Ten Essential Features of European Dual Career Development Environments: A Multiple Case Study

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Abstract

Aim: Dual career development environments (DCDEs) support athletes' effort in combining their competitive sporting careers with education or work. The characteristics of the environments may differ across cultures. The aim was to identify essential features of DCDEs based on a cross-case analysis of seven European DCDEs in Belgium, Denmark, Finland, Slovenia, Spain, Sweden, and the United Kingdom within the Erasmus+ Sport project "Ecology of Dual Career".

Design: The study was designed as a multiple case study and based on two holistic ecological working models (Henriksen et al., 2020). The cross-case analysis included series of focus group discussions, in which two-three researchers from each partner country and four dual career (DC) support providers compared the findings across seven national cases with a primary focus on similarities rather than differences.

Results: A list of ten essential features of the DCDEs, structured into two overarching themes. (1) Holistic structure with five subthemes: Dedicated DC support team, Integration of efforts across the whole environment, A clear understanding of DC issues and support from across the environment, Role models and mentorship, and Access to expert support. (2) Shared DC philosophy also had five subthemes: A whole-person approach, An empowerment approach, Flexible DC solutions, Care of DC athlete's mental health and wellbeing, and An open and proactive approach to the development of the environment.

Conclusion: The features are introduced in the manner of discussions, thus providing detailed information about the DCDEs without losing (too much) contextual information. These features can help researcher-practitioners to understand DCDEs and guide their optimization.

Keywords: Holistic ecological approach, case study, sport and education, cross-national, Erasmus+

Ten Essential Features of European Dual Career Development Environments: A Multiple Case Study

Athletes strive to succeed not only in sport but also in education or work (European Commission, 2012). They have to prioritize and make shifts in this prioritization depending on life situations (e.g., school during the exam period or sport when approaching competitions). The potential value and benefits of combining sport and studies are short-term and long-term. For example, the skills learned in one area may be transferable and valued in others; the intellectual stimulation may also help to maintain interest and commitment in training when athletes face ups and downs; a dual career (DC) gives a sense of balance and that there is more in life than elite sport; and finally, having a fall back plan provides a sense of security, that may even influence the athletes in manners so they perform better (e.g., Aquilina, 2013; Stambulova et al., 2015). Additionally, DC athletes are often better prepared for the post-sport life (e.g., Torregrossa et al., 2015). The DC pathway can be challenging, and inflexible schedules can be a major barrier for DC athletes (Lopez de Subijana et al., 2015; Stambulova & Wylleman, 2019). Therefore, maintaining an optimal DC balance defined as "a combination of sport and studies that helps student-athletes achieve their educational and athletic goals, live satisfying private lives and maintain their health and well-being" (Stambulova et al., 2015, p. 12) should be supported to safeguard athletes from burnout (e.g., Sorkkila et al., 2017) and staying motivated (e.g., Lupo et al., 2017). Obtaining an optimal DC balance also means the possibility of shifting priority for sport or studies in certain periods (Cartigny et al., 2019).

European DC Research

Two major factors are influential in DC adjustment, including personal resources of the DC athlete (e.g., DC competencies; see De Brandt et al., 2018) and the external DC support provided on different levels (Giudotti et al., 2015; Stambulova & Wylleman, 2019). In European countries, sport

is usually club-based, and therefore, special arrangements are needed between sport and educational institutions to facilitate athletes' DCs. Within the European context and taking into account the differences between educational policies in different European countries, Aquilina and Henry (2010) identify four different types of policy systems: (1) A state-centric regulation where the responsibility is placed on the institution to provide adapted opportunities for student-athletes (e.g., Spain), (2) the state as sponsor or facilitator, whereby the state promotes formal agreements to ensure that student-athletes' needs are met (e.g., Belgium, Denmark, Finland, Sweden), (3) the national federations or sports institutes as facilitators or mediators between student-athletes and educational bodies (e.g., United Kingdom: UK), and (4) systems with no formal structures where arrangements rely on individually negotiated agreements (e.g., Slovenia). This typology illustrates the diversity in DC management approaches across Europe.

Recently, in a state-of-the-art critical review on the psychology of European athletes' DCs, Stambulova & Wylleman (2019) identified a Bas a major gap in the literature. The holistic lifespan perspective (Wylleman et al., 2013) is a central driving force of the current European DC research. It promotes "a whole person" and "a whole career approach" and illustrates that across the athletic life span, DC athletes interact with different people (e.g., coaches, teachers) in a variety of organizations, such as schools, colleges, universities and sports clubs (see Debois et al., 2015). Accordingly, there is a need to capture the whole spectrum of athletes' experiences in sport and beyond, including environmental influences from micro and macro levels, as well as athletic and non-athletic domains (Stambulova et al., 2020).

The ECO-DC Project, Holistic Ecological Approach, and the European Context

This study forms part of the Erasmus+ Sport project "Ecology of Dual Career - Exploring Dual Career Development Environments across Europe" (ECO-DC). Within the ECO-DC project, a dual career development environment (DCDE) is defined as a purposefully developed system that

aims to facilitate athletes' investment in combining their competitive sporting careers with education or work (see also Morris et al., 2020). The ECO-DC project invites researchers to look beyond the individual student-athlete and shift their attention to exploring DCDEs.

