 0.27$ ,  $p < .001$ ) but also by personal resources at T1 ( $\beta = 0.29$ ,  $p < .001$ ), (c) personal resources at T1 significantly predicted perceived demands ( $\beta = -0.22$ ,  $p < .05$ ), coping efforts ( $\beta = 0.22$ ,  $p < .05$ ) and social support ( $\beta = 0.15$ ,  $p < .05$ ) at T2, and (d) social support at T1 was a significant predictor of perceived demands at T2 ( $\beta = 0.16$ ,  $p < .05$ ). All in all, the model shows a key role of personal resources for the student-athletes' adaptation at RIGs.

**Table 4**

Multiple Regressions for Contribution of the Dual Career Transition Variables to the Student-Athletes' Perceived Degree of Adjustment at RIGs (Measurement 2).

Predictors	$\beta$	$t$	$p$
Transition demands (total)	-0.107	-1.979	0.049
Coping strategies (sport)	0.179	3.377	0.001
Social support (studies)	0.105	1.276	0.203
Social support (sport)	0.298	3.805	<0.001
Social support (private life)	-0.164	-2.183	0.030
Social pressure (studies)	0.097	1.350	0.178
Social pressure (sport)	-0.162	-2.336	0.020
Personal resources (studies)	0.215	3.163	0.002
Personal resources (private life)	0.216	3.342	0.001
Stress level (total)	-0.113	-2.195	0.029

$R^2 \text{ Adj} = 54.0\%$ .

**Table 5**  
Parameter Estimates for the Cross-Lagged Model.

Regression weights	Parameter estimate		SE	Critical ratio
	US	S		
Adjustment T1 → Adjustment T2	0.29	0.27	0.07	3.94**
Demands T1 → Adjustment T2	−0.07	−0.07	0.06	−1.19
Support T1 → Adjustment T2	0.10	0.08	0.07	1.48
Personal resources T1 → Adjustment T2	0.34	0.29	0.09	3.94**
Coping T1 → Adjustment T2	0.07	0.05	0.08	0.85
Adjustment T1 → Support T2	0.03	0.02	0.08	0.35
Demands T1 → Support T2	0.02	0.02	0.06	0.29
Support T1 → Support T2	0.58	0.48	0.07	8.25**
Personal resources T1 → Support T2	0.18	0.15	0.09	2.01*
Coping T1 → Support T2	0.04	0.03	0.09	0.48
Adjustment T1 → Coping T2	0.05	0.06	0.07	0.80
Demands T1 → Coping T2	−0.09	−0.10	0.05	−1.64
Support T1 → Coping T2	0.06	0.05	0.06	0.90
Personal resources T1 → Coping T2	0.22	0.22	0.08	2.82*
Coping T1 → Coping T2	0.29	0.25	0.07	3.98**
Adjustment T1 → Personal resources T2	0.04	0.05	0.06	0.72
Demands T1 → Personal resources T2	−0.08	−0.09	0.05	−1.65
Support T1 → Personal resources T2	0.10	0.10	0.06	1.85
Personal resources T1 → Personal resources T2	0.61	0.58	0.06	9.59**
Adjustment T1 → Demands T2	−0.01	−0.01	0.09	−0.11
Demands T1 → Demands T2	0.41	0.37	0.07	5.86**
Support T1 → Demands T2	0.23	0.16	0.09	2.63*
Personal resources T1 → Demands T2	−0.30	−0.22	0.11	−2.70*
Coping T1 → Demands T2	0.01	0.01	0.11	0.03

Note: Critical ratio = the ratio of the unstandardized parameter to its standard error; S = Standardized estimate; SE = Standard error estimate; US = Unstandardized estimate.

\* $p < .05$ ; \*\* $p < .001$ .

