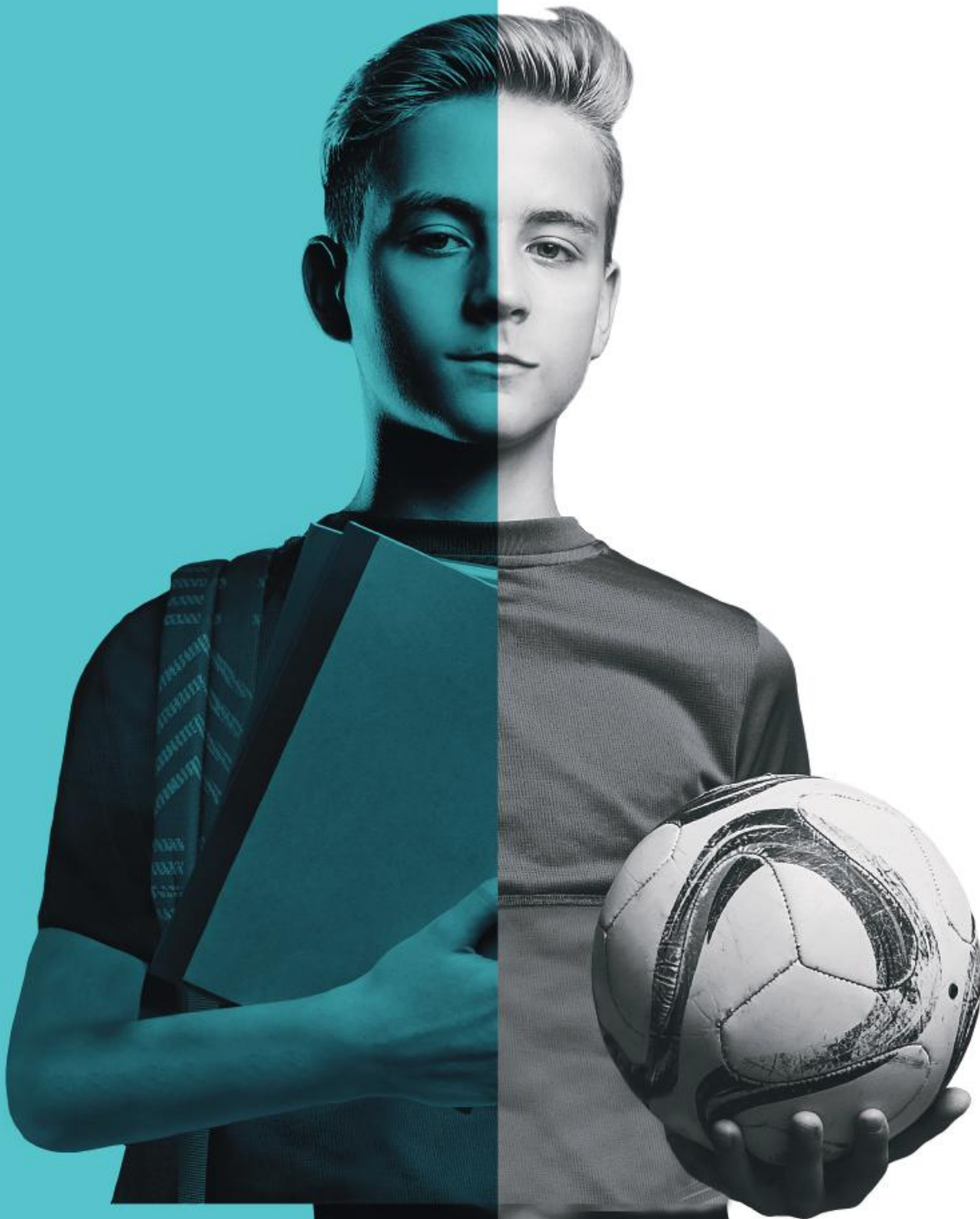


DCJA

Dual Career for Junior Athletes

HANDBOOK

December 2022



This handbook has been produced as the output of the project: **“Dual Career for Junior Athletes”**.

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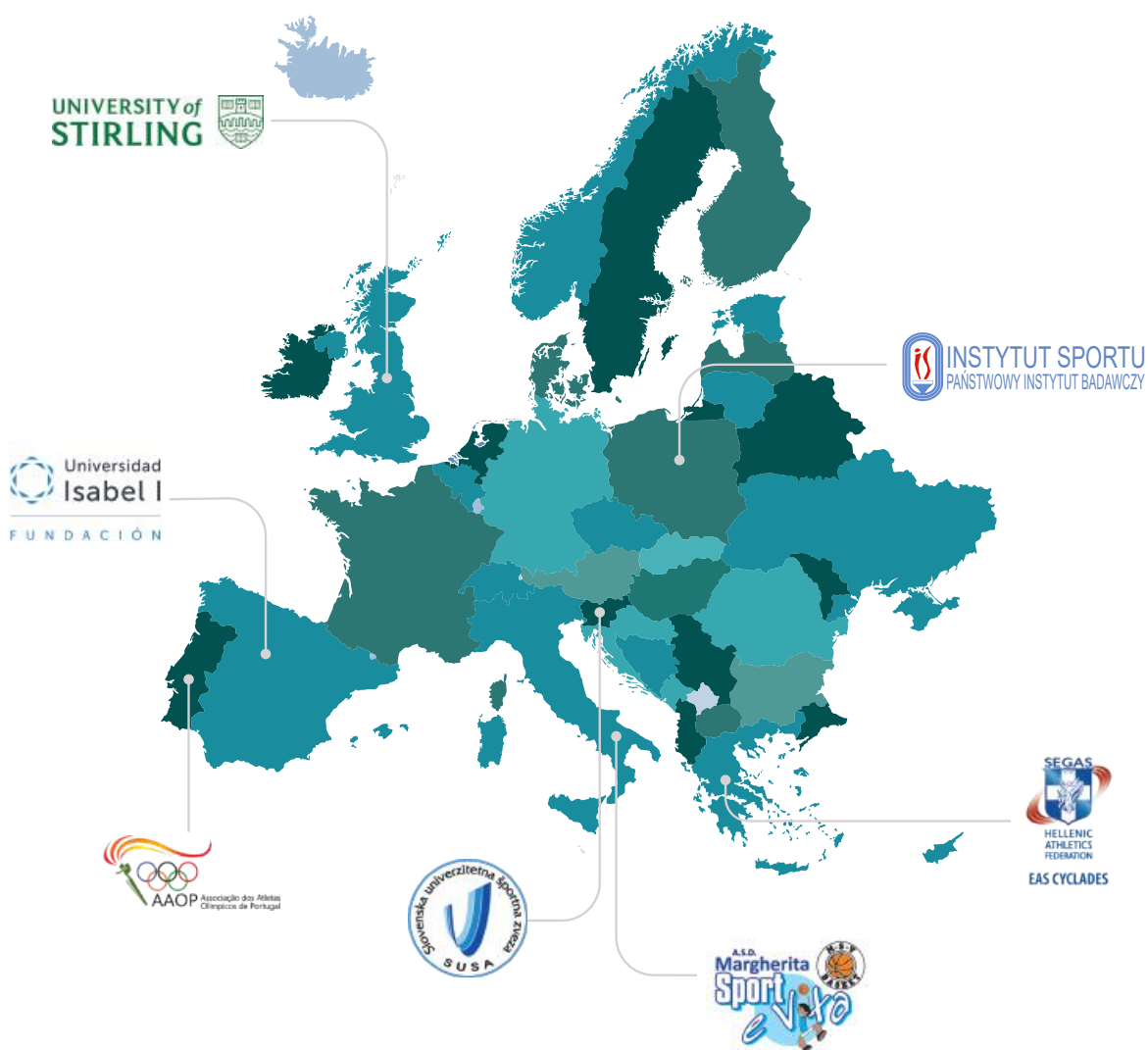
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Introduction to the project

Consortium

PARTNERS



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The Institute of Sport – National Research Institute (IS)



The Institute of Sport was established in Warsaw by Regulation of the Prime Minister in November 1977, as an independent research unit, and has held the status of National Research Institute since November 2015. The motto of the Institute is “Science for sport, sport for science”, as

they strive to implement innovations from science into the domain of sport. The Institute of Sport is actively involved in numerous research and applied projects aimed at education, optimising performance and development in the sport domain. Additionally, the Institute of Sport is a national coordinator of Team 100 and Team 100 Junior programs aimed at supporting athletes between 16-23 years old.

Slovenian University Sport Association (SUSA)



The Slovenian university sports association (SUSA) is a non-profit NGO that operates at a high educational level in Slovenia. SUSA is organised as an association of university

sports organisations that operate at a university level in Slovenia. SUSA’s key activities include organising extracurricular sporting activities for students at university level in Slovenia (recreational, competitive), the organisation of the participation of Slovenian student and international student sport competitions, and the coordination of university sport organisations at universities in Slovenia.

Margherita Sport e Vita (MSV)



Margherita Sports and Vita (MSV) was appointed to create conditions for the development of sports activities in the Inhabitants of Margherita of Savoia and its

surrounding areas. It is located in Southern Italy 75 km from the Bari the capital of the region. The organisation’s objectives consist of contributing to regional development and widening opportunities for the local community and preparing training of teachers and students through inter-school partnerships; and the introduction, planning and management of new proposals that are subsidised by the EU.

The University of Stirling (UoS)



Stirling is an international university that welcomes the world with proud Scottish hospitality. Thinking and working globally is part of their daily teaching and research practice. The University has partnerships with over 70 universities worldwide and

the contribution from our international students and staff is crucial to our continued success and global outlook. University of Stirling offers their students experiences of a lifetime through the Study Abroad programme and prepares them to thrive as global citizens in an increasingly connected world. The University of Stirling is well-known as Scotland’s university for sporting excellence.

Fundación Universidad Isabel I (FUI1)



Fundación Universidad Isabel I (FUI1) was created in 2010 as a private, non-profit, and independent institution with its own legal personality. From the beginning, the main goal of FUI1 has been to contribute to the

advancement of society through activities with a strong focus on education, culture, health, science, sport, and the promotion of R&D. Fui1 also works towards the inclusion of people at risk of physical, social, and cultural exclusion; the promotion of values and the development of new information and communication technologies that contribute to human and social progress.

EAS SEGAS CYCLADES (ESC)



EAS SEGAS CYCLADES (a Union of Athletics Clubs) is a legal entity representing 13 Athletics Clubs on 11 Cycladic islands in the South Aegean Region. Their headquarters

are situated in the heart of the Aegean Sea, on the famous Island of Mykonos. In the Union, there are more than 1.000 amateur athletes, including children (aged 6 and above) teenagers, and youngsters, some of whom have participated at a high level in the Olympic Games, the World and European Championships in addition to being members of the Greek National Athletics Team.

The Portuguese Olympic Athletes Association (AAOP)



The Portuguese Olympic Athletes Association (AAOP) was founded in 2003 by a group of former Portuguese Olympic Athletes with the aim of promoting solidarity and strengthening ties between them.

Additionally the AAOP also has a strong educational approach, promoting and disseminating the values of the Olympic Movement, whilst supporting the development of youth education through sport. Since its inception, the AAOP has continued to work with several sports organisations collaborating in the development of sports, recreational and cultural activities, in the interest of its members.

Aims & objectives

The Dual career of athletes is among the key priorities set by the European Commission since 2014 with an objective to build knowledge and applied solutions by the implementation of Erasmus+ Sport projects.

The DCJA (Dual Career for Junior Athletes) project's primary aim was to increase awareness of the importance of dual careers among both young athletes and their social supporters. The project was designed to enable a dialogue among participating countries (Poland, Italy, Spain, Portugal, United Kingdom, Slovenia, Greece) and to highlight issues, through conducted research

(secondary and primary data), which junior athletes face in their respective countries. As a result of conducted baseline study, suggestions of good practices for implementation on different governance levels in the respective countries were listed, with the aim of serving as a working example in other Member State countries. The ultimate goal of the DCJA project was to deliver an online, open course platform (MOOC) with evidence-based content to help young athletes and their social supporters address major challenges found in both education and sport during dual careers. In figure 1, presented below, the general objectives of the project are presented, with respective actions carried out to achieve them.



Figure 1. Objectives and actions of DCJA project.

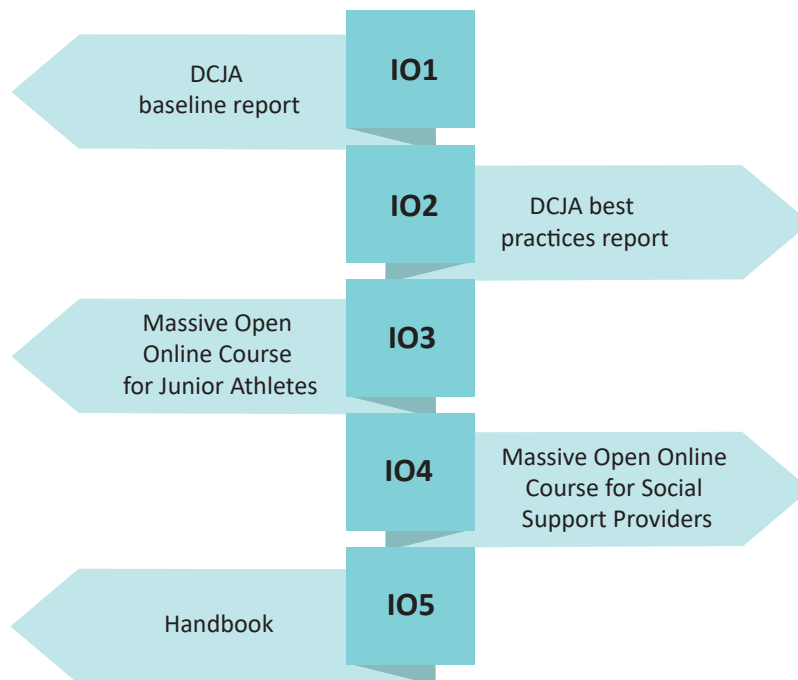


Figure 2. Intellectual outputs (IOs) in the DCJA project.

Following the implementation of the actions and completion of the IOs, junior athletes and their social supporters are expected to have increased knowledge of benefits and challenges associated with a dual career. Addressing the needs of athletes at an early stage of development is expected to positively contribute to their wellbeing and growth towards a higher

level of professionalism within their sporting career. Moreover, mapping the good practices on the policy-making level, together with other project results, will enable other Member States to implement the best solutions for the dual career of junior athletes at various levels of governance.

Rationale and theoretical background

The dual career of athletes is a vastly discussed topic on the agenda in both the academic field and programmes informing EU policies. Actions are being taken across

European countries, which attempt to implement EU Guidelines on Dual Careers of Athletes. However, while existing programs are targeting predominantly

adult populations, few initiatives have been undertaken specifically in relation to younger athletes. Young athletes in the population, aged from 15-19 years, are at a high risk of dropping out of either education or professional sport (e.g., Baron-Thiene & Alfermann, 2015). Research indicated that athletes who pursue dual careers often face substantial burdens, due to the accumulating demands of both education and sport (e.g., Wylleman & Lavallee, 2004). Encountered challenges such as these, together with a lack of support from significant others, is likely to lead to disturbed and unbalanced development in either sport or education, or in both at the same time (e.g., Knight et al., 2018). The difficulties experienced by athletes often accumulate when life workloads and sports training begin to require more attention and effort. Young athletes often begin struggling to meet these growing demands.

To conceptualise the potential crossover of further demands, Wylleman and Lavallee (2004) introduced a developmental model based on research of athletes' interpersonal relationships (Wylleman, 2000; Wylleman, et al., 2007), dual careers of elite student-athletes (Wylleman et al., 2004), and retired athletes (Wylleman et al., 1993). The lifespan model represents a holistic perspective of development, including four different levels of athletes' development: athletic, psychological, psychosocial, and academic and vocational development. After about a decade, the Holistic Athlete Career (HAC) Model was introduced, which includes five different levels of athletes' development: athletic, psychological, psychosocial, academic/vocational, and financial (Wylleman, et al., 2013). The HAC Model (Wylleman, et al., 2013; see Figure 3) served as the underlying framework for the DCJA project.