The holistic ecological approach (HEA) shifts researchers' and practitioner's attention from the individual athletes to the broader environment in which they develop, and it provides a theoretical grounding (systems theory, ecological psychology and cultural psychology), two working models, and methodological guidelines for researching environments (Henriksen, 2010; Henriksen & Stambulova, 2017). Inspired by the HEA and research into athletic talent development environments (Henriksen et al., 2010a), the ECO-DC project was conducted to advance the knowledge of DCDEs across Europe. The initial step in the project was to create a taxonomy of DCDEs, and eight types were identified across seven European countries (i.e. Belgium, Denmark, Finland, Slovenia, Spain, Sweden, and the UK) involved in the project: (a) sports friendly schools, (b) elite sport schools /colleges, (c) professional and /or private club programs, (d) sports friendly universities, (e) combined DC systems, (f) national sports programs, (g) defense forces programs, and (h) players' union programs with a range of approaches to supporting DCs (Morris et al., 2020). A natural extension of this work was to explore these types of environments in more detail by conducting case studies informed by the HEA after adapting it to grasp specific features of DCDEs.

Based on the original HEA working models designed to investigate talent development environments (Henriksen et al., 2010), the ECO-DC consortium designed two working models for the investigation of DCDEs (see Henriksen et al., 2020, for a detailed description). These two are interconnected and serve as a lens through which to analyze a whole DCDE. First, with the DCDE working model, there is a focus on the structure of the environment, particularly the roles and cooperation of key persons and organizations. The model is structured into two levels (micro and macro) and three domains (sport, study and private life). Second, with the DC-Environment Success

Factors (DC-ESF) working model, there is a focus on the DC preconditions, DC processes, DC philosophy of the DC support team, the student-athletes' development as athletes, students and persons, and their acquisition of DC competences. These elements are analyzed to explain the effectiveness of the environment (i.e., the student-athletes' athletic and academic achievements, wellbeing and satisfaction). After developing the working models case studies were conducted to provide holistic descriptions of local DCDEs in seven countries (more details in the Methodology), which are compared and contrasted in this current study, prioritizing the identification of similarities.

The ECO-DC project expands the growing trend of focusing on athletes' DC support network, including coaches, teachers, parents and DC support providers (Defruyt et al., 2019; Gledhill & Harwood, 2015, Knight et al., 2018; Tessitore et al., 2020). Previously, environmental aspects such as flexible study programs (Brown et al., 2015; Fuchs et al., 2016; Pink et al., 2018), mentorship processes (Pink et al., 2018) and the interactions between the agents in athletes' different life domains (Defruyt et al., 2019; Tekavc et al., 2015) have been identified as vital facilitators of DC management. HEA seems to hold merit for DC research and the analysis of the whole environment (Henriksen et al., 2020; Kiens & Larsen, 2020; Korhonen et al., 2020; Linnér et al., 2020; Nikander et al., 2020). In order to further construct and yield meaningful linkages across cases, the natural next step is to identify the similarities between a selected sample of European DCDEs. The outcome of this study may enable researchers and practitioners to identify areas for optimization and the promotion of practices that develop positive DCDEs. Further, this could provide the basis for the development of a monitoring and evaluation tool to support the management of DCDEs. Therefore, and inspired by previous studies in the field on defining specificities and commonalities of different environments (e.g., Henriksen, 2010; Kuettel et al., 2018), the aim of the current study

is to identify essential features of DCDEs based on a cross-case analysis of seven European DCDEs. Outlining analogous features of DCDEs would enable further development of DC support.

Methodology

The study is a qualitative post-positivist study with a multiple case design in which several bounded cases are selected to develop a more in-depth understanding of the phenomena than a single case can provide (Chmiliar, 2010). Following the guidelines of Stake (2006), the interest in the single cases is instrumental since they belong to a particular target collection of cases that are categorically bounded together. In this study we compared and contrasted processes and outcomes across seven cases of European DCDEs focusing primarily on their similarities (i.e., features) but also acknowledging their uniqueness and how each of them is influenced by local conditions (Miles et al., 2014). We position this study within realist ontology and post-positivist epistemology meaning that DCDEs exist as material structures that operate independently of our experience and that we strive for an accurate portrait of the European DCDEs' features but understand that it can only be grasped imperfectly (Smith, 2019; McGannon et al., 2019).

Background Case Studies

Partners of the ECO-DC project represented geographically and culturally diverse European countries, including Belgium, Denmark, Finland, Slovenia, Spain, Sweden and the UK. Based on an initial mapping of different types of DCDEs across Europe (Morris et al., 2020), the seven national research groups each selected a DCDE based on the context-specific criteria including effectiveness of the DCDE (e.g., sport and/or academic achievements, wellbeing, drop-out; see Table 1). For example, the Finnish case was awarded the best DC environment in Finland (Nikander et al., 2020), and the Swedish case was selected as a national example of best practice (Linnér et al., 2020).