### Searching for a balance between athletic and student roles and identities

Addressing the third objective on how the participants balanced their athletic and student roles and identities both quantitative and qualitative data were used, with a priority given to the qualitative approach. Based on the AIMS and the SIMS, no significant differences between the first and second measurements were found with regard to athletic (from  $M = 5.87 \pm 0.72$  to  $M = 5.86 \pm 1.10$ ) and student (from  $4.23 \pm 0.99$  to  $4.27 \pm 1.10$ ) identities. However, in both measurements the participants' athletic identity was significantly higher than their student identity. Meanwhile, the data from the interviews allowed for discovering inter-individual and intra-individual variations in balancing the two roles and identities. Comparing the interviewees' reflections on the identity issue we have arranged the relevant quotations along a continuum starting with prioritizing sport and higher visibility of athletic identity on the top to prioritizing studies and higher visibility of student identity, on the bottom.

I prioritize my sport more than school right now because I moved here for sports. School is secondary ... school goes OK but could go better if I didn't have my sport.

I see myself more as an athlete ... I mean, I'd rather be a sports star than a smart guy/ ... / [but] I wouldn't say that I care more for sports, but I think it's more fun and it is something I'd rather do.

I think both are fun and I want to be both a student and an athlete, I would have been that at home only here I practice some more.

I feel that school ... sport ... I care about them the same. You feel good doing sports and then when you do sports you clear your head from school a little and then you can continue studying. So ... school comes maybe a little before sports because it's a bit more important anyway. But it feels hard missing one practice or so ...

Sport is really just a hobby or so, study comes first because it is important to have a good education, if I cannot live off my sport I have to have my education.

Comparing the data from the interview participants representing different sports, it appeared that prioritizing the athlete role was more relevant to the sports where athletes could have a professional career (e.g., golf), and prioritizing studies was more typical to athletes from sports with low professionalization (e.g., volleyball). For example, a volleyball player said that she prioritized studies, but when she was asked: "Do you think this would be any different if you could live off of your sport?", she answered: "Yes/ ... /if you could live off of volleyball, I think many would prioritize training instead of studies".

Comparing the interviewees' reflections on the identity issue in the first and the second interviews, we could observe intra-individual changes. For example, one student-athlete's story clearly demonstrates a shift in the individual athletic-student balance (from prioritizing athletic to prioritizing student identity) and a change in personal meaning of both:

I'm going to practice, I'll go and practice, I'm gonna go practice, I have practice, whatever you say, I need to study, but ooh no I have practice, that's how it is, practice takes your whole life ...

In the beginning of the year I wanted sport and school to mean the same, but I moved here because of my sport, so my sport means more to me, but school is more important, so it comes first, I know I am contradicting myself ... school is number one, so I have told myself and so have all coaches and my parents told me ... but I moved here because of my sport ... I did not move here because it is a good school ... I chose to move here to get better at my sport. But school is not unimportant, because you cannot live off this sport, therefore you need education.

Now in the end of the first year I see myself more as a student with a focus on sport, compared to when I started here, then I saw myself more as an athlete trying to study ... This is because of the school level, new classes, it's a lot harder ... you have to put down extra time on it ... It's two years until graduation, but they already want us to think about what we want to become ... my student counselor and my teachers have made me realize ... it will be worth the time when you graduate ... so, it becomes more serious somehow ... you cannot waste three years of school, because if you do, you need to redo it later ... so I think more about school now than before.

This story also illuminates one contradiction noticeable in communication with other interviewees as well. On the one hand, student-athletes perceived RIG as an educational setting where studies are organized around sport (e.g., "I chose to move here to get better at my sport"). On the other hand, a message communicated to them by RIGs' staff and also parents was that "school is number one". This inconsistency between their own impressions of how sport and studies are coordinated at RIGs (i.e., unspoken values) and spoken values communicated by their coaches, teachers and parents could contribute to the student-athletes' difficulties



in obtaining an optimal balance between athletic and student roles/identities.