AGE	10	15	20	25	30	35
Athletic Level	Initiation	Development	Mastery		Discontinuation	
Psychological Level	Childhood	Adolescence	(Young) Adulthood			
Psychosocial Level	Parents Siblings Peers	Peers Coach Parents	Partner Coach Support staff Teammates Students		Family (Coach) Peers	

AGE	10	15	20	25	30	35
Academic Vocational Level	Primary education	Secondary education	Higher education	Vocational training Professional occupation		
Financial Level	Family	Family Sport federation	Sport federation NOC Sponsor	Family	Employer	

Figure 3. Holistic Athlete Career (HAC) Model (Wylleman, et al., 2013).

As shown in the HAC model, the 15-19 year age group targeted by the DCJA project highlighted a crucial decision process, especially when it came to academic development and athletic development. At that age, young athletes often faced the choice of pursuing further education, whilst at the same time undergoing rapid development with sport participation and entering mastery level. This is the time when the demands of both education and sport are too high to cope with, resulting in the highest dropout rates in both sports and in education (Guille, Sarrazin, Carperten, Trouilloud et al., 2002; Marsh & Kleiman,

2003; Grissom, 2005; García, Leo, Martín & Sánchez, 2008; Ruiz, Salinero & Sánchez, 2008).

The DCJA project offers a prevention-based intervention, allowing young athletes to foresee common challenges and barriers, and give them practical tools to cope with such demands. Aside from young athletes, the project is also directed to young athletes' social support providers with the aim of increasing their awareness and providing practical knowledge and tools to encourage and assist athletes in their dual career path.

Previous projects on the dual career topic

The topic of education in and through sport, as described in the White Paper on Sport (2007), emphasised the need to foster the dual careers of athletes, as one of

the key issues listed in Sport Action of the Erasmus+ programme. Since 2014, when the Sport Action programme started, a total of 1174 projects have been approved in

many different areas, from which 509 were collaborative partnerships, 584 were small collaborative projects and 80 were not-for-profit European sports events. Within these projects, a total of 77 schemes that targeted the issue of a dual career in sport were approved.

were smaller partnerships and 1 (1,3%) were not-for-profit European sports events.

The 77 approved projects regarding the dual career of athletes focused on the following policy sectors of the EU guidelines on dual careers of athletes.

Of those 77 approved projects, 66 (83,12%) were collaborative projects, 12 (15,58%)

YEAR	Sport	Education	Employment	Health	Financial incentives for athletes	TOTAL OF PROJECTS
2014	1	-	-	-	-	1
2015	-	2	-	-	-	2
2016	3	2	2	-	-	7
2017	-	2	2	-	-	4
2018	7	5	1	-	-	13
2019	4	6	4	1	-	15
2020	8	7	3	2	-	20
2021	5	5	4	1	-	15
TOTAL	28	29	16	4	-	77

Table 1. Number of Projects related to Dual Career subject categorized by Year and EU Guideline

Considering the high popularity of the topic in the previous projects, the emphasis that was put on developing support for younger athletes was uneven. The DCJA project has been developed to fill that gap, focusing not merely on assessing the needs of athletes aged 15-19 but also providing solution in the form of educational materials and

practical tools to cope with rising demands during their dual career. Moreover, previous projects have largely omitted the importance of social support providers, who play a crucial role in young athletes' development. The DCJA project target this population by offering practical information via the MOOC platform.

Literature review

In order to create evidence-based content that would stand as a continuum to already existing literature, primary efforts within the DCJA organised the existing evidence

regarding the project's key themes. To achieve this goal, a review of the literature was carried out and presented in the remaining section of the chapter.

Overview of the Dual Career in the context of sport

In the last decade, the Dual Career (DC) topic has received more attention from a large number of Member State countries. Most of the conducted research and applied projects implemented focused on the phenomenon of a dual career in sports relating to sport-specific disciplines or particular national contexts; it has also targeted specific populations, such as that of coaches and senior athletes, or concentrated on the transition period after a sporting career ends. For example, DC development has been studied among elite swimmers and basketball players (Tekavc et al., 2015), handball (Ekengren et al., 2018) or football players (Harrison et al., 2020). Research has moreover focused on junior-to-senior transition (Gledhill & Harwood;

2015) and examined gender differences in terms of DC pursuit (Baron-Thene & Alfermann, 2015; Ronkainen et al., 2016). In terms of transition periods, one popular topic in the literature was the retirement of athletes. For example, research by Torregrosa et al., (2015) looked into former Spanish athletes' views on the retirement period, finding that the promotion of DC among elite athletes. In particular, how a prospective view of retirement can facilitate the retirement from elite sport and assist in successfully transferring to an alternative professional career. There is also evidence of life skills development among athletes in the context of a dual career (Hardcastle et al., 2015).

While there is considerable research on a number of topics within the dual career, one population that has seen little interest is a demographic group of adolescents. Teenagers, specifically aged between 15 and 19 years old, encounter critical transitioning periods in both school and sporting life. During this age, there are also critical changes in terms of their biological and psycho-social development (Wylleman & Lavallee, 2004). Understanding the timing and trajectory of changes that occur within this important developmental period is crucial in optimising the future career choices of young athletes and thus, contributing to a balanced life and well-being.

Although generally perceived as highly important, the topic of dual career, has not received equal research attention in all Member State countries. Most research is based on populations from Northern Europe. For example, research conducted by Stambulova and colleagues (2015) examined a number of phenomena relating to DC on the Swedish population. A study by Ekengren et al., (2015), which also focused on a Swedish cohort, employed a qualitative approach to investigate handball players with the aim of building an empirical career model. Another example of a Member State country that has extensive research conducted in this area is Finland. For example, existential learning was explored as an alternative perspective on conceptualising and studying learning in sport (Ronkainen et al., 2021). Other research on the Finnish population investigated dual career construction styles (Ryba et al., 2017). There is some evidence of multi-national research; one example being Kuethe et al., (2017), which examined factors that contributed to the quality dimension of

athletic retirement among Swiss, Danish and Polish former athletes. Despite this research, there is still limited evidence on populations from a number of Member State countries (i.e., Poland, Portugal, Italy, UK, Slovenia and Greece). Furthermore, there has been a specific call (Stambulova & Ryba, 2013, 2014) for multi-national collaboration, which has the potential to enrich knowledge on specific cultural aspects of dual career phenomena.

In the area of dual career topic, research on social support providers is considerably more limited than those focusing on the DC of athletes. Nevertheless, existing literature clearly emphasises the importance of social support providers for athletes to achieve a well-balanced dual career. For instance, one study looked into coaching behaviour and attitudes towards the dual career of athletes (Roinkainen et al., 2018). Other research explored the role of parents in youth sport (Domingues & Goncalves, 2013) and the views of parents on their role as social support providers (Tessitore et al., 2020).

In Europe, one of the milestones for the DC discourse was the release of “The EU Guidelines on Dual Careers of Athletes”, published in 2012. This publication serves as a useful guide for the European community, as it not only presents a tailor-made approach respecting differences in sports, but also the diversity of competences and established practices in Member States with regard to various policy areas. The EU Guidelines Paper provides national stakeholders with a framework of arrangements to create a suitable environment for dual career athletes at different stages of their lives. The most recent literature on dual career often uses the EU Guidelines as an important reference.

This includes an increasing number of studies which investigated the benefits and challenges of dual career among athletes (Stambulova et al., 2015; Stambulova & Wylleman, 2018), as well as the competen-

ces that a dual career requires from athletes (De Brandt et al., 2017; Graczyk et al., 2017) and their social support providers (Tessitore et al., 2020).

Barriers & Challenges

Along with a range of benefits that a dual career might afford young athletes, there is also a substantial need to consider challenges, barriers and disadvantages that athletes might experience in everyday life following this dual pathway. The transition from a junior to a senior athlete is a crucial stage requiring decisions that influence future life. Specifically, it is a key period when young athletes face many obstacles and choices regarding their life goals and ambitions. For this reason, junior athletes, who are soon to transition into senior ranks, should be aware of the difficulties that a young athlete might face at this stage of life and the available solutions and tools to meet expected demands and life goals. This also applies to significant others from the junior athletes' environment including: parents, teachers, coaches, mentors, or friends.

The feasibility of a successful dual career partly depends upon financial and legal arrangements, as well as the policies of key institutions and organisations. In cases of young athletes who combine education and a sporting career, educational institutions play a key role. According to research, junior athletes often experience more difficulties associated with DC as the level of education increases (Harrison et al., 2020).

These findings indicate the need to raise awareness of dual career demands among teachers and other staff across all education levels. Another study indicated that educational institutions had a negative impact on the attitudes of junior athletes towards DC (Geranosova & Ronkainen, 2015). One key deficiency was found to be teachers' prejudice against student-athletes. Research highlighted other difficulties that DC athletes face at an academic level, such as a lack of time to manage school/university commitments and a lack of flexible course delivery; being away from the study locations; scheduling; or teachers' incapacitating attitudes (Stambulova et al., 2015; Ryan, Thorpe & Pope, 2017).

Challenges that relate directly to academic and sport commitments include psychosocial, psychological or socioeconomic backgrounds (Wylleman & Lavalley, 2004). Among these challenges, factors like fatigue, time constraints or inefficient communication with teammates, classmates, teachers and coaches, are problematic for athletes. Additionally, young athletes entering adulthood aim to be more independent, leaving their parents' house to live on their own. Such a transition has a significant impact on finances, which is likely to be an additional burden. Apart from the

foreseen transitions, there are also unanticipated events such as illnesses, injuries or social life events. It is important to recognise the individual and additive effect of these challenges for young athletes who try

to combine education, sport and private life (Aarresola et al., 2017). Figure 4 summarises the barriers and challenges found in existing research on dual career among athletes.



Figure 4. Barriers & Challenges of Dual Career.

Benefits

The dual career of young athletes might be perceived as a complex and demanding way to experience youth, especially when considering challenges and barriers arising from the combination of sport and education. However, increased awareness, understanding, and ability to use available resources are very likely to transform potential challenges into benefits. This, in turn, might make the life of young athletes easier and more enjoyable and further enhance the quality of their lives.

In terms of advantages arising from the dual career, most of the research concerns particular countries or disciplines. Numerous studies (e.g. Tekavc et al., 2015; Lavallee, 2005; Stambulova et al., 2007) have identified benefit athletes at several levels: the health-related level (balanced lifestyle, reduced life stress, and increased well-being); the developmental level (better conditions for the development of life skills and positive effects on athletes' self-regulatory abilities); the social level (positive socialisation effects, expanded social network/support systems, and better peer relationships) and the financial level (higher employability and access to well-paid jobs). Likewise, there is increased attention on the importance of dual career in relation to athletic retirement. Here, the dual career might result in better career/retirement planning, shorter adjustment time, and avoidance of identity crises (EU Guidelines, 2012). A dual career was also found to have a positive influence on sport systems as a whole, by encouraging young people to participate in sport and

parents to introduce their child into the sporting side of life (Stambulova et al., 2012).

When considering benefits and challenges related to a dual career among junior athletes, it is critical to bear in mind that a dual career additionally depends on a socio-cultural context and local conditions (Stambulova et al., 2015). Available resources, policies or attitudes of key stakeholders substantially differ between Member States. Therefore, it is important to consider tailor-made frameworks and arrangements when approaching the dual career concept. Figure 5 illustrates the benefits of dual career based on results from the literature review.

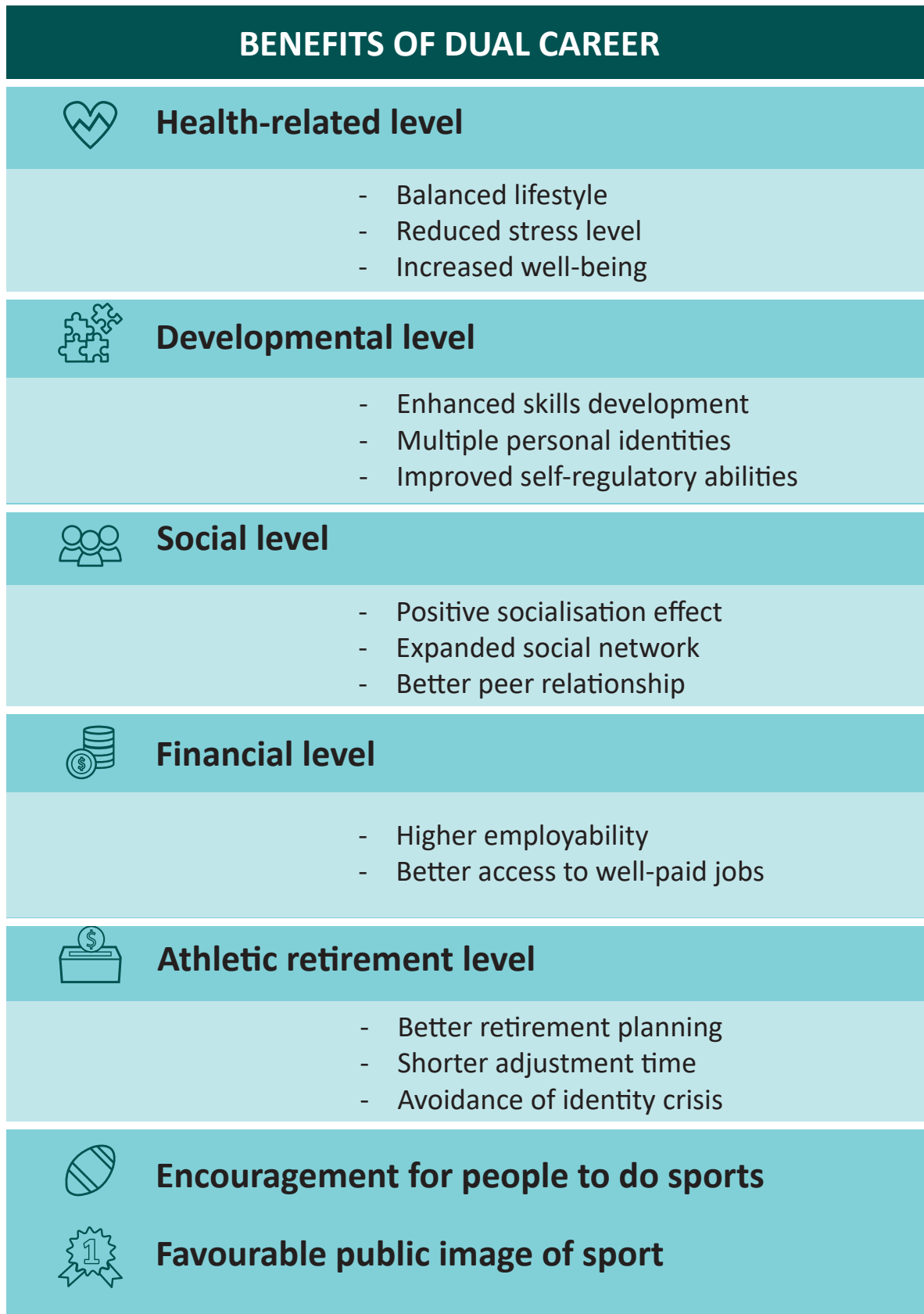


Figure 5. Benefits of Dual Career.

Competences in Dual Career

Combining two significantly different life domains, sports and education, requires a number of competences to be developed by athletes (Stambulova & Ryba, 2013). Research conducted by Ryan (2015) pointed out the importance of having other life interests, besides sport, as a factor enhancing an athlete's sporting performance. In this study, athletes considered themselves as better coping in sport "when pursuing other interests alongside their athletic dreams". Research by Gledhill and Harwood (2015) suggested, in turn, that different social competencies ('encompassing cognitive, affective and behavioural elements') are essential to go through career transitions successfully.