The case studies were collected at the same time (i.e. parallel design; Stake, 2006) by national research groups, based on the HEA (Henriksen & Stambulova, 2017), guided by the DCDE and the

DC-ESF working models (Henriksen et al., 2020), and the same templates for observation and interview guides (see more in Henriksen et al., 2020). The purpose of each of them was to provide holistic in-depth and rich descriptions of selected European DCDEs, and to investigate the factors influencing the environments' effectiveness in supporting the development of student-athletes (see Table 1 for an overview of the data collection). Case presentations relied on transforming the working models into empirical DCDE and DC-ESF models grounded in the empirical data of each DCDE. The overall ECO-DC project received ethical approval in a relevant university [removed for blind review]. All single case studies were conducted in accordance with the local ethical guidelines. For a detailed description of the data collection method employed and an example of a case study see Henriksen et al. (2020). Several of the case studies were presented at international conferences (De Brandt et al., 2019; Linnér et al., 2019; Ramis et al., 2019; Ronkainen et al., 2019).

Stages in the Cross-Case Analysis and Reflections on the Rigor

The project research group[1] consisted of two-three researchers from each partner country (15 in total) and four DC support providers from Belgium, Denmark, UK and Sweden (from now – the project research group). The project research group represents relevant expertise (i.e., DC research, the HEA, case studies) and experience from applied work within the European DC support systems at different organizational levels (e.g., managers of DC provision in national sports federations).

Cross-case analysis is a research method that can mobilize knowledge from individual case studies. The mobilization of case knowledge occurs when researchers accumulate case knowledge, compare and contrast cases, and in doing so, produce new knowledge (Khan & VanWynsberghe, 2008). The qualitative data analyzed in this study were case descriptions and focus group notes, and the analysis across cases proceeded through five stages.

Table 1

Overview of European Cases and Data Collection

	Belgium	Denmark	Finland	UK	Slovenia	Spain	Sweden
Type of DCDE	Elite sport school	Sport friendly University	Elite sport school	Sport friendly University	Sport friendly school	Private club	Combined DC system
DCDE effectiveness	International sporting success; student-athletes continue DC in higher education; low drop-out.	International sporting success; competent and satisfied students; low drop-out.	International junior and senior sporting success; no drop-out; high graduation rates.	Long term success as athletes, in their careers and as members of the community.	Long term vocational success; high graduation rates; academic success.	Athletic (results) and academic (grades) achievements.	Athletic and academic achievements Low drop-out rate.
Sports	Gymnastics	Multiple	Winter sports	Multiple	Swimming	Multiple	Athletics
Age group	12-18	19+	16-20	19+	16-18	10-18	19+
DC support	Organisational set-up	Three DC support providers	No DC support team or system	Three DC support providers	Two part-time employees	School's sport coordinator	Four DC support providers
Data Collection of the Case Studies							
Interviews	Athletes (5) Coaches (3) Support staff from sport federation (2), Flemish sport adm. (2), boarding school (3) and elite sport school (5) Parents (2) Health team (2)	Athletes (2) Coaches (2) DC support (2) Vice-counsellor Teacher	Athletes (6) Coaches (2) Teachers (3) Student counsellor Mental coach Dormitory attendant Principal Head of the sports academy	Athletes (2) DC support (5)	Athlete Coach DC support (2)	Athletes (5) Retired athlete Management (3) Sport and clinical psychologist Focus group interview (manager, teacher, coach)	Coaches (2) DC-support (4) Vice-counsellor Focus group interviews (4 DC-athletes and 4 coaches)
Observations	30 hours	50 hours	144 hours	75 hours	30 hours	90 hours	85 hours
Documents	Web page Policy documents	Web page Social media	Social media Web page Surveys Work sheets Banners Policy documents	Web page	Web page Policy documents Social media Athlete's diaries	Web page Official documents	Web page
Case-data	Each country provided a DCDE empirical model, a DC-ESF empirical model, a case description (5000 words), and a deductive case analysis using Table 2 as a lens.						

In the first stage – *familiarization with the seven DCDE case studies through oral and video presentations* – the project research group worked to get a feeling of the key features of all seven cases. A written report of each case study, supplemented by the empirical versions of the DCDE and DC-ESF models, and 15-minute video presentations were provided by the seven national research groups to enable familiarization with the cases studied. One researcher from each partner country provided a short oral presentation at a research meeting, and all from the project research group were able to ask questions and get clarification on uncertainties if needed. The project coordinators compiled a preliminary list that initiated discussion and critical reflection and the project research group agreed that further cross-case analytical work was needed.

In the second stage - *series of focus group discussions* - the project research group compared and contrasted the cases to identify similarities and differences of the seven cases and developed the list of *shared features*. To avoid the project research group overlooking important differences between the multiple types of DCDEs (Morris et al., 2020) when identifying shared features, the participants were divided into two smaller groups. First, one group compared and contrasted cases of sport schools (Finland, Spain, Slovenia, Belgium) and the other university cases (Denmark, Sweden and UK). The project research group acknowledged that all environments are unique and that they are embedded in and shaped by specific local contexts and cultures; however, after lengthy discussions and negotiations, the project research group agreed on a preliminary list of features (e.g., shared philosophy, clear responsibilities, whole person approach, flexibility) for further elaboration, which was developed inductively from the data. Guided by the two working models the project research group constructed the two overarching categories, i.e. holistic structure and shared DC philosophy. From this point the analysis turned to a deductive strategy. Second, two new focus groups were established. One was focusing on the holistic structure of the DCDEs and the other on the shared DC philosophy. The meaning of each feature was clarified and described within these groups. Two persons in each focus group took notes and were leading the discussion in a collaborative and democratic manner, and were making sure that all members of the project research group contributed with their individual expertise and insights from their case studies. At this point, the common features of talent

development environments served as inspiration (Henriksen, 2010) and provided a common understanding of what a description of shared features might look like. The project research group reached consensus that all DCDEs do have space for improvement; they compensate for their weak points, and not all features are present in all cases. Therefore, the idea of identifying shared features turned into the idea of defining *essential features*, which we define as the most characteristic and important features of European DCDEs.