## Discussion

The three objectives of this study with a mixed-method design guided us to start with a holistic overview of the participants' dual career experiences during their first year at RIGs, proceed onto exploring the factors contributing to the student-athletes' perceived quality of adjustment at RIGs, and finish with examining the participants' identity development relevant to their roles as students and athletes. The results showed that student-athletes' adaptation at RIGs was related to coordinating different layers of their development (athletic, psychological, psychosocial, and educational) in order to search for, and (possibly) obtain an optimal balance between sport, studies and private life. Therefore, results of the study provide support to the developmental model of transitions faced by athletes (Wylleman & Lavalée, 2004), which is also championed in the *EU Guidelines on Dual Careers of Athletes* (2012) for its relevance to dual career research and applied work. The participants of the study perceived all the three big spheres of their life examined in the study (sport, studies and private life) as important and demanding, both at the beginning and at the end of their first educational year at RIG, and used resources and coping efforts to deal with them. This general conclusion is well derived from both quantitative and qualitative data obtained (see more below).

The study also contributes with support for the athletic career transition model (Stambulova, 2003, 2009), in which a transition is seen as a process of athletes' coping with transition demands using (and developing) their external (e.g., social support) and internal (i.e., personal) resources, as well as dealing with possible transition barriers in order to feel adjusted (in our case, to RIG demands in terms of sport, studies and living situation). In this study the DCS was based on the athletic career transition model, and the interview guides incorporated the major concepts of the model. Student-athletes' perceived level of adjustment to RIG at the beginning and at the end of their first year appears to depend on a set of factors articulated in the model (based on the results of the regression analyses). The dynamics of contributing factors was also interesting. At the beginning of the year, perceived transition demands, pressure from school teachers (the higher the demand/pressure, the lower the adjustment) together with coping strategies in sport, social support at school and personal resources in private life (the higher the coping efforts/support/resources, the higher the adjustment), significantly contributed to their total adjustment at RIG (45.6%). At the end of the year, transition demands, social support in private life, coaches' pressure in sport and total stress level contributed negatively (i.e., the higher the demands/support/pressure or stress, the lower the adjustment), but a lot of other factors, such as coping in sport, social support in sport, personal resources in studies and private life contributed positively (i.e., the higher the level of these factors, the higher the adjustment) and altogether accounted for 54.0% of student-athletes' adjustment at RIG. These results confirm that upon entering RIG student-athletes face a complicated transition encompassing all major spheres of life and personal development. Even the transition in private life was important. For example, at the beginning of the year, personal resources in private life (e.g., self-discipline, life skills) positively contributed to the RIG adjustment, while at the end of the year social support in private life contributed to the degree of adjustment negatively (i.e., the higher the support, the lower the adjustment), which can be interpreted as a sign of the participants' growing autonomy and denial of help (and also control) in private life from the significant others.

More insights into the role of personal resources and external support in the transition/adaptation process are provided by the results of the cross-lagged panel analysis. Student-athletes' personal resources are shown to be a key factor in their adaptation at RIGs. The higher the level of the participants' personal resources at the beginning of the educational year was, the lower they perceived the dual career demands and the higher their (a) personal resources, (b) social support, (c) coping efforts, and (d) perceived degree of adjustment at RIG at the end of the year. Importance of personal resources, especially competencies and skills in the transition/adaptation process, has been highlighted in a number of career studies (e.g., Petitpas, Van Raalte, & Brewer, 2013; Pummell et al., 2008). Relevant to personal resources is a nature of social support. For example, the supporters might aim at making student-athletes more resourceful and autonomous (i.e., an empowerment approach) or more dependent and relying on help from others (a controlling approach; see, e.g., Alfermann & Stambulova, 2007). In this study perceived social support (total in sport, studies and private life) at the beginning of the year is shown to be a significant predictor of increased dual career demands at the end of the year (the higher the support, the higher the demands). This result might indirectly shed light on the mainly controlling manner of social support provided to the student-athletes at the initial period at RIGs. Therefore, in recommendations of this study, the empowerment approach and services focusing on the student-athletes' life skills were emphasized following also career transition/assistance literature (e.g., Alfermann & Stambulova, 2007; Lavalée, 2005; Stambulova, 2012; Stambulova & Wylleman, 2014) and the *EU Guidelines on Dual Careers of Athletes*.