De Brandt et al. (2018) distinguished four main competences required to fully succeed in DC: DC management (effectiveness in combining sports and education), Career Planning (having plans for athletes' future on many levels), Emotional Awareness (ability to deal with different emotions and multi-level stressors) and Social Intelligence & Adaptability (athletes' interpersonal, support seeking and adaptive competencies). The four competences were used to construct the Dual Career Competency Questionnaire for Athletes (DDCQ-A). Each item of DDCQ-A provides information about the perceived importance of described competence and athletes' possession of each competency. In terms of the four-factor DC competencies, existing literature (De Brandt et al., 2017; Perez-Rivases et al., 2019) highlighted the fact that student-athletes perceive these competencies as

relevant and express the need to develop them to succeed in DC. Considering DC competencies in terms of differences between individual and team sports, Graczyk et al. (2017) found out that team sport athletes lay more emphasis on making contacts within a team, whilst female athletes are more skilled in managing DC.

Role strain is another aspect that can possibly clarify DC competencies. The role strain is regarded as "the felt difficulty in fulfilling role obligations" (Goode, 1960; p.483 as cited in van Rens et al., 2016) and can be experienced in both social and sport fields (van Rens et al., 2016). Van Rens et al., (2016) distinguished the five most prominent sources of role strain: overload in school (difficulty in performing in a sufficient way at school), overload in sport and between roles (difficulty in combining sport and social roles), between-role conflict (prioritising one role over another), underload (considering yourself as not challenged enough by the environment) and ambiguity (lack of clarity in terms of what others expect). The five sources have been used to construct the Role Strain Questionnaire for Junior Athletes (RSQ-JA). The RSQ-JA questionnaire is considered as an adequate tool for monitoring a player's wellbeing (Gledhill, Harwood & Fordyke, 2017). Van Rens, Borkoles, Farrow and Polman (2018) found that all components of role strain affected, negatively, total life satisfaction among junior athletes. Moreover, they noticed that DC overload and underload explained most of the variances regarding

life satisfaction levels. Developing DC competencies could be helpful while transitioning on an academic level, specifically, from high school to university studies. In some Member State countries (e.g., UK) such transitions take place simultaneously while becoming a senior athlete (Toms & Bridge, 2008). MacNamara and Collins (2010) stressed the importance of preparing for these transitional challenges by “acquiring and consolidating the skills, attitudes and behaviour needed to move from dependence on others to both self-reliance and independence”. This study placed a particular emphasis on encouraging athletes “to take responsibility for their learning and self-regulate their behaviour in anticipation of the autonomy, increased competition, and higher standards of the university environment”.

Research demonstrates that athletes have difficulties in allocating personal resources equally between both life domains, sport and education. Findings from Stambulova, Engström, Franck and Lindahl (2015) suggested that junior athletes placed more coping effort into dealing with sporting issues rather than educational or private matters. It was suggested that at the end of the educational year, when demands were rising, student-athletes’ strategies of planning and of emotion regulation were used more. Moreover, athletes who consider themselves to be well equipped with personal resources, at the beginning of the school year, perceived lower levels of the dual career demands (Stambulova, Engström, Franck & Lindahl, 2015). These findings suggest that developing competencies among young athletes can help them to successfully deal with upcoming issues encountered on a dual career path.

It is worth noting that some challenges that athletes face during their DC career can lead to them quitting sport. Among Norwegian athletes, the highest drop-out rate was recorded around the age of 17 (Enoksen, 2011). In related work, Baron-Thiene and Alfermann (2015) noticed that fewer bodily complaints, higher self-optimisation and higher win orientation were factors supporting career continuation. The authors suggested that personal resources (e.g., social orientation, achievement orientation, self-optimisation, loss of focus) are significant predictors of well conducted transition to senior careers.

Competences of Dual Career Social Support Providers

Additionally, dual career competencies can be considered in terms of abilities owned by athletes' support social providers (e.g., coaches, parents). According to GEES (Gold in Education and Elite Sport; Wylleman, De Brandt & Defruyt, 2017) "a DC support provider (DCSP) is a professional consultant, related to an educational institute and/or an elite sport organisation – or certified by one of those – that provides support to elite athletes in view of optimising their dual career/combination of elite sport and education". Studies showed that athletes tend to highlight the need for a social support network when struggling to maintain their DC path (Knight, Harwood and Sellars, 2018). According to adolescent athletes' perspective, supportive surroundings provided by a parent or a coach is desirable when learning to cope with stressful events (Tamminen & Holt, 2012). Tamminen and Holt (2012) highlighted that, with a supportive environment, an athlete can feel comfortable in discussing ways of coping with stressful situations and improve opportunities for learning about them. Therefore, the role of a support provider requires a number of skills to be an adequate facilitator for an athlete. One of the first steps in understanding athletes' challenges in combining school and elite sport is the recognition of DC needs by a social support network (Knight, Harwood and Sellars, 2018). In this way, parents would be able to adjust their behaviour to athletes' daily struggles, and find solutions in coping with DC, minimise barriers in

different fields and discover a way to foster athletes' independence (Knight, Harwood and Sellars, 2018).

When it comes to social support providers, studies often highlight the role of an athlete's parent in maintaining a DC (O'Neill, Calder & Allen, 2015; Varga et al., 2021; Tessitore et al., 2020; Park & Kim, 2014; Gjaka et al., 2021). Parents can possibly be better observers beholders (than a teacher or a coach) of athletes' daily stressors (O'Neill et al., 2015) due to an increased time spent together. Nonetheless, while parents are often aware of their children's problems, such as time management issues, they are not usually able to recognise issues with drugs or other stimulants. Moreover, O'Neill, Calder and Allen (2015) drew attention to the issue that parents rarely get any formal training about better supporting their children-athletes. Relating to this, we can find another example of the EU funded Erasmus+ Collaborative Partnership called "Education Model for Parents of Athletes in Academics" (EMPATIA, 2020) that gives practical tips for DC athletes' parents. The programme highlights 4 parts called "why, what, how & where" which in a simple way of explaining DC athletes' needs to a parent. Athletes themselves further acknowledge the cooperation of social supporters from different fields (e.g., parents with coaches) is necessary to get an integrated message from everyone (Knight, Harwood and Sellars, 2018).

In order to measure competencies among support providers, Defruyt et al. (2019) proposed the Dual Career Competency Questionnaire for Support Providers (DCCQ-SP). The DCCQ-P scale distinguishes key competencies for support providers (Advocacy and cooperation competencies, Reflection and self-management competencies, Organisational competencies, Awareness of student-athletes' environment, Empowerment competencies, and

Relationship competencies). Research conducted by Defruyt et al. (2021) showed that support providers are generally aware of the need to develop those skills and that understanding athletes' demands comes with the experience of being the support provider. Figure 6 below lists some of the required competences of dual career athletes and the competences of their social support providers.

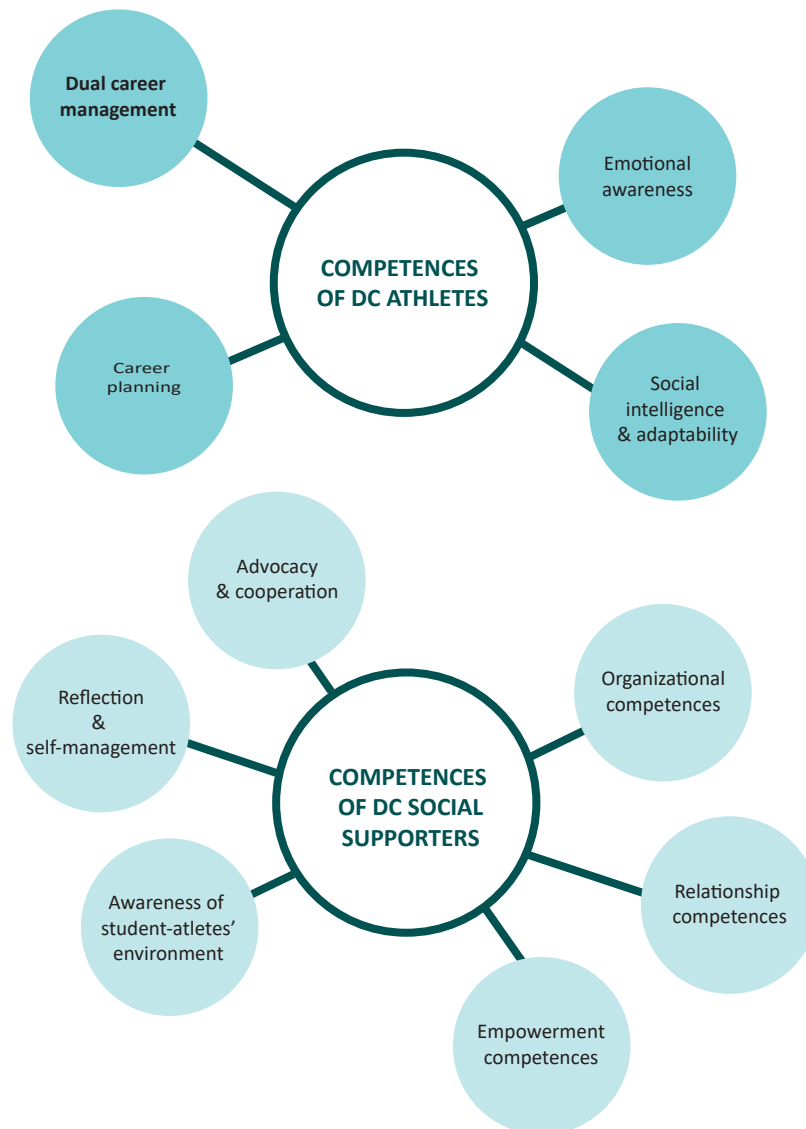


Figure 6. Competences of dual career athletes and social support providers.

Baseline Study Report

Introduction

Dual careers, combining sport and education or sport and work, can be beneficial for athletes, helping them to balance sport and non-sport commitments in preparation for 'life after sport' (Aquilina, 2013; Carless & Douglas, 2013; Henry, 2013; Lally, 2007). The benefits of engagement in dual careers include the development of employability skills, financial security, and well-rounded identities, less life stress, and the establishment of a good social network and plans for retirement (Petitpas, et al., 2009; Price, et al., 2010; Tekavc, Wylleman, & Cecić Erpič, 2015; Torregrosa, et al., 2015). However, researchers have identified that dual career athletes face challenges and barriers, such as time constraints when balancing sport and education (Cosh & Tully, 2015; Ryan, et al., 2017). Other researchers have also investigated dual career athletes' coping strategies to overcome difficulties caused by managing two different commitments simultaneously, such as distancing, rationalisation, active agency, self-disciplining, and responsibility transfer (e.g., Schubring & Thiel, 2014). Therefore, the need to support athletes to help them balance their lifestyle has been highlighted and some

career support programmes have been established to address such needs (e.g., Gordon, et al., 2005). Junior athletes in this study were defined as student-athletes aged between 15 and 19 years of age, who are adolescents and/or young adults. These student-athletes are likely to be at risk of dropping out from sport; a failure to balance dual careers may be one of the reasons for athletes 'dropping out' (Baron-Thiene & Alfermann, 2015). Also, during this timeframe, the target group of athletes may face the junior-to-senior transition, which is considered challenging and may cause a high dropout rate, because athletes struggle to balance sport and non-sport activities (e.g., Pummell et al., 2008; Stambulova et al., 2012; Stambulova & Wylleman, 2014). This area needs to be addressed to ensure junior athletes' development and success in both sport and education. The primary purpose of the present report is, therefore, to identify existing support systems offered to junior athletes to better understand current practices within sport organisations, sport clubs, and national governing bodies in different European countries.

Methodology

Firstly, ethical approval was sought and granted by the University of Stirling's General University Ethics Panel (GUEP). Following this, between March 2020 and June 2020, desk-based data collection was used.

To identify any structured support services and systems used to help junior athletes in managing their dual careers, data were collected from the websites of sport organisations, youth sport clubs, and schools in

seven countries – Greece, Italy, Poland, Portugal, Slovenia, Spain, and the United Kingdom. Data collection was conducted by researchers in each country who are native to each language (i.e., English, Greek, Italian, Polish, Portuguese, Slovenian, and Spanish).

Data from each country were collected using a template provided by the leading partner (UK) (Morris et al., 2020), which focused on understanding; 1) the sports

system (Centralised or Decentralised), 2) presence of sports school, 3) level/type of organisation (e.g. scholarship schemes, charities, higher education institution, sports governing bodies, etc.), 4) name of organisation, 5) name of support services/programmes, 6) type of support services/programmes (e.g. educational, financial, psychological, vocational, etc.), and 7) eligibility (e.g., target age group).

Results

Structured organisational support services or systems provided to junior dual career athletes

The seven consortium members in their respective countries (Greece, Italy, Poland, Portugal, Slovenia, Spain, and the United Kingdom) identified between 10 and 36 organisational support services/systems for junior dual career athletes. The identified support services/systems are provided by different types of sport organisations, including charities, governmental institutions, local authorities, sports governing bodies, sports clubs, higher education institutions, sports schools, sports academies, and leisure operators. Although other levels of support mentioned in the HAC Model were identified, it is notable that financial support, such as small grants to cover travel expenses and equipment and scholarships for attending higher education institutions, were noted as the most common support across the sport organisations and countries. Educational support, such as tutoring and managing dual careers, was provided =

by mainly higher education institutions and national sports governing bodies through their support programmes (e.g., Winning Students programme and Performance Lifestyle in the UK). Some countries, such as Italy and Portugal, provided vocational support to athletes to help them integrate into the work environment. For instance, in Italy, athletes are appointed as army, air force, and carabinieri personnel during their sport career, which allows them to develop their career outside of sport and secure their jobs in one of the defence sectors once they retire.

Most of the support identified is not limited to junior athletes, but includes them with older athletes. The support provided by a small number of secondary schools, as well as sports schools, contrastingly and solely targets junior athletes aged between 15 and 19-years-old. Such support is limited to tutoring or academic flexibility (e.g., rescheduling exams, assignments). In the case of junior athletes, aged between 17 and 19, who attend higher education insti-

tutions in the UK, they can receive a holistic support service including tutoring and academic flexibility via support programmes, such as Performance Lifestyle. This holistic support includes support from a sports psychologist and nutritionist,

strength and conditioning coaches, physiotherapists, and dual career management staff (e.g., timetabling, communication with lecturers and coaches, applying for an extension for assignments/exams in advance, etc.).

Similarities or differences between the seven countries

All countries participating in this study have a centralised sports system. These bodies (e.g., Ministry of Culture and Sports [Greece], Ministry of Sport [Italy and Poland], Ministry of Education [Portugal], Ministry of Education, Science and Sports [Slovenia], Ministry of Sports and Culture [Spain], UK Sport [UK]) are responsible for establishing and implementing a support scheme for the dual careers of junior athletes. However, there are no specific schemes/systems identified for junior athletes with dual careers developed by those bodies. Although UK Sport has developed the Performance Lifestyle programme to assist athletes in balancing different commitments during their sporting career, the services are not tailored for the target population in this project/report.