In the third stage *an appointed working group* (consisting of the first four authors of this paper) constructed a list of essential features (based on case descriptions and focus group notes), worked on providing descriptors of these features and following the example of Henriksen (2010) also the opposite pole descriptors (see Table 2). The opposite poles are meant as examples. However, they are not only inferred logically, but also grounded in the project research groups' applied experiences on optimization of less successful DCDEs and from the focal cases, where the participants reflected on both the strengths and the weaknesses of their environments. The stage was an iterative process going back and forth between notes from the focus group discussion, the case descriptions, and the list of shared features of talent development environments (Henriksen, 2010).

The fourth stage was *the final agreement of the list of essential features* as presented in Table 2. The draft list of descriptors and opposite poles was sent from the working group to the project research group who were invited to reflect, comment, and revise. This "member reflection" (Smith & McGannon, 2017) provided further intellectual precision of the essential features of European DCDEs. Based on comments and feedback, the working group revised the list, which again was sent to the entire project research group. The project research group reached final agreement on the essential features of European DCDEs, with descriptors and opposite poles, as presented in Table 2.

The fifth stage - *the list of essential features used as a coding frame for a deductive analysis of all the seven cases* - provided enriched detailed descriptions for direct comparisons of the cases. In line with the post-positivist stance of the ECO-DC project, we used a coding reliability thematic analysis approach, conceptualized themes as data domains (Braun & Clarke, 2019) for the second round of the case descriptions. Each national research team deductively analyzed their data set (see Table 1) using Table 2 as a

coding frame and produced descriptions of their DCDEs (now) based on the essential features. Then, the working group summarized and condensed these descriptions in Tables 3 and 4 to finally confirm the overarching categories – the holistic structure and the shared DC philosophy – and the relevant essential features.

Reflecting on the rigor of this five-stage cross-case analysis grounded in the post-positivist epistemology (see McGannon et al., 2019 about various approaches in defining rigor in qualitative research), we would like to mention the following: (a) from the very beginning we didn't plan to identify (exactly) ten DCDEs' essential features but we kept in mind that these features should have clear connotations with the DCDE and DC-ESF working models; (b) during the analysis we realized that all the DCDEs under comparison had stronger and weaker points, and that is why we shifted from the concept of shared features to essential features and also provided descriptions of positive meaning and opposite meaning of each feature; (c) in all the stages of the analysis, we went back and forth between the cases and the crystalizing list of DCDEs' essential features moving through a series of open and critical discussions in which members of our project research group challenged each other and searched for mutual understanding; (d) we moved to each next stage in the analysis only after the partners had agreed on a previous stage; and (e) we think that the outcome of the fifth stage (i.e., of the deductive analysis of all the cases using the essential features as a code-frame; Braun & Clarke, 2019) confirmed the list of essential features as comprehensive and credibly derived from the DCDEs compared.

Results

The European DCDEs varied in terms of the age of the athletes, the type of environment (e.g., sport friendly university, private sport club and elite sport school), and the level of sport and education they supported. All the essential features of DCDEs will be introduced below in the manner of the discussion to illustrate how the project research group contrasted, debated, and developed the features in the focus groups and reached consensus. We selected extracts from the dialogues in the project research group and give the readers a feel of our discussions. Table 2 is an overview of the ten essential features and their descriptors. We include in this table the opposite poles of the essential features to further clarify the meaning of each.

The positive pole and the opposite pole can be seen as designing a continuum that provides a richer and more nuanced reading of each feature. The ten features are structured into two overarching themes - Holistic structure and Shared DC philosophy - each with five subthemes. Table 3 displays the characteristics of the holistic structure and Table 4 displays the characteristics of the shared DC philosophy across the seven DCDEs. Tables 3 and 4 should be read one case (vertical) and thus one feature (horizontal) at a time. While the horizontal reading of Tables 3 and 4 allow the reader to look at one DCDE at a time, we emphasize that the condensed analysis does not present the rich in-depth illustration that is expected of a case study (Hodge & Sharp, 2016). In the following, we illustrate the diversity of the DCDEs and provide selected examples, but not all cases are mentioned in each feature even though all national research groups contributed with insights in the construction of each feature.