The overall dynamics of the student-athletes' adaptation at RIGs during the first year was characterized by increases in perceived demands of being a RIG-student-athlete, total stress level, and a need for additional help, combined with decreases in some personal resources and aspects of social support. These results confirm the findings of Engström's (2011) study and also make us think that student-athletes' transition to RIG was still in progress at the end of the year, and that fatigue accumulated during the year (Emrich et al., 2009; Gustavsson et al., 2007) might have influenced their perceptions of the dual career experiences in the second measurement. Keeping in mind that the perceived quality of adjustment at RIG was rather high in the first measurement and did not change significantly in the second measurement, we can extrapolate that at the beginning of the year the participants underestimated the demands of studying, doing sports and (for many) living away from home and overestimated (based on previous relevant experiences) their adjustment at RIG or, more exactly, their readiness to pursue their dual career at RIG. As the year progressed, more awareness and understanding of the reality came and led to re-evaluation of the adjustment process and outcomes.

Results of the study provide support but also challenge some previous research on athletes' career development. The relevant study areas include: dual career research (e.g., Aquilina, 2013; Elbe & Beckmann, 2006; Emrich et al., 2009; Gaston-Gayles, 2004; Gustafsson, Kenttä, Hassmén, & Lundqvist, 2007; Jonker et al., 2009; Ryba, Stambulova, Ronkainen, Bundgaard, & Selänne, in press; Uebel, 2006; Wylleman et al., 2007), the junior-to-senior transition research (e.g., Bruner et al., 2008; Pummell et al., 2008; Stambulova, 1994, 2009; Stambulova et al., 2012; Vanden Auweele et al., 2004) and research on the transition to higher level training environments (e.g., Poczwadowski et al., 2013; Verkooijen et al., 2012). Results of this project support previous studies in emphasizing that athletes have to meet higher demands while transitioning to the next level in sport, studies or both, and to cope successfully they need good time and energy management, effective recovery skills, and social support from coaches, peers,



family, teachers, and experts. The aforementioned studies are usually relevant to adolescent athletes and many consider athletes' identity formation as a part of their development and adjustment in the athletic or other transition. In many of these studies athletes' athletic identity is measured using the AIMS (Brewer et al., 1993) and conclusions are made that talented juniors aspiring to become elite senior athletes usually have high athletic identity. At the same time, the transition literature communicates a precaution in that having a high and especially exclusive athletic identity is a risk factor in terms of a career ending injury (or similar) and premature dropout from sports (e.g., Lally, 2007; Lavalley & Robinson, 2007; Stephan & Brewer, 2007; Warriner & Lavalley, 2008). Meanwhile, few studies measured the non-athletic dimensions of athletes' self-identities. For example, Richard (2008) identified nine various identities in Swedish adolescent football players, and Engström and Stambulova (see in Engström, 2011) developed the SIMS to determine how much student-athletes identify themselves with their student role. Results of the present study showed that high athletic identity of RIG student-athletes was well complemented by their lower (but still salient) student identity. It is also interesting to note that in spite of no significant dynamics of both identities, there is an increase in standard deviations of both identity variables in the second measurement compared to the first. This might provide some support to the qualitative data indicating that some processes related to searching for an optimal balance between the two were going on during the first year at RIG. On the individual level changes in prioritizing sport and studies and in personal meanings of both were visible in some interview participants confirming previous research on this issue (e.g., Aquilina, 2013; Ryba et al., in press).

Combining the results of quantitative and qualitative parts of the study we were thinking about what meaning our participants put to "feeling adjusted at RIG" and came to the conclusion that they mainly meant obtaining an optimal balance between sport and studies and also private life. This conclusion led us to define the *optimal dual career balance* as a combination of sport and studies that helps student-athletes achieve their educational and athletic goals, live satisfying private lives and maintain their health and well-being. Findings of this study showed that the participants realized that a constant equal focus on both sport and studies was impossible without compromising their private life, health and well-being. Therefore, obtaining the optimal balance should imply *shifts in prioritizing sport or studies*, in which the prioritized role and relevant tasks are given more time and efforts whereas the other role and relevant tasks are maintained to the degree of allowing a quick comeback when necessary. For example, in the period of preparation for important competitions, educational load should be decreased; and when school tests are on the agenda, training time and loads should be lowered. We suggest a combined planning for the competitive season and educational year including necessary shifts in prioritizing between sport and studies (or even to private life, if important events are expected) for certain periods of the educational or sport cycles. Student-athletes, their teachers, coaches and (if possible) dual career support service providers should be involved. Referring from this point to the postulates of the *winning in the long-run* philosophy, we can add that the first step to becoming a *winner in the long-run* is becoming a *winner in the short-run*. That is, for RIG student-athletes to feel well-adjusted at RIG and use this resource environment for the benefit of both sport and studies.