Five countries have no sports school system, while Poland (e.g., Sport Mastery Schools) and the UK (e.g., Glasgow School of Sport) have such systems in place. However, among those countries that do not have a sports school systems, some of them do have an equivalent form of initiatives. For example, with regard to Spain, the policies have been centralised by the National Council of Sports and its programme for dual career support (PROAD) for elite athletes. In the last decade, some public bodies like Junta de Castilla y León, Junta de Extremadura and Gobierno de las Islas Baleares

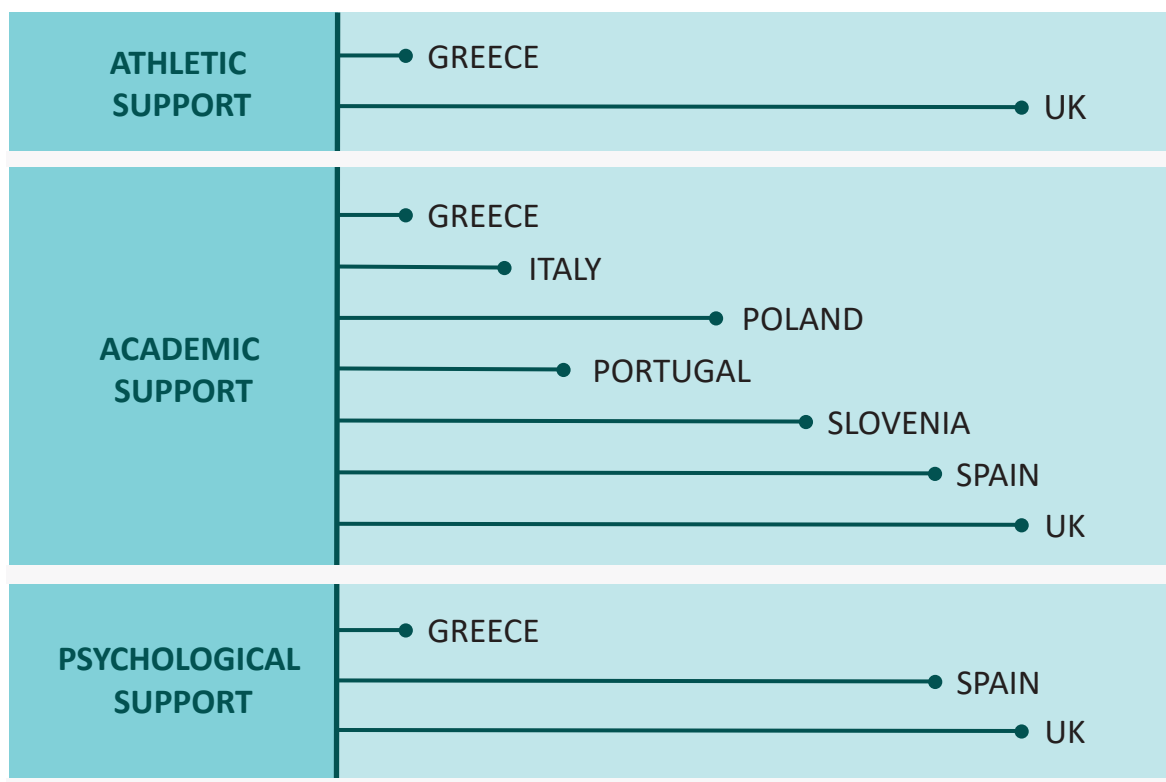
have made contributions to increase dual career support facilitation at a regional level. In the compulsory school sector of Italy, the Sport Lyceum was recently established, within humanities and scientific subjects. In the last 6 years, the number of participants has increased at the national level. In Greece, sports schools, both primary and secondary levels, operated for 20 years until its national financial crisis. There are verified programmes at the secondary level of education (secondary schools), called Sports high school programmes or Sports departments, specially adapted for young athletes in Slovenia. Moreover, there are some dedicated schools called Unidade de Apoio ao Alto Rendimento na Escola (UAARE; Unity of Sport for High level Athletes in School) that function on a regular basis for regular, non-sporting students and with a special system embedded for high level athletes in Portugal; athletes from variety of sports can attend this system.

The findings associated with a sports school system show that all the countries in this study have not yet established a structured system at the level of secondary school, which can help junior athletes in jointly pursuing sport and education. There was only one country, Slovenia, that identified some support services provided to junior athletes at secondary school (n=14), which

is limited to educational support such as tutoring and academic flexibility. This indicates that a structured support system/service within secondary schools, and one designed with a holistic approach to assist junior athletes in balancing the two different commitments (sport and education), is lacking.

As emphasised in the previous section, many of the sport organisations across the participating countries provide financial support in the form of a small grant to cover equipment, travel expenses, and sport science and medical support through physiotherapy services or sport psychology consultations. Higher education institutions

in the UK, such as the University of Stirling and the University of Bath, have holistic support for student athletes as mentioned earlier, but not at a secondary school level. Although other countries such as Italy, Poland, Portugal, Spain, and Slovenia identified some support from their higher education institutions, this is limited to educational or financial support such as tutoring, academic flexibility, scholarships, fee waiver, and grants. As aforementioned, some sport organisations offer athletes vocational support (e.g., Italy, Portugal, Spain, and the UK). However, the majority of support appears to focus on education over vocation.



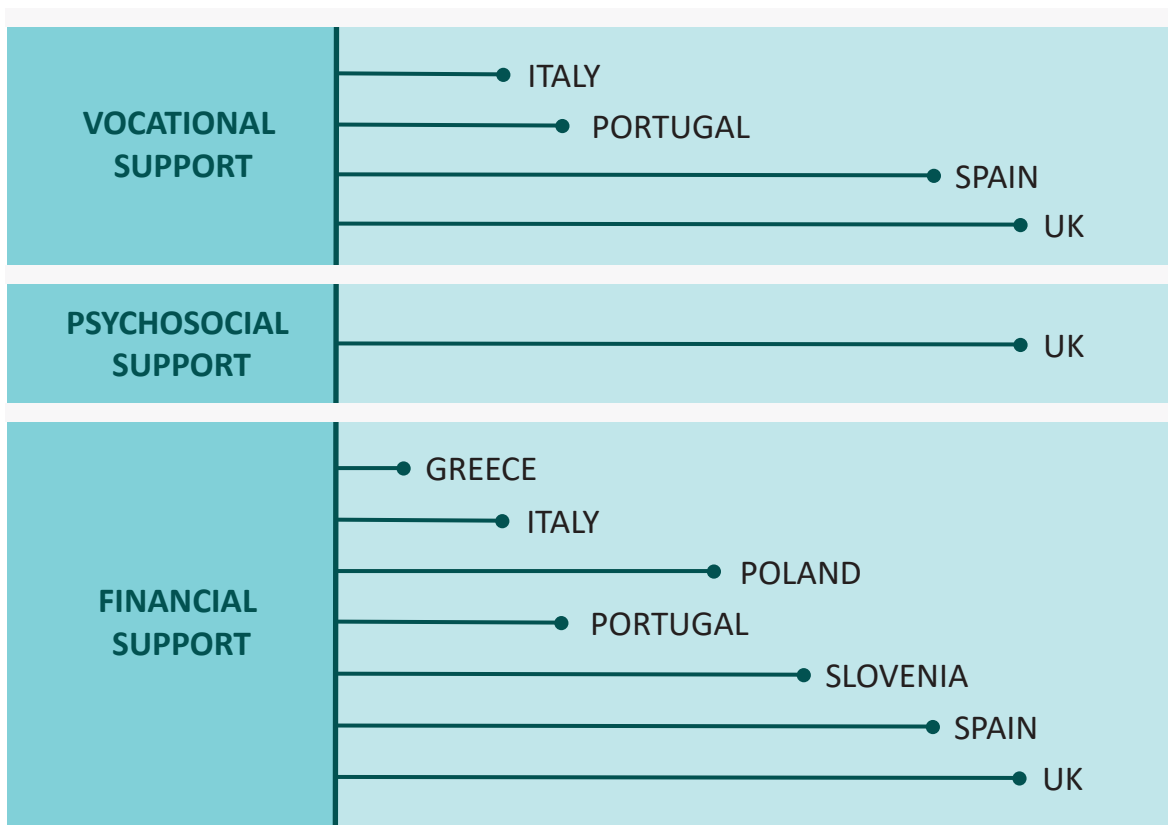


Figure 7. Degree of Support for Dual Career Junior Athletes among Partner Organisations.

Conclusion

The study aimed to understand the type and level of support provided to junior dual career athletes within sport organisations, sports clubs, and national governing bodies in different European countries. The findings from this study extend the knowledge of organisational support for junior athletes with dual careers and identify a clear gap in both literature and practice – a lack of a holistic support system for junior athletes aged between 15 and 19 years old. The

study also highlights the importance of taking a holistic approach to support provision. It is hoped that the evidence gathered raises an awareness of the need for a customised support system for junior athletes and contributes to the development of evidence-based support schemes across Europe.

Research study and best practices report

Abstract

Based on the findings that were presented in the baseline report, a larger research project was designed to identify junior athletes' challenges and barriers, and their needs in managing their dual career. Applying a mixed method, both qualitative and quantitative data were collected. For the qualitative data, all partners interviewed both junior athletes, aged between 15 and 19, and social support providers including parents, teachers, coaches, and significant others. A total of 106 participants were assessed (70 junior athletes and 36 social support providers). Four different themes were discussed in the results: Challenges and Barriers, Internal Available Resources (coping skills/strategies), External Available Resources (social/organisational support), and the Support needed. For the quantitative data, a total of 1117

responded to the survey, of which 954 fully completed it (completion rate = 85.4%), representing a very large sample. Data was collected via two different questionnaires: The Role Strain Questionnaire for Junior Athletes (RSQ-JA) and the Dual Career Competency Questionnaire for athletes (DCCQ-A). Overall, both datasets clearly identified challenges and barriers that junior athletes face, such as time constraints, injury, the burden of travel, limited funding/scholarship and both the internal and external resources that they could currently access. The findings also show the additional support young athletes require to manage their dual career paths and ensure balanced lives and wellbeing. Therefore, we have sufficient evidence to develop our online support curriculum in the next step.

Methodology

Qualitative Research

Applying a qualitative approach ensures that researchers can develop an in-depth understanding of participants' narratives (Tracy, 2013). Semi-structured interviews were applied to collect the qualitative data. The seven partners in seven different countries – Greece, Italy, Poland, Portugal, Slovenia, Spain, and the U.K. – interviewed both junior athletes (aged between 15 and 19 years) and social support providers

including parents, teachers, coaches, and significant others. A total of 106 participants were assessed, comprising of 70 junior athletes and 36 social support providers. An interview guideline was developed by the University of Stirling research team, based on a literature review, and all interview data was transcribed for the purpose of data analysis.

With the transcripts, thematic analysis (Braun & Clarke, 2019) was applied to identify themes. Three researchers from the Stirling team led the data analysis process. Each researcher read the transcripts, identified initial codes, and developed some possible themes. All researchers then shared

the codes and themes, and confirmed the final themes via a series of research meetings. All authors reached an agreement with the identified themes to inform the next stage of the project; the development of an online support curriculum.

Qualitative Research

A survey was used to collect quantitative data from junior athletes (3.7% 14 and under, 91.6% between 15 and 19, 4.3% 20 and over) living in the seven partner countries. Participants included 1,170 junior

athletes (51.2% female, 47.6% male) from seven European countries (U.K. = 108, Slovenia = 476, Portugal = 139, Italy = 104, Greece = 121, Spain = 66, Poland = 103). The structure of the survey was as follows:

PART 1: Role Strain Questionnaire for Junior Athletes (RSQ-JA)



The Role Strain Questionnaire for Junior Athletes (RSQ-JA; van Rens, Borkoles, Farrow, Curran & Polman, 2016) was used for this section. Twenty-five items were answered on a 5-point Likert scale from 1 = never to 5 = very often. Items were grouped under the following factors – Overload in sport and between roles, Ambiguity, Overload at school, Underload, and Conflict.

Part 2: Dual Career Competency Questionnaire for Athletes (DCCQ-A)



The Dual Career Competency Questionnaire for Athletes (DCCQ-A; De Brandt, Wylleman, Torregrossa, Schipper-Van Veldhoven, Minelli, Defruty, De Knop, 2018) was used for this section. Twenty-nine items were answered on a 5-point Likert scale from 1 = very poor to 5 = very strong. Items were grouped under the following factors – Dual Career Management, Career Planning, Emotional Awareness, and Social Intelligence & Adaptability.

PART 3: Background information



Background information about the participants was collected, including their country of residence, gender, age, education, and employment status.

The final English version of the survey was sent to all project partners and was then translated into their local languages and cultural contexts. All versions were then programmed into Online Surveys for the online data collection process. A link to the respective language was provided to all partners, who were responsible for data collection and the distribution of this link to relevant junior athletes in their respective countries. Two researchers from the Stirling team led the data analysis process. Data was downloaded and combined into one master dataset. The researchers created variables for the different factors of the two questionnaires. Summary statistics were then produced for all variables (excluding missing values) over the entire sample, and across demographics.



Results Summary

(Qualitative data)

There were four key areas to consider: Challenges and Barriers, Internal Available Resources, External Available Resources, and

Support needed. Each theme had its sub themes as follows.

Challenges and barriers:

1) Balance between sport and study; 2) Time constraint; 3) Focusing on one over the other; and 4) Issues in sport – injury, burden of travel, limited funding/scholarships.

As expected, junior athletes identified ‘balancing between sport and study’ as their main challenge and barrier, being the most frequently reported outcome. Time constraint was another issue, resulting from struggles to manage two different commitments. Many also found it challenging

to focus on sport when they have some exams and an assignment deadline at school/university. In the same way, it was hard for them to focus on their school/academic work when important training sessions and competitions required their attention and efforts. Further issues were identified, particularly those related to sport itself, as mentioned above – injury, burden of travel, limited funding/scholarships. Junior athletes at secondary school might also require family support in terms of transportation and expenses, which can be a barrier if such a support wasn’t in place.

Internal Available Resources (coping skills/strategies):

- 1) Time management skills; 2) Seek support; 3) Positive distractions; and 4) Socialising.**

The junior athletes across the countries have coping skills and strategies to manage their dual career. Time management skills were mentioned the most and many of them recognised that these skills are key to the success of their dual career. Junior athletes also seek support when they face

challenges and barriers. Support providers varied. This will be discussed in the following section. Positive distractions were listed as a significant coping strategy including playing other sports, playing games, watching movies, doing yoga for mindfulness, etc. Socialising was also considered as being significant by the junior athletes. Spending some quality time with their family, friends, and teammates helped them to release stress and keep motivated.

External Available Resources (social/organisational support):

- 1) Support from schools and teachers; 2) Support from coaches; 3) Support from friends; 4) Support from family members; and 5) Limited support from the University and governing bodies.**

As mentioned earlier, the junior athletes asked for support when they faced challenges and barriers. Four different groups of social support providers were identified:

schools and teachers, coaches, friends, and family members. Since a number of the participants were attending secondary school, support from schools and teachers were most appreciated and frequently mentioned. Unfortunately, many of the participants who were attending universities identified limited support from their universities and sports governing bodies related to academic flexibility and financial support in particular.