Table 2

Ten Essential Features of European Dual Career Development Environments

	Descriptors	Opposite Poles
	Holistic Structure	
Dedicated DC support team	Designated team (or person) responsible for coordinating sport and study domains. One central entry point. Helping student-athletes manage their DC is everybody's business (e.g., coaches, teachers), but the responsibility to coordinate lies with the support team.	Multiple contact points leave DC athletes uncertain about who to approach for assistance with DC issues. DC athletes are sent to multiple people in the system and feel no one has overall responsibility.
Integrated efforts	Coordination and communication across the sport, study and private domains. Coaches, teachers, family, DC support providers etc. have on-going communication. Micro and macro levels are linked through networks. Student-athletes experience concordance in daily life.	Lack of communication. Conflicting interests. DC athletes experience contradicting priorities in daily life - for example, when coaches advise athletes to primarily focus on their sport and teachers on their studies.
Understanding and support from the environment	Opportunities for DC athletes to focus on the sport and study at different times. Family, coaches, teachers, peers and others understand, acknowledge, and support the athletes' dedication to combining sport and study.	Lack of understanding of the demands involved in pursuing a dual career. Academic staff considers sport as a barrier to education. Sport staff and teammates consider studies as a barrier to sport performance.
Role models and mentorship	The presence of persons who DC athletes can be guided by in the form of direct mentorship or observational learning. Opportunities to learn from other DC athletes. Inspirational narratives from other DC athletes.	Impermeable boundaries between DC athletes across sports or across levels of sport or education. Athletes regard other athletes as rivals and are unwilling to share. Successful DC stories are not told for inspiration.
Access to expert support	Access to experts and services, such as nutrition, physiotherapy, sport psychology, and medical services (through the sport or study domain). DC support team knows how to help the DC athletes get access when needed.	No access to experts. DC athletes who need expert support do not know how to get this help.
	Shared Dual Career Philosophy	
A whole person approach	Acknowledgement that all domains influence DC athletes' lives. Developing the athletes holistically. People from one domain take an interest in the athletes' experiences, challenges, and learning in the other domains.	People in the sport domain see the athletes as athletes, and people in the study domain see students as students.
An empowerment approach	Opportunities for DC athletes to develop competencies and resources to manage their own dual career and become autonomous. Increasing empowerment of the athletes.	Focus only on sport and study specific skills and not on DC competencies. Excessive control. No active involvement of DC athletes in key decisions regarding their own DCs.
Flexible DC solutions	Recognition that DC athletes require individualized solutions, including sport and / or academic flexibility. Education based DCDEs allow for extra focus on sport when needed. Sport based DCDEs allow for extra focus on education when needed.	Dual career initiatives and services are fixed. Support services are not appropriately contextualized to the different sport and to the needs of individual athletes. Academic and sport staff compete for the limited time DC athletes have.
Care of DC athlete's mental health and wellbeing	Dual careers are managed in a socially responsible manner. Recognition of responsibility for athlete wellbeing. Ethical conduct guidelines and support systems (e.g., referral systems) are embedded in policies.	No recognition of responsibility for athletes' mental health. Gladiator philosophy that sport is hard, and athletes should toughen up. Staff colludes when they learn of inappropriate practices. No policies in place.
An open and proactive approach to the development of the environment	Dual career support providers engage in on-going development of their environment and their own competencies through e.g., further education, reading scientific literature, on-going evaluation of services, visits to other DCDEs, and involvement in research projects.	Lack of time for on-going professional development and evaluation. There may be knowledge sharing within the team but no expansion of horizons. Seeing other DCDEs as rivals.

Table 3

Characteristics of the Environments under Study: The Holistic Structure

	The holistic structure of European DCDEs						
	Belgium	Denmark	Finland	UK	Slovenia	Spain	Sweden
Dedicated DC support team	Representatives from the elite sport school, sports federation and boarding school constitute the dedicated DC support team.	An open and accessible team of three university people with specified roles and responsibilities is the point of entry.	No specific DC support team. Two student counsellors provide support in course related matters at school.	A well-coordinated DC support team with specified roles communicates with sport and academic stakeholders.	A DC support team situated in the school system provides DC support mainly for the educational aspirations.	No specific DC support team, but coaches, sport psychologists, teachers, the school's sports coordinator provide support.	A coordinated team of DC support providers and coaches had clear roles, and coaches were often first point of entry.
Integration of efforts across the whole environment	The structure is the key connector between the three domains, and student-athletes use sport and school friends for emotional support.	A relationship between the student athletes and DC team connected sport and study, and micro- and macro systems were integrated.	Poor communi-cation between school and sport, coaches and family were a barrier. The Olympic Committee provided support for coach and DC education.	On-going and largely informal and 'person-dependant' communication between DC team, sport and study ensured coherent support.	A club and school that work as separate organisations with little or no integrated efforts was considered a barrier.	Families provide practical support, and the school domain adapted to the sport domain to compensate for a lack of integration and coordination.	The DC support team integrated efforts of sport and study staff. At the macro-level, university, local authorities, and regional and local sports collaborated
A clear understanding of DC issues and support from across the environment	Shared under-standing of the mission to develop gymnasts with focus on graduation and wellbeing. Strong family support.	Coaches were supportive and allowed flexibility. Study peers provided practical and emotional support. The whole system acknowledged the importance of DC.	Academic staff considers prioritising sport as a barrier to education. Coaches support professionalisation of athletic career.	Promoted by the DC support team, the importance of DC is mostly supported. Some stakeholders did not see a reason to accommodate DC athletes.	A lack of shared understanding and a main focus on education were compensated for by coaches being flexible, and by sport peers being supportive.	Coaches' being insensitive to the athletes' academic commitments were in contrast to parents' emphasis on education.	A shared understanding of athletes' needs and challenges was visible in how coaches and teachers acknowledged DC dedication, and in peer support.
Role models and mentorship	No formal structures, but pedagogues were mentors and supported a balanced life.	Experienced DC athletes were role models in a virtual community based on stories.	Olympic athletes are present, but their potential role as mentors is not fully utilized.	Mentorships include a buddy system, a tight-knit community, and active alumni.	No formalized mentorships, but peer student-athletes were helpful informal mentors.	Successful student-athletes were acknowledged, and coaches were role models.	Informal mentorship between student-athletes at the training centre.
Access to expert support	Multidisciplinary meetings to follow up on injuries and training schedules, and daily access to physiotherapists.	The DC support team referred athletes to clubs, federations, and Team Denmark for expert support.	Access to some experts within the support system in the environment is based on athlete status.	Lifestyle, sport science, sport psychology and physiotherapy services are inside the DCDE.	The school provides support related to education, and the clubs provide physiotherapy and sport psychology.	Clubs provide sport psychology, medical services, and physiotherapy, and school offers clinical psychology.	A performance team organized by the DCDE provided sport psychology, medicine, nutrition and physiotherapy.