#### Methodological reflections

Although combining quantitative and qualitative findings of the study was a challenge, we think that using a mixed-method design was an advantage helping us not only to trace major tendencies in

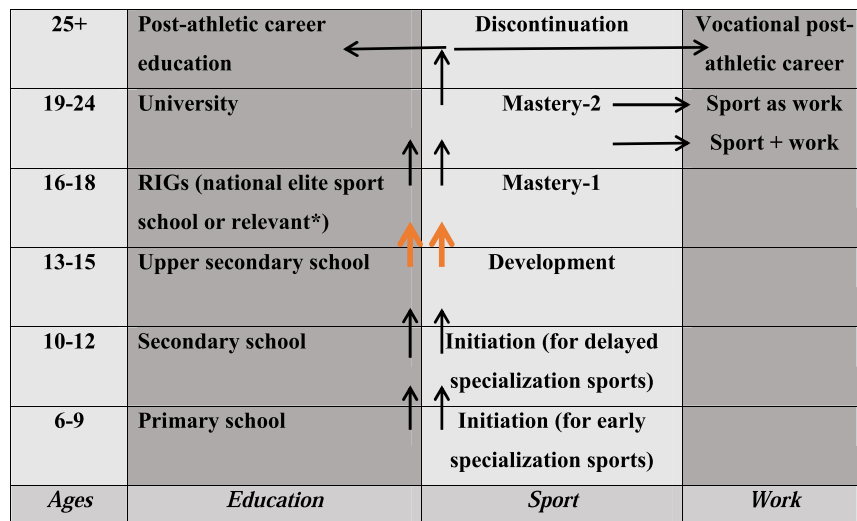
student-athletes' transition to, and adaptation at RIGs (the quantitative part), but also to pick up nuances in the adaptation process that could not be caught by statistical analyses (the qualitative part). Based on the recommendations provided by Yardley and Bishop (2008), we adopted a pragmatic approach already used in the transition research (e.g., Poczwadowski et al., 2013) when deciding to use quantitative or qualitative data or both depending on the specific nature of each research objective. For example, in studying the dynamics of the student-athletes' adaptation at RIGs we considered the quantitative approach as dominant and the qualitative as supportive (the first objective), whereas in exploring how student-athletes balance their two roles/identities (the third objective) we used the qualitative approach as dominant and quantitative as supportive. Keeping in mind that quantitative and qualitative methods help researchers to discover different, but equally important sides of truth we tried to provide complementary insights from both kinds of our data.

In investigating factors contributing to the student-athletes' perceived adjustment at RIG we relied on two regression analyses (at the beginning and at the end of the year) those demonstrated predictive value of major transitional variables (e.g., demands, coping strategies). More insights into the key role of personal resources in the participants' adaptation process were obtained in the cross-lagged panel analysis that had been previously used in sport and exercise psychology research (e.g., Luszczynska, Mazurkiewicz, Ziegelmann, & Schwarzer, 2007).

Being basically satisfied with the overall design of the study and methods used, we see some limitations to discuss. For example, we wonder how much ten participants who participated in the interviews were representative for the sample of over two hundred participants involved in the quantitative measurements. We also think that at least one more quantitative measurement could help us to better trace and easier interpret the participants' transition/adaptation process.