Support needed:

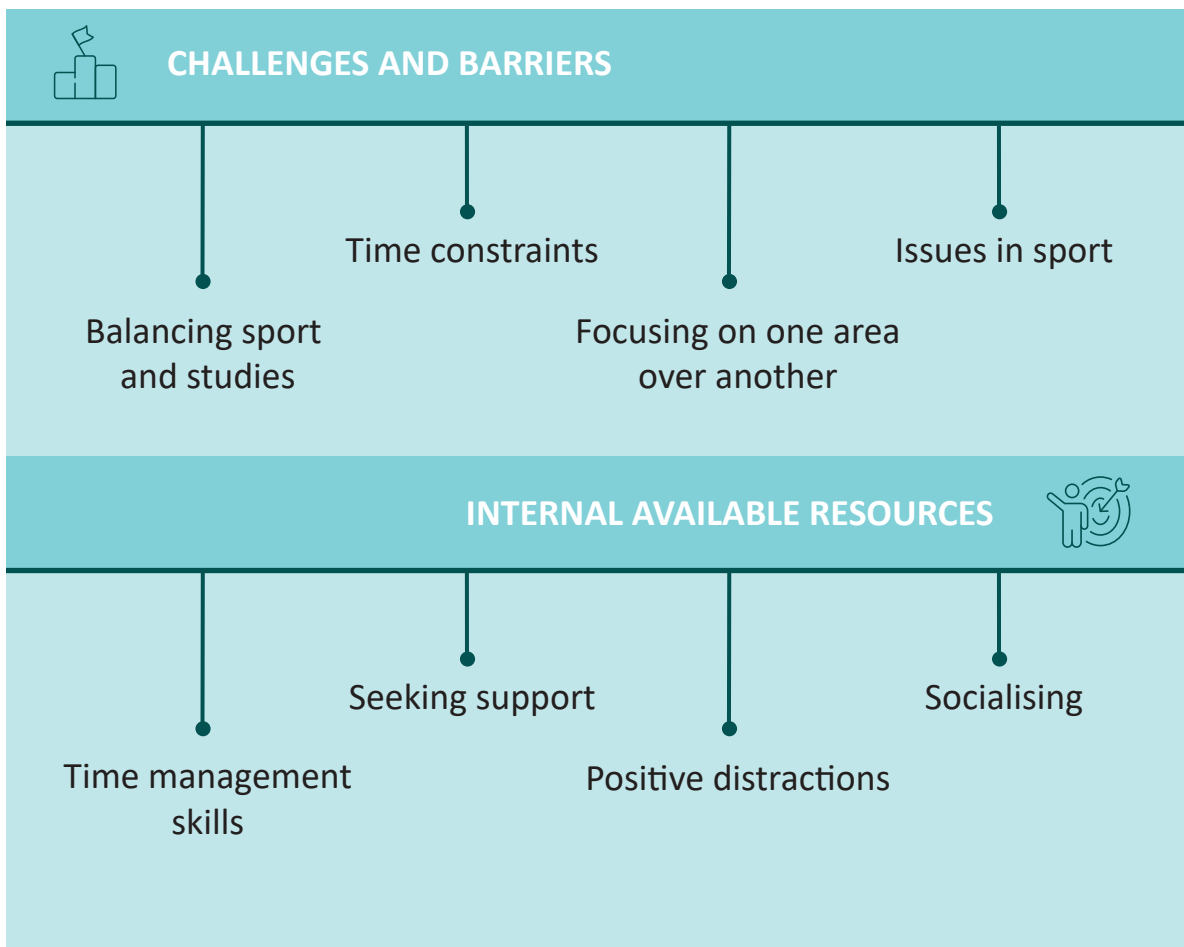
- 1) Academic Flexibility; 2) Financial support; and 3) Psychological support.**

Three areas were identified as having room for improvement, not only for undergraduate students, but also secondary school students, who require academic flexibility due to extensive training and competitions in other cities or abroad.

Communication between sports governing bodies (e.g., sports federations) and schools/universities was considered crucial in providing academic flexibility. Some junior athletes mentioned that they did not let their schools/teachers know that they are student-athletes, as they did not know how to appropriately communicate with them and had no clear information about

their contact point. Financial support was also recognised as being central to continuing sport aspirations, because not all athletes have sufficient family support in regard to finance. In particular, sports such as tennis and cycling cost a lot more compared to other sports, such as athletics, which requires extensive financial support or a scholarship. Finally, psychological support was considered a significant factor

in managing a dual career well and ensuring general wellbeing, in particular, mental health. However, such support was in place for many junior athletes, especially for those attending secondary school and few athletes on scholarship schemes associated with their universities have access to psychological support. This should be addressed in a future scheme to support junior athletes.



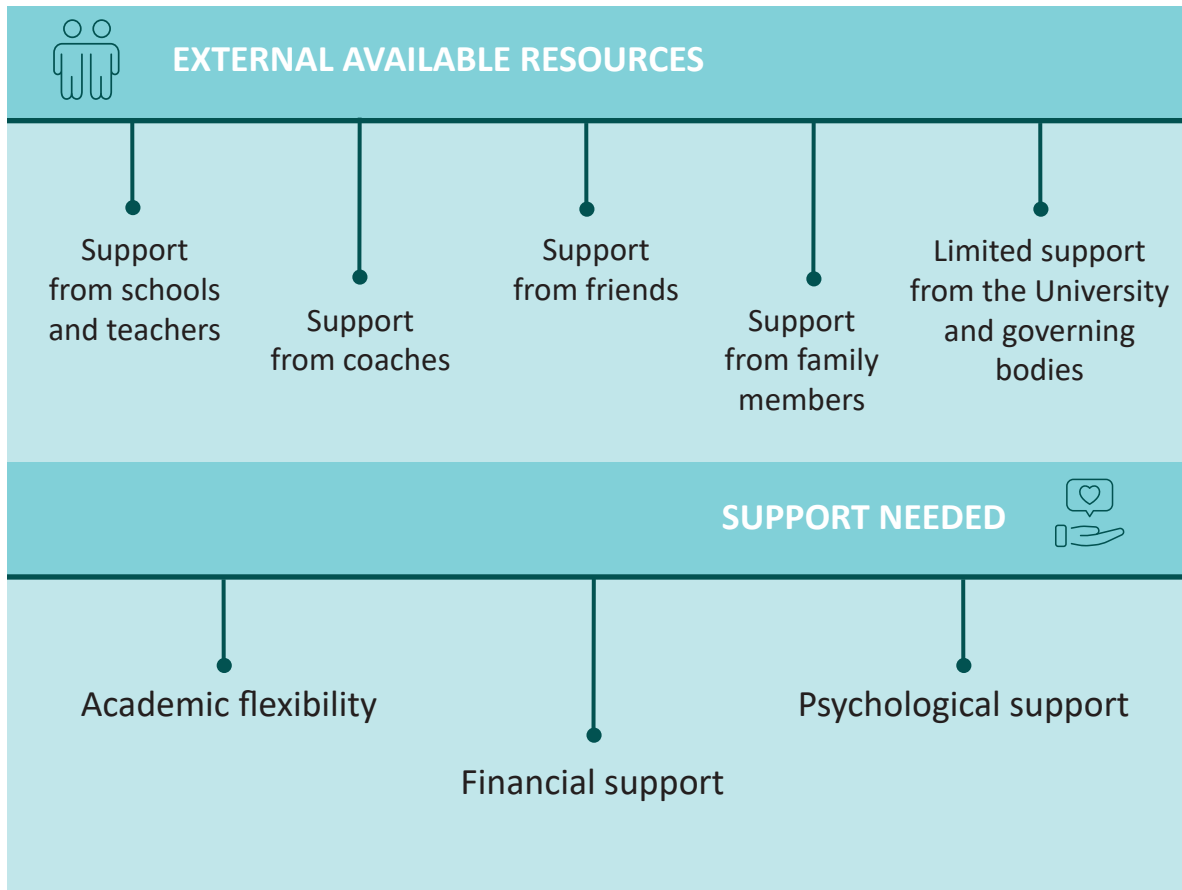


Figure 8. Results Summary: Challenges and Barriers, Internal Available Resources, External Available Resources, and Support needed.

Results Summary

(Qualitative data)

Dual Career Junior Athletes were asked to complete a survey which contained questions about their characteristics, the Role Strain Questionnaire for Junior Athletes (RSQ-JA), and the Dual Career Competency Questionnaire for Athletes (DCCQ-A).

By dual career, we refer to when athletes combined their competitive sporting career with education or work. A total of 1117 responded to the survey, of which 954 fully completed it (completion rate = 85.4%). Table 1 contains participants' characteristics.

DUAL CAREER JUNIOR ATHLETES			
		N	%
TOTAL		1117	100%
COUNTRY	UK	108	9,7%
	SLOVENIA	476	42,6%
	PORTUGAL	139	12,4%
	ITALY	104	9,3%
	GREECE	121	10,8%
	SPAIN	66	5,9%
	POLAND	103	9,2%
GENDER	FEMALE	532	47,6%
	MALE	572	52,4%
AGE	14 OR UNDER	41	3,7%
	BETWEEN 15 AND 19	1023	91,6%
	20 OR OVER	48	4,3%
EDUCATION	SECONDARY SCHOOL	857	76,7%
	HIGHER EDUCATION	167	15,0%
	OTHER	84	7,5%
CURRENTLY EMPLOYED	YES	105	9,4%
	NO	997	89,3%

Table 2. Participants' characteristics.

Main findings:

Gender was almost equally divided across the entire sample.

Most countries had a similar number of respondents, except for Slovenia (42.6%) having a much higher response rate, and Spain (5.9%) having a slightly lower response rate.

The majority of DCJAs were aged between 15 and 19 (91.6%).

Most respondents were in secondary education (76.7%) with most of the remaining students in higher education (15.0%).

The majority of DCJAs were currently unemployed at the time of the study (89.3%).

Overall, participants reported the highest scores with the following items within the 26 items of the RSQ-JA:

My brain is usually tired at the end of the day.
School and homework take up too much of my time.
My body is tired because I do a lot of sport.
It is difficult for me to get everything done because I spend a lot of time travelling (between home, school, sport and other activities).

Participants reported the lowest scores with the following items:

I am not challenged as an athlete.
My coaches don't agree on what they want me to do.
I don't know what to do to be a good family member.
I don't know what happens if I don't do my schoolwork.

From looking at the items, the highest scores are linked to overload and the lowest scores are linked to ambiguity.

Main findings: 1) DCJAs score between negative and neutral on all factors; 2) Overload in school was perceived as the strongest factor; and 3) Ambiguity around responsibilities was perceived as the weakest factor.

This confirms that the factors concerning overload scored highly among the athletes and those related to underload and ambiguity scored lowly.

Overall, participants reported the highest scores with the following items within the 29 items of the DCCQ-A:

Eagerness to listen and learn from others and past experiences.
Willingness to make sacrifices and choices to succeed in sport and study.
Clear understanding of what it takes to succeed in sport and study.
Understanding the importance of rest and recuperation.

Participants reported the lowest scores with the following items:

- Ability to cope with stress in sport and study.
- Ability to use setbacks in sport and/or study as a positive stimulus.
- Ability to regulate emotions in different situations.
- Vision of where you want to go in life after your dual career.

It is important to note that all scores ranged between 3 and 4, from neutral to positive. Following a closer inspection of these items, it appeared that the highest scores were linked to social intelligence & adaptability and the lowest scores were linked to emotional awareness.

Main findings: 1) DCJAs score between neutral and positive on all factors; 2) Social Intelligence & Adaptability was perceived as the strongest factor; and 3) Emotional Awareness was perceived as the weakest factor. This confirms that the factors concerning overload score highly among the athletes and those concerning underload and ambiguity score lowly. Figure 1 shows key findings.



Figure 9. Results Summary: Role Strain Questionnaire for Junior Athletes (RSQ-JA) and the Dual Career Competency Questionnaire for Athletes (DCCQ-A).

Conclusion

Extensive data was collated from this report, which provided in-depth insights and strong evidence for the next step of creating an online support curriculum specifically for junior athletes. The findings clearly demonstrated challenges and barriers that junior athletes can face, which need to be addressed to assist them in balancing their life and continuing their sport aspirations. Although some resources

to cope with experienced difficulties are available, such resources are still limited for many athletes, so further support is needed to fill the gap in practice and make the resources more accessible. Moving the project forward, the findings will guide the development of an evidence-based online support curriculum to address the gaps identified.

Teaching materials – development of the curriculum

Introduction

One key IO emanating from the DCJA project is the development of a curriculum for junior athletes and social support providers, presented in the form of a massive open online course (MOOC). The platform is catered to junior athletes, between 15 and 19 years and social support providers including young athletes' coaches, teachers and their parents.

The present chapter describes the key content of the curriculum and the materials (teaching materials), created by researchers and experts engaged in the DCJA project, together with those employed for methodology development. Two separate blocks were created, one for junior athletes and one for social support providers, organised in two seven-Module courses. The procedure for creating course content

expanded over a period of nine months, starting in March 2021. All partners have contributed to the curriculum and the creation of a MOOC. A detailed methodology is described below.

Given the diversity of the organisations participating in the project, from Universities to a National Research Institute, to sport associations at national and regional level to a sports club, the consortium provided expertise and experience from different, but complementary perspectives. Seven European countries were represented in the DCJA project, providing a wide-ranging breadth of approaches in addressing the needs of dual career of junior athletes and the validity of the produced learning curricula.

Learning Objectives

The objectives of the teaching materials and the MOOC were as follow:

A training course for Junior Athletes was targeted to junior athletes; aiming to raise their awareness and knowledge on the necessity of balancing both, an educational and sporting career.

A training course for Social Support Providers was designed for social support personal; aiming to raise their awareness and knowledge on the necessity of balancing an educational and sporting career among junior athletes.

Background and Methodology

The teaching material content is based on existing literature on the topic of the dual career of junior athletes, research findings from the current project and designated knowledge of experts. The evidence extrac-

ted, from both qualitative and quantitative sources, identified many challenges and barriers that junior athletes face. A synopsis of the major findings can be found in the following tables:

Challenges and barriers

- A balance between sport and study
- Time constraints (Time management)
- Focusing on one area over another
- Issues in sport – injury, burden of travel, limited funding /scholarships

Available resources (internal – coping skills/strategies)

- Time management skills
- Seeking support
- Positive distractions
- Socialising

Available resources (external support)

- Support from schools and teachers
- Support from coaches
- Support from friends
- Support from family members
- Limited support from the University and governing bodies

Support needed

- Academic Flexibility
- Financial support
- Psychological support

Junior Athletes

Support they provide to junior athletes

- Make them aware of the requirements of a dual career
- A holistic approach
- Make them stay motivated

Their perceived challenges and barriers junior athletes face

- Limited understanding for key stakeholders
- Coaches
- Schools/Universities
- Academic flexibility
- Injuries/mental health issues
- Finance

Available resource or support needed for junior athletes

- Support from sport’s governing bodies
- Support from parents and coaches
- Support from schools/universities

Challenges and barriers to provide support to junior athletes

- Limited understanding from key stakeholders
- Adjusting their support towards different individuals/sport

Available resource or support needed for social support providers

- Sports background and experience
- Continuous Professional Development opportunities

Social support providers

The expertise of the partners working within the field, either as academics or other sports-related positions, was fundamental to the creation of effective teaching material. The establishment of an Expert Committee, consisting of 7 members, one

from each partner of the project consortium, safeguarded the quality and validity of the results. Moreover, the relevant scientific articles were reviewed and their findings were included in the process of content-building.

Definition of Study Program and Courses Modules

Based on the findings mentioned above, the expert committee with the researchers defined several module topics (teaching

materials). Topics to be created into modules were distributed to project partners, based on their competences and skills.

The selected Teaching Modules for Junior Athletes are presented in Figure 10.

TEACHING MODULES FOR JUNIOR ATHLETES
1. A Dual Career - Benefits & Challenges
2. Personal Development
3. Planning a Dual Career
4. Time Management
5. Use of Resources - Communication
6. Emotion Regulation & Stress Management
7. A Dual Career - Support System

Figure 10. List of Teaching Modules for Junior Athletes.

The selected Teaching Modules for Social Support Providers are presented in Figure 11.

TEACHING MODULES FOR SOCIAL SUPPORT PROVIDERS
1. A Dual Career - Benefits & Challenges
2. Career Paths / Orientation Planning
3. Dual Career Benefits
4. Acting as a Dual Career Support Provider
5. Best Practices & Recommendations for Parents
6. Best Practices & Recommendations for Coaches
7. Best Practices & Recommendations for Teachers

Figure 11. List of Teaching Modules for Social Support Providers.

Once the allocation of each module was completed, each partner, along with the expert committee together started preparing the teaching materials. Guidelines were provided to partners producing the teaching material regarding the; (a) content per learning unit, (b) types of learning exercises (c) duration etc.

Modules were divided into didactic units and self-assessment exercises, designed to evaluate the progress of self-study. The content of each module is presented in the following summaries.

Course for Junior Athletes

Module 1. Dual Career - Benefits and Challenges

The scope of this module was to outline and discuss the benefits and challenges faced by junior athletes when undertaking dual careers. Particularly, students were informed about the benefits of dual careers in supporting career development. For athletes attempting to navigate career transitioning, it was important to underscore likely challenges when combining their sporting careers with education and /or a vocation, and how they could use the Five-Step Career Planning Strategy to support an effective dual career. Students were taught using a series of video and audio-based PowerPoint presentations and a series of tasks which they could engage in to develop their knowledge.