Holistic Structure

As an overarching theme, the *holistic structure* refers to the specific components of the environment (people, institutions etc.), the roles and functions of these components, and the communication and coordination between the different components and levels of the environment. The holistic structure of each DCDE was centered around the student-athletes and embraced micro- and macro-levels, and sport, study and private domains. This overarching theme contains five sub-themes representing five essential features of DCDEs (see Tables 2 and 3).

Dedicated DC Support Team

The dedicated DC support team refers to having a designated team (or person) responsible for coordinating sport and study that helps to facilitate an optimal DC balance. In the best cases, one central entry point was provided, but promoted helping student-athletes as everybody's (e.g., coaches, managers, teachers, family) business.

Organization of the DC support varied across the seven cases. The Swedish research group investigated a combined DC system for university student-athletes and identified that the DC support team consisted of four stakeholders with a clear distribution of roles and functions (e.g., coordination, organization, contacts with student-athletes, coaches, teachers, administration, experts, and external partners). This team coordinated flexible study and helped with other aspects of DC athletes' life (e.g., planning and prioritizing), facilitating their search for optimal DC balance. Student-athletes' main entry point for DC support was the coaches from whom they got initial support and advice on how to proceed. Then the DC support team, who had close contact with the coaches, organized a more attuned support based on the nature of student-athletes' needs. By contrast, the Finnish research group investigated a Finnish elite sport school for winter sports and found no DC support team. Athletes still combined sport and studies, but the school did not have a person or team responsible for DC issues. If athletes struggled with school issues, they had to approach student counselors like all other students. The Slovenian research group found two designated people (a pedagogical school coordinator and a school psychologist) that provided DC

support. If the student-athletes had problems with school grades, the teachers contacted the pedagogical coordinator and they collaborated to find a solution. The Spanish research group, studying a private multiple sports club, found no people with formal responsibility for helping student-athletes manage their DCs, but a few well-intentioned people (a teacher and a sport psychologist) compensated for this lack of formal structure by helping the athletes regardless. These well-intentioned people met adolescents who needed help finding a balance in life. The Spanish research group described this as a weakness, because it left the athletes uncertain of whom to approach. When they discussed this with the club management, they agreed and decided to remedy this in the future.

Integration of Efforts Across the Whole Environment

The integration of efforts across the whole DCDE refers to the coordination and communication between representatives from the sport, study, and private life domains (e.g., coaches, teachers, family, DC support team). Micro- and macro-levels were linked through formal or informal networks. When integrated, the efforts to support the student-athletes allowed them to experience concordance and synergy in daily life.

The Danish research group investigated a sports friendly university and identified a DC-support team that functioned as a key connecter between the sport and the study domains, especially at the macro-level. The head of this team had a large network in the local and national elite sport system, as well as within the university system. To the benefit of the student-athletes, the head of the team ensured that the efforts of people across the DCDE were in sync. For example, he visited the national training centers to explain the ideas of DC to coaches, family, and athletes. The day-to-day coordination of the DC, however, was mainly the task of the student-athletes. In general, in Denmark, the combination of sport and study is considered the norm and a key ingredient of the life of an elite athlete, not a barrier to sporting achievements. The Belgian and Finnish research groups explored DCDEs where the student-athletes lived, trained, and studied within the same environment. In the Finnish elite sport school, the student-athletes did not experience integration

and coordination, but rather contradicting priorities in daily life. The coaches primarily focused on sporting achievements, whereas the teachers expressed concerns over sports interrupting day-to-day rhythm of student-athletes. The Flemish (i.e. northern part of Belgium) elite sport school for gymnastics provided integrated efforts due to a successful collaboration between three organizations - boarding school, sports federation, and the school. One person from each domain constituted the DC support team and they had weekly meetings, which provided good communication and quick follow up if problems occurred. Living at a boarding school facilitated integrated efforts, but some student-athletes (aged 12-18) suffered from homesickness.

A Clear Understanding of DC Issues and Support from Across the Environment

A clear understanding of the challenges faced by student-athletes allows the support network to provide appropriate support for student-athletes to allow them to focus on the sport and study at different time points depending upon key priorities at that time. It refers to family, coaches, and teachers acknowledging, accepting, and supporting the DC athletes' dedication to combining sport and study.