#### Practical implications

Results of the study provide support for the *EU Guidelines on Dual Careers of Athletes* (2012) in terms of importance of *dual career support services* for student-athletes helping them to successfully combine their sport, studies, and private life spheres. Based on the results of this study, three sets of recommendations have been formulated. The first set is addressed to *dual career (psychological) support service providers* in terms of how to help the first year student-athletes to increase their readiness to, and optimize their adaptation at RIG, aiming at their higher self-responsibility and autonomy in the future. These recommendations are structured following the transition/adaptation process: (a) *before entering RIG* (e.g., to provide clear information about RIG, to organize meetings between incoming and current/former RIG students, to stimulate parents to prepare their kids for independent living); (b) *at the beginning of the educational year* (e.g., to start with planning for the educational year and competitive season, to provide a series of workshops in which experts help the new students with various practical issues, such as budget, nutrition, injury preventions, and housekeeping activities to increase their life skills and other personal resources); (c) *during the educational year* (e.g., to monitor how the plans with prioritizing sport or studies work and make corrections if needed, implementing life skills); (d) *at the end of the educational year* (e.g., individual and group meetings on summarizing lessons learned from the first year at RIG and planning for the next year). The second set of recommendations is addressed to the *RIGs' staff* and related mainly to better coordination of coaches' and teachers' work and congruence of their messages communicated to student-athletes. The third set includes



**Notes:** The arrows marking the transition to RIG (examined in this study) are shown by salient color.

\* "relevant" means other existing pathways of combining sport and studies at this age, e.g., regional and local certificated sport schools (that were out of the scope of this study).

**Fig. 1.** The Swedish dual career model.

recommendations to *student-athletes* from the research group (e.g., to prepare for the RIG demands in advance, to ask for clarification and help when needed) complemented by recommendations given by participants of the study to future RIG student-athletes (e.g., "be serious about both sport and studies", "plan well and be self-disciplined in following your plan", "put demands on yourself in order to develop" "take responsibility", and "have fun").

#### Conclusion, future research and Swedish dual career model

In this mixed-method study a short-term longitudinal design not only allowed to trace the dynamic of student-athletes' adaptation at RIG and its contributing factors, but also shed light on the participants' efforts to search for an optimal balance between their athlete and student roles/identities. This project (the first one of this kind in Sweden) (a) resulted in deeper understanding of Swedish RIGs context and dual career experiences of Swedish adolescent athletes, (b) demonstrated a *key role of personal resources* in the dual career adjustments, (c) added the concept of *winning in the short-run* to the *winning in the long-run* philosophy underlying the Swedish RIG-system; (d) introduced the SIMS as a reliable instrument to use in dual career research in conjunction with the AIMS when studying athletes' self-identity, (e) provided the definition of an *optimal dual career balance* and some insights about strategies (e.g., shifts in prioritizing) on how to obtain it; (f) led to formulating recommendations to RIGs' student-athletes and staff, and (g) gave structure and content to the *psychological dual career support services at RIGs*, emphasizing the empowerment approach in assisting student-athletes in development of their personal resources. This study also stimulated us to set an agenda for future dual career studies by means of drafting the Swedish dual career model (Fig. 1).

The model is inspired by the cultural praxis of athletes' careers paradigm (Stambulova & Ryba, 2013, 2014) and recommendations of the *EU Guidelines on Dual Careers of Athletes* (2012); it is also based on the developmental model of transitions faced by athletes

(Wylleman & Lavalée, 2004). More specifically, the model aligns stages in Swedish educational system with related age markers and stages in athletic as well as vocational careers, showing possible dual career pathways during and right after termination in sports with arrows indicating dual career transitions. Using the Swedish dual career model, the results of this study can be seen as a piece of a bigger puzzle that outlines further research steps, for example, studying transition experiences of RIG student-athletes of different genders and sports, examining RIGs and regional/local certified sport schools as dual career environments with an emphasis on resources/benefits and barriers/constraints they bring to student-athletes, exploring the transition from RIG to university level with a focus on dual career support services assisting with readiness for the transition, and others. More generally, the model suggests an agenda for future dual career research in Sweden, potentially leading to the national system of dual career support services, but it also can serve as an example of how dual career researchers in other countries can proceed with planning for their research and applied agendas.

#### Acknowledgment

The authors are grateful to the Swedish Sports Confederation for financial and organizational support of this project (grant # 700/10-51) and also to all the RIGs and participants involved. The authors thank Andreas Ivarsson for helping with the cross-lagged panel analysis of the data.

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