The module was divided into 3 units covering the topics above and titled; (1) Benefits of a Dual Career; (2) Challenges of Undertaking a Dual Career; and (3) The Five-Step Career Planning Strategy, starting with a definition of “Dual careers” as the pursuit of a sporting career alongside education or vocational career development (Cartigny et al., 2021).

The 1st unit was focused on how undertaking a dual career can benefit athletes’ career development, including both sport performance and athletes’ wellbeing, as well as how undertaking a dual career can help athletes prepare for and adapt to career transitions in sport, including the junior-to-senior transition and retirement from sport. A number of benefits were explored, such as health- and socially-related benefits, as well as benefits related to athletic retirement and adaptation in life after sport, along with enhanced future employment prospects (e.g., higher

employability and access to well-paid jobs).

In the next unit, the focus was on how undertaking a dual career can be challenging to athletes’ career development, including sport performance and athletes’ wellbeing, while providing help for athletes to understand how their own context and individual weaknesses can also create a more challenging and rewarding dual career experience. The challenges explored were caused by external factors, such as a lack of cooperation between key stakeholders; a lack of DC management, Career Planning, Emotional Awareness, Social Intelligence and Adaptability skills; and support often being ad hoc rather than formalised and planned, together with restrictions in the educational system and the labour market. Problems such as burnout, wellbeing issues, and maladaptive coping were also noted.

The last unit placed emphasis on understanding the main features of the five-step career planning strategy and how it could be used to evaluate and plan for a dual career. Moreover, understanding how to use the 5-SCP strategy to evaluate their own dual career and how to re-evaluate their dual career using the five-step career planning strategy was crucial in the unit. Starting with an introduction to the 5-SCP, and an outline of the main features and tasks athletes using the five-step career plan were asked to undertake, the unit continued by engaging athletes in a series of tasks designed to help them use the 5-SCP to evaluate their own individual career development pathway and ways they could make this more effective.

The 5-SCP is a framework aimed at helping athletes (a) to increase awareness of his/her past experiences, present situation, and future perspectives in sport and life,

and (b) to better prepare for the forthcoming transitions in sport and life. It can be used by dual career athletes to help them prepare for their dual career and any transitions they may face during it.

Module 2. Personal Development

The scope of this module was to enable athletes to understand the importance of Personal Development, to help them develop a Personal Vision Statement and finally to help them create a Personal Development Plan.

Personal Development is regarded as one of the most powerful tools for success, as it consists of activities that develop a person's capabilities and potential, build human capital, facilitate employability, enhance the quality of life, and the realisation of dreams and aspirations.

Therefore, the main focus was on providing participants with tools to raise their awareness and knowledge of personal factors relevant not only for dual-career management and balance, but for their whole life. Consisting of 5 learning units, students explored the topic of Personal Development using reading materials, videos, and a series of tasks in which they engaged formerly to develop their learning and expertise.

Defining Personal Development as “a continuous lifelong process of nurturing, shaping, and improving skills and knowledge to ensure maximum effectiveness and growth”, Unit 1 mainly explored its benefits, such as clarity of personal vision, improvement of existing skills, help in identifying true potential, a motivation and satisfaction driver and help in focusing on the bigger picture.

In Unit 2, the idea of getting started with Personal Development was explored, beginning with developing a personal vision and planning Personal Development. In Unit 3, the Personal Vision was further analysed, by explaining its importance, as well as details on what to include in a personal vision statement. More tips on how to write a personal vision statement, and how to use a personal vision statement, were included in the unit. Examples of personal vision statements were provided to facilitate the learning process.

Unit 4 was focused on self-reflection (Developing Personal Vision) in order to prepare a future plan. The unit structure was based on seven core steps that prepared participants for the next core unit.

In the final Unit, 5, Personal Development Tips were given to the junior athletes about planning their Development, documenting their plans, continuously updating them and grasping new opportunities. The module also provided them with two downloadable documents: a Personal Vision Template and a Personal Development Plan Template.

Module 3. Planning a Dual Career

The scope of Module 3 was firstly to provide dual career athletes with an understanding of their strong skills, secondly to recommend to them some professional choices and to analyse educational possibilities (e.g., educational possibilities regarding possible career choices) and finally to present some best practices - analysis regarding the sporting professions, which could give them inspiration and food for thought. Empowering DC athletes by helping them to develop DC and thus become more resourceful and autonomous was formulated into a major task of 4 of the learning units of this module for DC athletes.

In the first unit titled “Skills Analysis”, numerous internal factors indicated the strengths of athletes. These included commitment to excellence, a positive mind-state, optimism, confidence and self-esteem. Moreover, reference was made to 21st century skills and competencies like collaboration, creativity, problem-solving and characteristic qualities like persistence, curiosity and initiative.

In the next unit, titled “Recommended Career Choices”, a list of potential career choices for athletes was presented while self-assessment was considered a crucial first step identifying strengths, weaknesses and favourite activities. It was acknowledged that for athletes finding something that one loves as much as playing a sport can be a serious challenge indeed.

In Unit 3, titled “Analysis of Education Possibilities”, different options were explored regarding education. Taking for granted that there is a multitude of ways to access education nowadays, a distinction is drawn between educational choices after the end of a sports career and during an active sports career and reference is made to the possibility of opening up the time spectrum. The Unit progressed by pointing out the support some universities in Europe offer for dual sports careers. The provision of online or blended learning possibilities was finally mentioned, with reference to the fact that blended (hybrid) and online courses not only change how content is delivered, but they also redefine traditional educational roles and provide different opportunities for learning.

Unit 4, titled “The Best Practice – Analysis of Career Choices”, provided a short overview of 13 jobs for college athletes, with multimedia material.

Module 4. Time Management

The scope of this Module was to enable junior athletes to recognise time management as an important aspect of their Dual Career management, in order to succeed in both academic and sport fields, by managing their time effectively. The necessity for a specific focus on Time Management was dictated not only by the demands of contemporary fast-paced societies, but also acknowledged by an earlier DCJA survey as one of the most important challenges for dual career junior athletes. Divided into 3 learning Units and with the aid of multimedia material, this Module helped students with one of the most stressful factors in dual career: time.

Unit 1 explained and justified the importance of Time Management for student-athletes. Busy schedules, physical and mental tiredness, and the need for coping strategy applications to succeed are all part of a dual career daily life. The situation is even more complicated when they are younger, and they are living transition periods between competitive phases.

A further unit, “Tips on how to improve your time management”, focused on practical ideas which could be easily assimilated into one’s mindset. Time management is about planning and controlling the amount of time student-athletes spend on specific tasks. In order to do so, there is a great need in setting goals, prioritising tasks, organising and planning the implementation of their tasks. These include the creation of a Master Schedule and a project plan, its continuous review, an elimination of distractions, an avoidance of multitasking, a rest time, setting goals for each study session, discipline and amongst other things.

Ultimately, unit 3 was dedicated to a number of recommended commercial tools for time management and the organisation of junior athletes’ workload. Advice was also put forward regarding whether provision of a pro version of any of these recommended tools, or any other software solution by academic institutions was available. Existing tools can sufficiently help students in their time management and workload monitoring.

Module 5. Use of Resources - Communication

This Module addressed the challenge of empowering the junior student-athlete to be able to communicate their needs and concerns when asking for help. This is both a skill and an attitude which can contribute to a more balanced, healthy mind and body, sport and school life. Moreover, the scope of the present Module included getting the DCJA acquainted with the types of social support as available resources for dual career athletes. Finally, the Module explored both the power and confidence collective action and DCJA community-building can yield. Multimedia material and easy-to-follow practical tips were included in all 3 learning Units of the Module.

Unit 1, titled “Speaking for myself as a Dual Career Junior Athlete”, explored the need to communicate to others the specific situation student-athletes are in. Being able to present themselves and to articulate their particular needs in a clear, consistent and self-reliant way is considered the backbone of a balanced and healthy life while building self-awareness and self-confidence with a view to striking a balance between sport and study. The Unit also offered ways to facilitate advocating their claims in different contexts and with different causes (e.g., academic flexibility, mental or physical health issues, limited financial resources, burden of travel, time constraints). Special reference to transitions both in sport and academic environments was also made since they constitute stressful periods requiring extra support.

DCJA community-building and the benefits of collective action were explored in Unit 2, titled “United We Stand: Building a DCJA

In the last unit, “Lend Me Your Ear: Requesting Support from Social Support Providers”, the learning objective was to build confidence in student-athletes that their dual career can benefit from the social support provision system. Besides helping them identify a social support provision system, such as coaches, institutions, family and friends, other stakeholders, such as local and regional authorities etc., it enabled the students to realise that support is an important asset in their Dual Career. Finally, the context and some practical skills on how to effectively reach out to ask for support were presented.

Module 6. Emotion Regulation and Stress Management

The focus in Module 6 was to understand the emotion and stress management associated with athletes' dual careers. The learning objectives of the module referred to student-athletes being able to (a) explain what emotion and emotional regulation is, (b) to define stress and (c) to recognise its sources and symptoms. Examples of strategies to cope with stress were also provided to the learners with the final aim of being able to apply monitoring tools to assist in their coping strategies. Exercises were also presented to increase students' awareness and provide on hands tools to better regulate emotional states together with lectures and videos.

The Module addressed the psychological dimension of the dual career as athletes are considered to experience intense emotions including happiness, joy, anger, fear or anxiety. The experience of emotions is also integral to a sporting career as well as to personal living. Positive emotions are perceived as enhancing performance while uncontrollable, negative emotions experienced for shorter or longer periods of time can be destructive to one's performance. The successful regulation of emotions is key to optimal functioning and performance. In module 6, learning units were presented with the aim of explaining the concept of emotion, emotion regulation and stress management.

In the 1st Unit, learners became acquainted with what emotion and the antecedents of emotions were. Key terms such as state stress and the appraisal of an emotion were explained with the aim of providing the necessary theoretical background to facilitate the learners ability to differentiate between positive and negative stress.

Unit 2 explained the three key sources of stress: Competitive stressors, Organisational stressors and Personal stressors, while the following Unit analysed the symptoms of stress, organised in physical, psychological and behavioural categories of reactions. Unit 3 provided a repertoire of strategies that could be employed when attempting stress management, including the most effective methods reportedly used by athletes: relaxation techniques, imagery techniques or reappraisal with cognitive restructuring. Emphasis was given to the necessary personalised approach to be applied as the best coping mechanisms should meet the needs of each athlete.

Module 7. A Dual Career – Support System

This final Module was focused on one of the most important aspects of a successful dual career: student-athletes need social support from their family, coaches and sports staff as well as teachers and other school staff, and help integrating their studies, sports, and personal life into a sustainable lifestyle. The Module provided an overview of the different types or systems of social support both within and outside sport (e.g., psychological, psychosocial, academic and financial), and these were normative, non-normative or quasi-normative. Divided into 3 Learning Units, the Module pointed out the importance of cooperation among the different environ-

ments (sport, family, academic) and of all the stakeholders involved (coaches, physical therapists, physicians, educational officials, parents, friends) which is necessary to ensure the well-being of dual career junior athletes.

Besides understanding the importance of social support for dual career athletes, the Module also aimed to help learners recognise a variety of types of social support and acquaint them with different tools (platforms) which could help to understand the importance of a balanced dual career with the help of significant others.

Course for Social Supporters

Module 1. A Dual Career – Benefits and challenges

The first Module addressed: (a) understanding demands and challenges that dual career athletes face in order to better assist them being support providers, (b) the importance of social support, as it is recognised as the most important resource for athletes' career development and transitions, and (c) the experiences of support providers in supporting emerging dual career athletes.

Recognising that support providers need to understand the dual career experiences of youth athletes and build their expertise to better support them, Module 1 was focused on understanding the demands and challenges that youth athletes may face and the support they need to address these

demands and challenges for their career development and transitions. In addition, the module was designed to help support providers develop their skills to better assist their junior athletes.

Other learning objectives have been the following: (a) to understand the importance of social support and how it impacts DC athletes; (b) to learn about the experiences of support providers in supporting junior DC athletes, based on the empirical findings from the research project. To achieve these goals, learning activities were generated in the form of lectures with ppt slides, reading materials, discussions.

Module 2. Career Paths / Orientation Planning

Recognising that there was a clear need for dual career athlete Orientation Planning, the focus of the dual career planning Module was to understand the best path for career improvement for dual career athletes. The educational material included the best advice and criteria for social support providers to focus on, so as to assess an athlete's strengths (e.g., to understand and focus on the athlete's psychological profile), to identify personality types (e.g., to understand the athlete's personality type, common characteristics, and what to focus on), to identify and clarify interests and non-vocational aspects of life, and, finally, to identify the best path for educational planning.

The module began with guidance on assessing an athlete strengths (e.g., what questions should be answered, what internal factors demonstrate an athlete's strengths). The module then continued with identifying personality types - it highlighted four classic behavioural styles and suggested identifying what type of personality an athlete has at the beginning of their career. The behavioural types were then presented with their typical characteristics (strengths, weaknesses, and needs are described for each behavioural type). Three individual cases of successful dual career athletes were then presented before the module continued with action planning. To assist athletes with career planning, a brief action plan questionnaire was provided. The module concluded with an assessment designed to verify that the content of the module was well understood and that the educational material would be helpful to support providers.

Empowering DC athletes by helping them to develop DC and thereby become more resourceful and autonomous was formulated as the main task of the 5 teaching units for DC support providers. The main teaching tools were lectures with ppt presentations (video or audio based).

Module 3 – Dual Career Benefits

Athletes invest in an athletic career at several crucial stages of their age- and life-course-related development should therefore be supported to maximise the benefits of their athletic activities and offset potential costs. Dual careers have been shown to be a good solution for balancing sport and other areas of athletes' lives and preparing them for life after sport. The literature on athletes' careers shows that finding (and achieving) an optimal balance between sport and other life domains (directly or indirectly) is a factor in preventing athletes from quitting sport and exclusion from sport identity. This also works as a strategy for managing the transition from a junior to a senior career, and shows that athletes should be supported to maximise the benefits of their sporting activities (e.g. physical, psychological and social) and compensated for their potential costs (e.g. unbalanced development, sacrifices in other areas of life, injuries).

In this module, one was able to learn about the different types of benefits of dual careers. There include health-related benefits (e.g., a balanced lifestyle, reduced stress, increased well-being), developmental benefits (e.g., better conditions for developing life skills, multiple personal identities, and positive effects on athletes' self-regulation skills), social benefits (e.g., positive socialisation effects, expanded social networks/support systems, and better peer relationships), financial benefits (e.g., increased employability and access to well-paid jobs) and athletic retirement benefits (e.g., better career/retirement planning, shorter adjustment periods, and the avoidance of identity crises).

In the context of (mental) health during a dual career, a balance between education and sport needs to be ensured, and all stakeholders need to show appropriate understanding and flexibility, and provide support, tools, and skills to help student athletes. In order to adequately manage dual careers and their various transitional phases, the module presented several internal and external resources deemed essential for student athletes. The chapter on the social benefits of a dual career emphasised the processual nature of the student-athletes journey and the role of the various "significant others" who make up the support network for student-athletes. In addition, the completion of a sports career and retirement plan were presented as challenges that require a dynamic balance of transitional resources and barriers to successful management. The final part of this module vividly highlighted the soft skills that athletes acquire either during their athletic careers that are transferable and desirable to their potential future employers, or that they acquire before entering the labour market.

Module 4. Acting as a Dual Career Support Provider

There are different views in the literature about the role of the Dual Career Support Provider (DCSP). The support provider could be considered a person involved in the student-athlete's life, such as family, coaches, tutors, psychologists. But for this particular course and module, the DCSP was defined as the specific role directly involved in managing the dual career of the student-athlete. This could be more comparable to a mentor-mentee relationship. Mentors do many things for an individual. One important role is to empower others. When someone empowers another person, they create opportunities.