The UK DCDE under study was a sports friendly university, the DC support team promoted the importance of DC as a protective factor for the wellbeing of the athletes. The UK research group identified that the environment was characterized by a shared understanding of the issues related to DC. The DC support team worked deliberately on disseminating knowledge to family, coaches, teachers, and peers so that they were able to recognize and understand the specific needs of student-athletes (e.g., shift in prioritizing depending on the situations). The Belgian research group found that families played a positive supporting role. However, because there is little chance to make a living from gymnastics, some parents unwittingly pressured their children by emphasizing the importance of school. Responding to the Belgian story, the Finnish research group similarly described how student-athletes rated (from the case descriptions) the financial support provided by parents as crucial for them to be able to pursue a dual-career.

Role Models and Mentorship

Role models and mentorship refer to the presence of appropriate persons who student-athletes can learn from and be guided and inspired by. Role models and mentorship was regarded essential in all cases, but each environment varied in terms of how formalized the setup was. All the environments provided opportunities for student-athletes to learn from others.

The focus group discussions showcased multiple types of role models and mentorship across the European DCDEs. The UK research group identified that all student-athletes coming into the environment were assigned a “buddy”, who was a second or a third-year student-athlete. The buddy demonstrated what was expected within the environment and acted as an additional point of contact for questions or support for the new student-athletes. The tight-knit community among student-athletes within the scholarship system promoted peer learning and support. Student-athletes communicated with each other through the scholarship hub, in the gym facilities, or when they attended workshops. Some even shared accommodation with other student-athletes. Furthermore, alumni gave presentations and willingly passed on their knowledge. Responding to this story, the Danish research group described how the Danish student-athletes were a part of a virtual community tied together by shared narratives. The DC support team provided opportunities for vicarious learning by sharing stories of challenges, dilemmas, and solutions based on previous experiences. So even if the student-athletes did not necessarily meet within the environment, they still learned from each other. The management of the Danish DCDE explained that one-size-fit-all workshops would not suit a diverse group of athletes from different sports and education backgrounds, and, therefore, the DC team used examples of previous individualized solutions as a part of their supervision of student-athletes. The project research group agreed that peer learning, role models and mentorship were essential in a well-functioning DCDE. Role models helped student-athletes to become aware of their career options and ways to cope with adversity and challenges.

Access to Expert Support

The project research group agreed that access to expert services, such as nutrition, physiotherapy, sport psychology, sports medicine was essential for a successful DC. In the different cases, such access was either provided within the DCDE, or the DC support team knew how to signpost the DC athletes to the relevant support.

The Spanish research group explored a private sports club and explained that the student-athletes had access to clinical and educational sport psychology support, physiotherapists, and sport medical staff in the DCDE. Although access to experts was crucial in helping the athletes solve their DC related issues, it was up to the student-athletes to ask for this support, and often they were not aware of the services available to them. In the Finnish DCDE, the services were based in the sports domain (e.g., full time employed physiotherapist and support for physical training). Access to sports medicine and a mental coach was only for national team athletes, which provided them with an express lane to expert assistance, however, everyone had access to a free, albeit slower and less specialized, health care system. The Swedish research group found a well-organized performance team of experts in sport psychology, sport medicine, nutrition, and strength and conditioning training. The Swedish research group emphasized that these experts were also teachers and researchers at the university, which provided a coherent structure across the sports and study domains. Hearing this, the Danish research group shared how they did not find expert support within the university, but clubs and national sport organizations offered expert support services, and the DC support team would refer athletes when needed. By contrast, the Slovenian research group shared that in Slovenia student-athletes (or their families) pay for expert support. The project research group agreed that access to expert support was not implemented in the same way across the DCDEs, but it was essential for the student-athletes to thrive and develop.

Table 4

Characteristics of the Environments under Study: Shared DC Philosophy

	Shared DC philosophy of European DCDEs						
	Belgium	Denmark	Finland	UK	Slovenia	Spain	Sweden
A whole person approach	All stakeholders took an interest in the other domains, and the boarding school was a main driver of the whole person approach.	A clear aim was to teach the athletes to prioritize and plan, and to help them develop social skills.	Student-athletes were mainly seen as athletes, and time spent on studies was seen as a barrier for sport development.	DC support team took an interest in all domains, and aimed to develop competences for long-term success in sport and job.	Student-athletes were seen as more than students and athletes, but there was a lack of support for this challenge.	The sports domain stimulated multiple roles (friend, student, partner) but a lack of communication was challenging.	Student-athletes seen as whole persons with individual needs and interests and learned to switch between domains.
An empowerment approach	Promotes the development of competencies such as autonomy, self-discipline, planning, and resilience.	A shift from proactive to reactive support stimulated growth in autonomy.	Direct instructions from coaches were a barrier to empowerment.	Student-athletes were encouraged to take their own path in both sport and vocational careers.	Student-athletes were co-creators of a good environment and expected to act as grown-ups.	Athletes learnt time-management and emotion- regulation skills.	Support was provided in ways that empowered athletes to be in command of their own development.
Flexible DC solutions	Modular study systems, online courses, teachers tutoring during lunch breaks, and coaches shortening practice sessions in exam-periods.	Flexible solutions were formalized through an individual study plan, that could be changed along the way.	Student-athletes' curriculum differed from that of regular students, and there was possibility for night school and for prolonging the education.	An aim to provide individual solutions was visible when services and support were adapted to the athletes' needs.	Student-athletes were allowed to spend PE classes in the club, and the school offered additional teaching.	Flexibility was mainly seen from the study domain, where teachers supported athletes with planning exams and homework.	Athletes received help to move exams, take exams elsewhere, or reduce study pace. Training facilities were accessible 8-10 hours per day.
Care of DC athlete's mental health and wellbeing	Some athletes struggled with homesickness, but everyone had easy access to sport psychology support and pedagogues.	A well-balanced DC and free access to health care was seen as protective factors. Socially responsible sport was obliged by law.	Lack of specific mental health care was compensated through free access to national health care and life-skills classes.	The lifestyle and sport psychology practitioners managed mental health and well-being issues.	The pedagogical coordinator was a psychologist and provided mental health literacy. Clinical issues were referred.	A clinical and a sport psychologist were responsible for athletes' mental health.	The DCDE mission was healthy performance in the long run, which stimulated to help athletes achieve balance.
An open and proactive approach to the development of the environment.	Improvement through on-going evaluation of services and taking part in research.	Development through inspiration visits, sharing perspectives, on-going evaluation and taking part in research.	Satisfaction questionnaires and coaches engaging with sport science research. Teachers lack development opportunities.	Openness to feedback, formal evaluation at the end of each academic year, and engagement sport science research.	No time spend on developing the environment.	No resources spend on develop the environment, but the present project stimulated a new focus and additional resources.	Dialogue about improvement stimulated engagement in national networks and visits from other DCDEs.