The module began by defining some terms, such as mentoring and tutoring. Mentoring is a relationship in which a more experienced or knowledgeable person helps guide a less experienced or less knowledgeable person. It was emphasised that the experience of the mentor and the structure of this relationship influences the potential amount of psychosocial support, career guidance, role modelling, and communication that occurs in mentoring relationships. The types of mentoring were then presented and the difference between formal and informal mentoring was highlighted and explained.

Since the role of the mentor was the focus of this module, the skills required for it were described in detail (e.g., actively listening, building trust, encouraging, identifying goals and current reality). The mentoring relationship involves not only specific skills that must be developed by mentors and mentees, but also personal characteristics that must be shared by both parties to achieve maximum satisfaction in the men-

toring process. Subsequently, the most common challenges that mentors may face were listed and explained.

To introduce the general theory to the dual career field, the specific challenges and characteristics of student-athletes' parents were then included. Even though the supervisors and coaches are the primary contributors to academic and athletic achievement, the family plays an important role in balancing both careers and overcoming personal problems. In addition to listing some familiar concerns and stressors, two different types of feedback were cited as potentially useful and valued by children as student athletes; namely critical comments and advice rather than just encouraging remarks and comments, and setting shared goals (parent-child) so that parents can provide tailored feedback for the specific problems involved.

Module 5. Best practices and recommendation for parents

Considering that the educational part of athletes' dual careers has a clear need, the goal of Module 5 was to teach parents how to support their children as young athletes.

Children engage in sport primarily because they enjoy it. As they continue to grow up, the number of their commitments increases, and children who become teenagers tend to feel more pressure. Athletes who choose dual careers are expected to meet the demands of school and sport. By understanding the environment, Module 5 showed us how the demands of commitment to school and sport between the ages of 15 and 19, become very high. Junior athletes are often overloaded and under pressure to perform well in both school and sport. To better understand the dual career environment of junior athletes (DCJA), the Holistic Athletic Career Model by Wylleman et al. was created. This model looks at different developmental stages in relation to a specific age and matches them with demands and changes in 5 important life contexts, namely athletic, psychological, psychosocial, academic/vocational and financial. Higher demands in school and sport are often the most challenging to overcome. In such situations, support from social support providers including parents, is inevitable.

Studies have clearly shown that athletes who do not receive adequate support tend to give up the sport prematurely. Module 5 identified the most common difficulties reported by young athletes (e.g., lack of time and travel constraints, the need to choose between sports and studies, limited

financial resources to support participation in sport) and highlights that support through adequate communication, i.e., active listening, allowing autonomy, and avoiding pressure on the young athlete is most important. In terms of parental competencies, it was noted that communication patterns that are generally positive and empathetic, reflect warmth, consistent discipline, and low hostility, and are associated with lower conflict behaviour, improved mental and physical health, and resilience. Other parental competencies were also mentioned and the selection of the 10 most important were listed. Another important component was to raise awareness of the demands of a dual career and share that awareness with teachers and coaches. It is important to be prepared for the large amount of time and financial commitment involved in a junior career.

The module continued by providing parenting advice (best practices) and recommendations (a list of do's and don'ts), and ended with self-assessment materials and a quiz. The main teaching tools in this module were a lecture with a ppt presentation (video or audio based) followed by exercises.

Module 6. Best practices and recommendations for coaches

Although the primary goal of a coach is to develop athletic potential in sport, coaches are often confronted with non-sporting issues and challenges experienced by young athletes that also affect performance and well-being.

Coaches are not only consulted by their athletes to overcome and address athletic problems and goals. Often teenage problems are discussed as well, which sometimes leads coaches to feel that they are taking on a parental role in the development of young talent. Given this multidimensional role, it is appropriate for coaches to add soft skills development as an additional responsibility in fostering dual-career athletes. Research shows that the coach is considered the most important person in the athlete's life and has the greatest impact on their dual career. This means that the coach plays an active role in the development of skills and competencies

through explicit and implicit actions, so awareness of this influence is extremely important.

Module 6 assisted coaches in being more helpful in the dual career process of their athletes. It began by listing the important competencies coaches need to support DC athletes and then presenting some of the best practices selected. In list form. The module then included some recommendations for coaches (for example: seeking training on the benefits, implications and requirements of DC; taking responsibility and interest in your athlete's education and personal development; motivating young athletes; sharing knowledge with other coaches, etc.). Finally, some exercises were offered so that coaches could work with their athletes on their personal development and the module ended with an evaluation test.

Module 7. Best practices and recommendations for teachers

Teachers play an important role in supporting student athletes with special needs, by firstly understanding the importance of a dual career for junior athletes and the academic challenges and other multiple barriers that a dual career presents for these athletes. At the same time, teachers need to understand their role in the social support provider system for DCJA and colla-

borate with other providers, such as coaches and parents. They should also think about ways and methods to develop learning conditions that significantly support a dual career and encourage junior athletes in that direction by creating opportunities to improve their academic performance. School teachers can maximise their instructional success by using the athletic

skills of young athletes to improve academic performance. In this regard, professional development has clear added value, both to their professional status and to their role as social supporters of junior athletes.

Module 7 explored the above points and offered some practical advice to school teachers. The learning objectives for teachers were:

to understand the importance of a dual career for junior athletes and to understand the academic challenges and various barriers DC poses;

to comprehend their role in the social support provider system for DCJA and the need to collaborate with other providers, such as coaches and parents;

to think about ways and methods of developing learning conditions to support DC and encourage JA in that direction;

to create opportunities to improve DCJA academic performance; to make sense of junior athletes' athletic competencies to improve academic performance;

to understand the added value of continuous personal development.

After explaining the role of the teacher as a social support provider, the module offered some best practices to follow. One of the main objectives being to eliminate competition between the two spheres of students' lives by creating mutual respect and channels of collaboration. The module continued with recommendations for teachers (e.g., learn about the student's athletic schedule and other extracurricular

activities; get to know the other important people in the student's life; take time to learn more about dual careers; express genuine interest in the student's athletic commitments, problems, and progress; be proactive; take a holistic approach, etc.) and concluded with a self-assessment test. The list of resources used for Teaching Materials is available at the end of each Module in the MOOC.

Review Process

The review of the different steps of production, was both recorded on a dynamic assessment document accessible to all partners and on individual Module draft documents. SUSAs & EAS were responsible for the entire task of coordinating and monitoring Training Curricula and Material production, providing partners with templates, methodology and deadlines.

Peer review amongst partners; National expert review.

These stages were essential in maintaining quality standards, avoiding overlapping and omissions, therefore guaranteeing cohesion and coherence in the Training Curricula.

The MOOCs

In line with the project objectives, the Training Curriculum was developed into two comprehensive Massive Open Online Courses (MOOC) on Dual Career for Junior Athletes and Social Support Providers. Its aim was to provide the necessary knowledge to the relevant targeted groups on how to create balance between education and sport, and detail why it is so important.

All partners' knowledge and skills together with expertise in e-learning possessed by

FUi1 contributed to the development of MOOCs.

The stages of production included (a) the selection of materials to be included in the Massive Online Open Course (MOOC) and (b) the Design of e-learning material. During the MOOC design and development, the e-learning experts at FUi1 designed the platform and multimedia content, in collaboration with the Expert Committee and researchers.

The pilot testing of the MOOCs

Upon completion of the courses curriculum and relevant teaching materials, the testing of the MOOCs commenced to ensure delivery of the adequate content. The testing was performed on the end users. Each project partner selected at least 40 participants: ≥ 20 junior athletes and ≥ 20 for each respective MOOC.

Once the piloting stage was terminated

(see chapter: Conclusions) and any adjustments and corrections were made, the Courses were freely available online on the project's official website:

www..dcja.eu/courses/

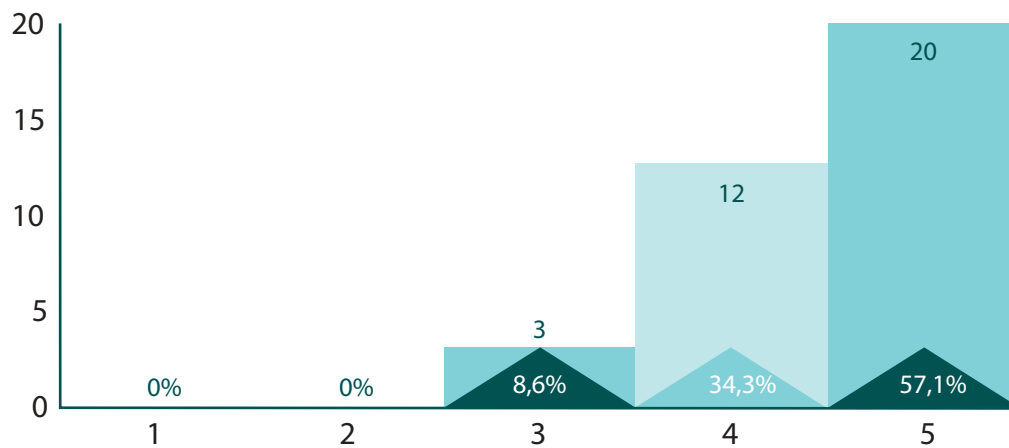
Below is displayed analyses of feedback from MOOC participants.

Evaluation Overview

Scores for all questions have been evaluated using the 1 item satisfaction scale, with 1 corresponding to unsatisfying and 5 corresponding to satisfying.

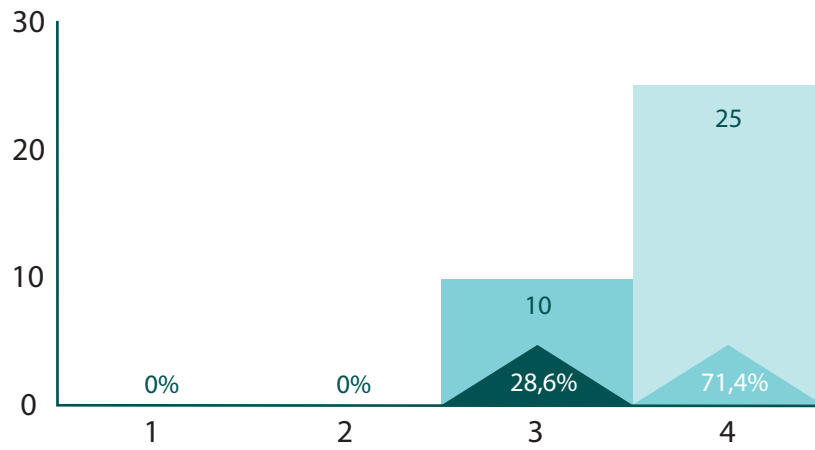


Clarity of the course objectives



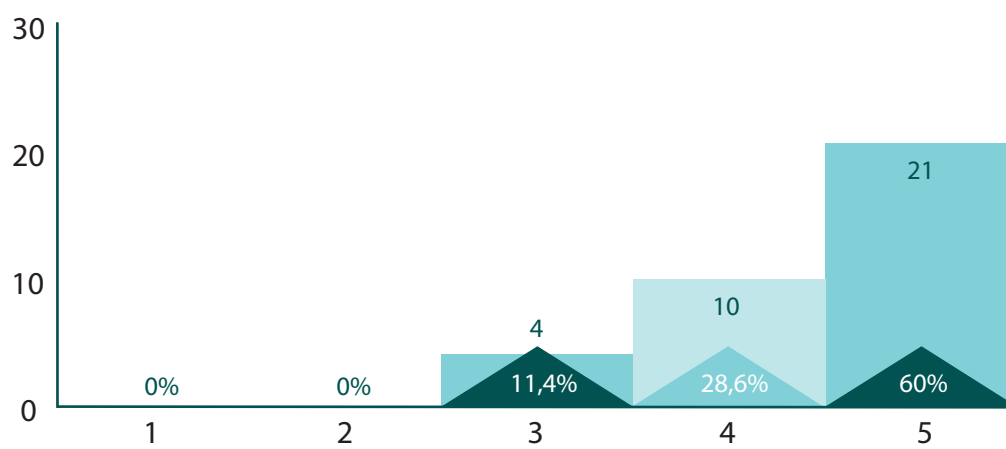
Most participants (more than 90%) voted that the course objectives were sufficiently clear. Only 8% of respondents found that the course clarity was of an average level.

Content relevancy



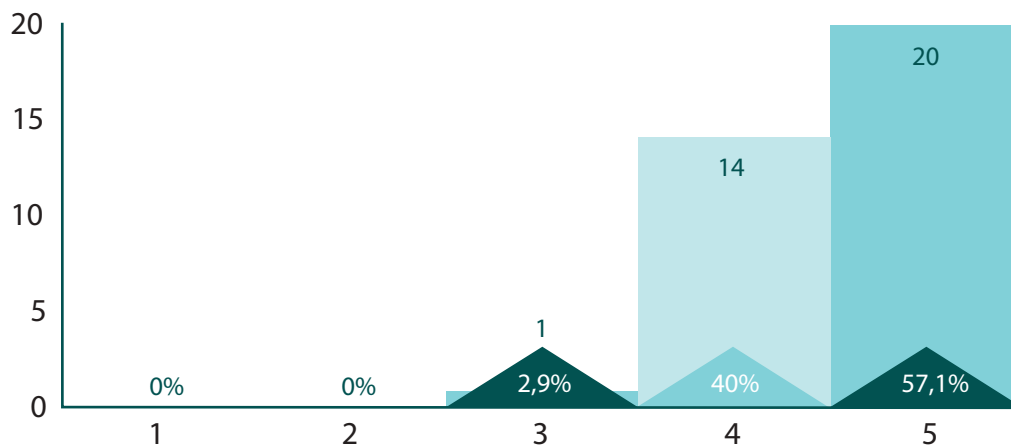
All participants reported that the provided content was relevant for the target audience.

Course usefulness



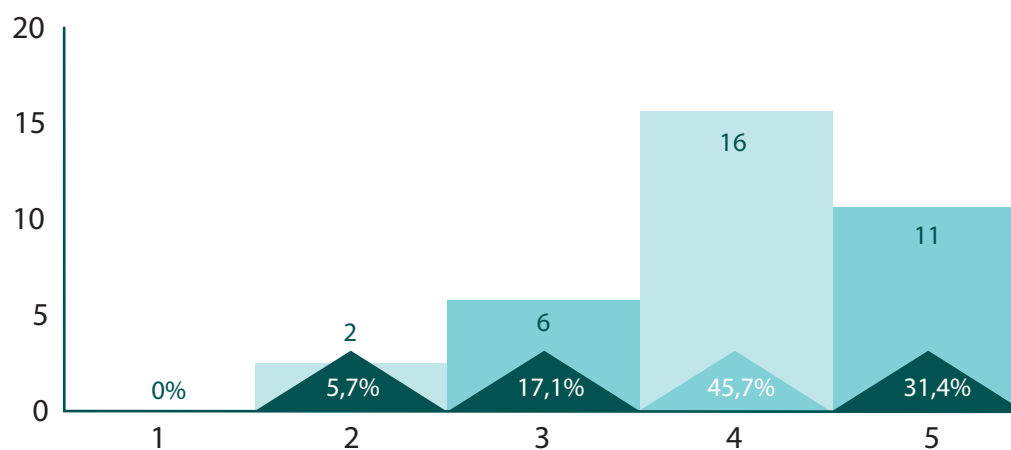
Most participants (more than 80%) voted that they found the course useful as a tool for improving their knowledge.

The theoretical part of the course



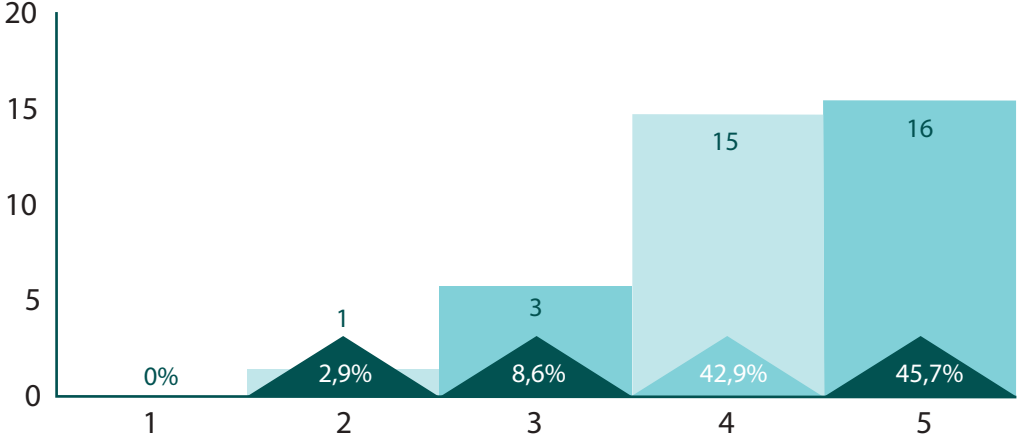
97% of all participants were satisfied with the theoretical part of the course.

The practical part of the course



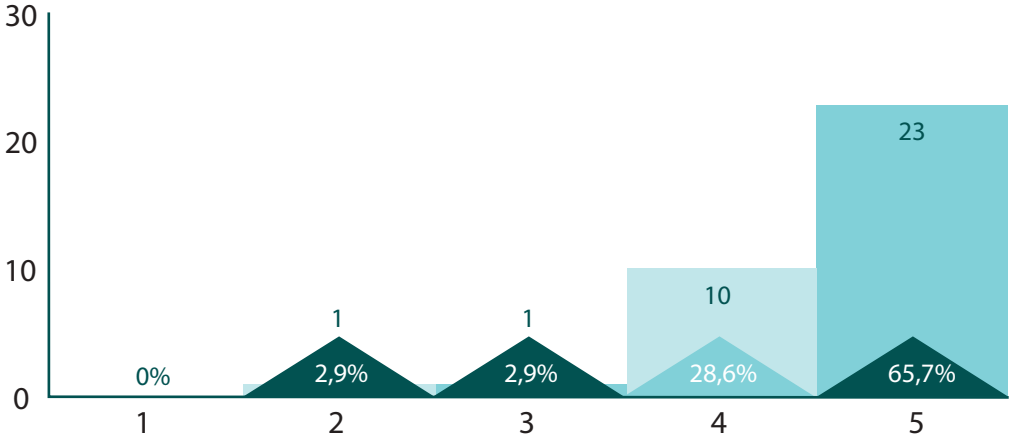
More than 55% of the participants were satisfied with the practical part of the course, 17,1% were partly satisfied and 5,7% were not satisfied.

The length of each module



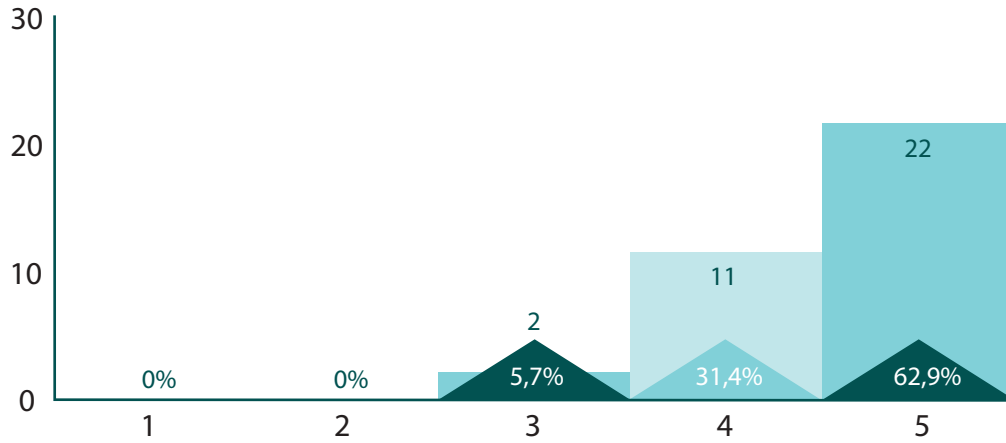
Most participants (more than 80%) were satisfied with the length of each module, however around 10% would have preferred a different length of modules. More detailed comments can be found in the survey conclusions.

The languages that were used



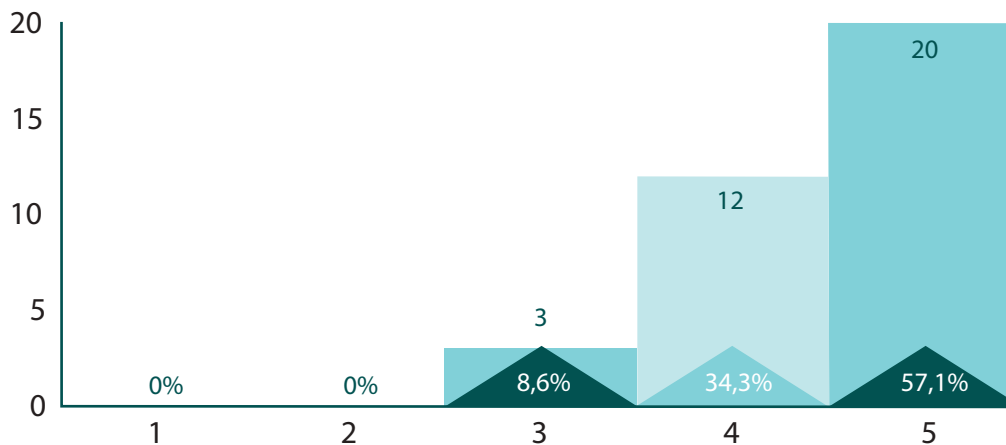
Most participants (more than 90%) were satisfied with the language used in the online course.

The level of understanding



Most participants (more than 90%) admitted that they had a good level of understanding, while only 5,7% admitted that their level of understanding was average.

Do you think the course has improved your knowledge about the provided topics?



Most participants (more than 90%) agreed that the course had improved their knowledge about the related topics, while only 8,6% considered it of average level.

FEEDBACK PARTICIPANTS' FURTHER SUGGESTIONS

What are the positive aspects of the course? Could you please list three?

Expansion of knowledge, internal motivation to develop, better self-confidence
 Knowledge & tips, presenting problems, changing approaches
 Increasing knowledge, the possibility of contact with other people
 The course is well done and easy for everyone to understand
 The course is definitive, interesting, and instructive
 Reflection and information on such a serious issue
 The platform and the audio-visual content
 Easy to understand , simple English, content
 Key information, good understanding, well-organised
 The idea of cooperation between teachers and coaches
 Examples of action planning to give to an athlete
 Having video links to help explain sections:
 good practices
 recommendations
 skills
 Good organisation of knowledge and skills, convenience and flexibility, career advancement
 Increasing knowledge, topics are well explained
 I will use the course to help my athletes in class by asking them about their relevant sporting backgrounds, I will use the wheel of life, and definitely use the video of the boy telling his father how to play golf as this will have an impact on the players' parents.
 All aspects
 Fast learning, understandable explanations, good videos
 General knowledge of the notion of a dual career for junior athletes
 I gained an expanded knowledge of the social benefits of a dual career for junior athletes
 I will be able to use the acquired knowledge in order to support the idea of a dual career for junior athletes.
 Improving knowledge about athletes' dual careers:
 better treatment of athletes
 better planning of the training of athletes
 Looking deeper into the essence of dual career athletes
 Learning strategies to help these athletes
 Being now more aware of upcoming difficulties for an athlete, ways of helping , being aware that a dual career is "international" and we can enjoy the experience of others and share it with them

I could learn how to deal with not having enough time for my homework. Moreover, the thing that I liked the most was a chance to hear (on the videos) the opinions and advice of other athletes.

A good use of resources (video, articles); Quality of sources; Relevancy

The different skills provided for us to use

It allowed me to consolidate the things I have learned

I know what should I do when I'm stressed and I know how to get educate in school and do sports.

Ready for changes. How to cope with stress. How to plan time.

I understand how a dual career works now

I know more about the topics

Knowing about the topics

It was easy to understand

The videos and images used made the lesson more enjoyable and easier

The course was short enough

Not too long but also not too short

I learned how to better myself as an athlete using the new skills I learnt e.g. Time management, asking for help when necessary etc.

What aspects/areas of the course could be improved? Could you please list three?

More videos

If I had to improve something, I would improve the practical aspect, sharing experiences with the other members of the course and I would deepen some aspects concerning the contents.

The relationship between schools and federations.

The relationship between teachers - coaches - athletes

Better information for parents

I don't know any aspects that could be improved, it's fine

Coaching, parents, more real examples

More pictures, more colour, more dynamic (graphs, videos)

More practical examples please

It could be a good idea to give the athletes a training internship

More interaction, more questionnaires, more videos

Maybe more text and fewer long films (the short ones were good),

There is nothing I would change; for me it was informative, I learnt new things and it gave me a number of new ideas to use in my coaching.

More information, more interesting themes, more activities

There is no need for any significant changes to the course.

The teacher's relationship with the athlete

The correct treatment of the athlete by the teacher

Improving training-work conditions

Maybe more interactive tasks

Practical up-to-date examples of elite/ talented young athletes and their educational path (what degree course they have chosen); if there are any introduction of formal institutions in European countries providing Dual Career Support, a consideration of the possibility of exchanging views, asking questions among the participants

Activities should be harder, or have a minimum grade completion for a mark not really anything to improve actually; it was ok to me

I learned a lot and I think that everything was good.

More videos, motivational courses, the length of each module

More pictures, videos

Everything was good

Lessen the amount of words in each slide

The function for us to answer questions was sometimes faulty

The answers to the quizzes at the end were wrong for the last 2 modules

Some modules are a bit long (long videos)

If you have any comments to help us enhance the quality of the courses, please share them here.

Sharing of course contents with other students.

My idea is that more synergy could be created, that is, to give both practical and theoretical support to students

It was very useful for me, thank you!

Keep doing what you are doing; the course has been fantastic.

Based on the remarks above, I have no substantial comments.

I tend to think that you could work on the clarity of the whole course. Maybe give more helpful advice, because there was loads of theoretical information and less practical stuff.

The general idea was great :)

Conclusions

A clear gap in both literature and practice was identified regarding the support needed for dual career junior athletes. The findings extended the knowledge of organisational support for junior athletes aged between 15 and 19 years old and their addresses.

The Teaching Curricula and Materials were designed to meet the gaps identified in the Literature Review, the Baseline Report and the Best Practices Report.

Since it was the first attempt to address junior athletes aged between 15 and 19 years old and their social support providers, the Teaching/Training provided by DCJA was an ambitious project whose aims were to raise awareness. Nevertheless, the need for customised support systems for junior dual career athletes and the need to develop evidence-based support schemes require further concerted efforts at all levels.

Conclusion

The dual career of athletes is one of the key priorities set by the European Commission in the implementation of Erasmus+ Sport projects. The challenges of a dual career in sport affect all athletes regardless of their country of origin or of sports discipline. The first project funded by Erasmus + Sport which was dedicated to the dual career of athletes took place in 2014. Since then, there has been an increase in the number of projects that investigate and provide on-hand experience to further support athletes and social supporter providers. The most covered policy areas among the projects were sport (28 projects) and education (29 projects), which represent 36,36% and 37,66% of the total projects regarding the dual career of athletes ever approved, respectively. The 16 projects regarding employment policy represent 20,78% of the total projects focused on the dual career of athletes approved and the 4 projects covering health policy represent 5,20%.

Dual careers among young athletes might definitely be perceived as a complicated and demanding way to experience youth, especially when considering challenges and barriers arising from a combination of sport and education. However, increased awareness, understanding and the ability to use available resources are very likely to transform potential challenges into benefits. This, in turn, might make the life of young athletes easier and more enjoyable. Numerous research indicates that dual careers, combining sport and education or sport and work, can be highly beneficial for athletes, helping them to balance sport and non-sport commitments in preparation for 'life

after sport'. Therefore, there is a clear need to support athletes on this challenging path. For the purpose of the project and research study, junior athletes were conceptualised as student-athletes aged between 15 and 19, undergoing adolescence and/or young adulthood one of the most challenging periods of time in their lives. During this period, young athletes experience transition not only within their sport or educational context but also the crucial changes that occur in their personal lives within psychological, social and physiological contexts. Importantly, research showed that at this age student-athletes are at higher risk of dropping out of sport than at any other period in their lives.

DCJA project results revealed that in many European countries support mechanisms for dual career are at a very early stage and it is important to undertake further research and applied initiatives to improve dual career among athletes in Europe. The current project's primary aim was to increase awareness of dual career among both young athletes and their social supporters, ensuring that they have support in the one of the hardest or so called "bottle neck" periods of their career, by delivering a platform with evidence-based content. To identify any structured support services and systems used to help junior athletes in managing their dual careers, secondary data was collected (i.e., from websites of sport organisations, youth sports clubs, and schools) in each of the partners' countries: Greece, Italy, Poland, Portugal, Slovenia, Spain, and the United Kingdom. The results showed that every country has a centralised sport system, however five out of the

seven countries haven't got a sport school system. The findings associated with a sports school system outlines gaps for a structured system at the level of secondary school, which can help junior athletes in pursuing sport and education. The findings from the first part of the project extend the knowledge of organisational support for junior athletes with dual careers and identifies a clear gap in both literature and practice.

The most recent literature on dual careers often refers to EU Guidelines. Nevertheless, the research devoted specifically to the junior athletes is quite limited, with the DCJA project aiming to fill that gap. The majority of studies conducted in the area of C were focused on a single country or a particular sport discipline. The DCJA project's objective was to develop a curriculum for junior athletes and social support providers, presented further in the form of a massive open online course (MOOC). A Training Course for Junior Athletes was aimed at allowing them to raise their awareness and knowledge on the needs of balancing educational and sporting careers. A Training Course for social support providers was aimed at allowing Social Support Providers to raise their awareness and knowledge on the needs of balancing educational and sporting careers among junior athletes. The teaching material content was based on existing literature on the topic of the dual career of junior athletes, research findings and experts' knowledge who were designated in the project.

The selected Teaching Modules for Junior Athletes were as follows: Dual Career – benefits and challenges, Personal Develop-

ment, Planning dual career, Time management skills, Use of resources / communication, Emotion regulation, stress management, Dual Career – support system. The selected Teaching Modules for Social Support Providers were as follows: Dual Career – benefits and challenges, Career Paths / Orientation Planning, Dual Career Benefits, Acting as a Dual Career support provider, best practices & recommendations for parents – Institute of Sport, best practices & recommendations for coaches, best practices & recommendations for teachers. Upon the completion of the Courses Curriculum and the relevant Teaching Material, the pilot testing of the MOOCs was conducted with end users to ensure adequate content for both junior athletes and social support providers was delivered. Each project partner aimed at selecting 40 participants: ≥20 junior athletes and ≥20 for each respective MOOC. Each project partner aimed at selecting 40 participants: ≥20 junior athletes and ≥20 for each respective MOOC.

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Appendix 1: List of Abbreviations

Abbreviation	Definition
DCJA	Dual Career for Junior Athletes
DC	Dual Career
IS	Institute of Sport – National Research Institute
SUSA	Slovenian University Sports Association
AAOP	Portuguese Olympic Athletes Association
MSV	Margherita Sport e Vita
UoS	University of Stirling
FUI1	Fundación Universidad Isabel I
ESC	EAS SEGAS CYCLADES
MOOC	Massive Open Online Course
IO	Intellectual Output
EU	European Union
HAC	Holistic Athlete Career Model
NGO	Non-Governmental Organisation
DCCQ-A	Dual Career Competency Questionnaire for Athletes
RSQ-JA	Role Strain Questionnaire for Junior Athletes
GEES	Gold in Education and Elite Sport
DCCQ-SP	Dual Career Competency Questionnaire for Support Providers
EMPATIA	Education Model for Parents of Athletes in Academics

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Appendix 3: List of Project Team Members

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