Shared Dual Career Philosophy

The second overarching theme, a *shared DC philosophy*, suggests that key stakeholders (DC support providers, sport staff, academic staff) in the environment share basic ideas and values related to DCs. At the most fundamental level, there was agreement inside the environment that sport and education can benefit each other and that competencies acquired in one domain (study, sport, or private) could be of value in the others. The content of the philosophy, i.e. the key values and ideas that were highlighted as essential to success, included five features (see Tables 2 and 4).

[Insert Table 4 around here]

A Whole Person Approach

A whole person approach represents the acknowledgement that sport, study, and private life domains all influence student-athletes' lives. It represents the idea of developing the student-athletes holistically, as seen when people from one domain take an interest in the student-athletes' experiences, challenges, and learning in the other domains.

The Swedish research group found a shared DC philosophy among the stakeholders in the combined DC system (i.e. university): Student-athletes were neither only approached as students nor only as athletes. All people in the DCDE agreed that student-athletes are whole persons with individual needs and interests. For example, the coaches agreed that studies are important for athletes and that a focus solely on sport is not beneficial for development. The research group quoted a coach who said: 'First and foremost you are a person, then an athlete, and only then a pole vaulter.' The Slovenian research group investigated a swimming club and its collaboration with a sport friendly school as a DCDE. The coaches considered the athletes to be more than athletes and emphasized the importance of studies, and the teachers emphasized the importance of personal development through elite sport. Unfortunately, a lack of communication across the domains challenged this whole person approach in several ways. Coaches and teachers did not always agree on what came first and did not collaborate to find an optimal balance. Inspired by the other project cases, the Slovenian research group discussed this with the school management and the club coach

as a challenge to the optimal functioning of the environment. They agreed that more communication is needed in the future, but no one had the time allocated for this task. In the UK DCDE (i.e. sports friendly university), the UK research group found lifestyle advisors employed to support a whole person approach. For example, the lifestyle advisors encouraged the student-athletes to nurture their network and friendships outside the sport domain.

An Empowerment Approach

An empowerment approach refers to the student-athletes having opportunities to develop competencies and internal and external resources to manage their own DC and become autonomous. This was visible when student-athletes were actively involved in key decisions regarding their own DCs.

In the Danish sports friendly university, the DC support team played a pro-active supporting role in the athletes' first year as a student-athlete, but a more reactive role later in the development. This meant the DC support team gradually supported the student-athletes' autonomy development and helped developing their DC competences. The student-athletes matured as students, athletes, and persons along the way, and the DC support team adapted to this development by increasing empowerment of the athletes. In contrast, the Belgian research group investigated an elite sport school in an early specialization sport (i.e. gymnastics; age 12-18). This DCDE was highly structured, and compared to the Danish case, it was more controlling and protective. For example, large training and study loads and the set schedules restricted student-athletes in their interactions with peers outside the elite sport context. The student-athletes developed skills such as self-discipline, planning skills, and work ethic in function of the demands they encountered, but they sometimes struggled with motivation. Still, within this gymnastics context, the Belgian research group found that the DC support team shared a philosophy and aimed for an empowerment approach. The Spanish research group explored an environment for a similar age group (age 10-18), and they gave an example of how the sports psychologists supported the student-athletes in developing a sense of control over their own lives, within a structured set-up.

Flexible DC Solutions

Student-athletes' needs differ depending on the sport, the education, and the individual circumstances. Because athletes are different, flexibility is an essential feature of a successful combination of sport and school. Appropriate support is provided to all student-athletes as necessary. Flexible DC solutions are seen when the education-based DCDEs allow for extra focus on sport when needed, just as when the sport-based DCDEs allow for extra focus on education when needed.

Flexibility was a characteristic of all cases, but was exhibited in different ways. The UK research group explored a well-functioning scholarship system, which was flexible, but also had predetermined content (e.g., time management, career planning). The services and the support were adapted to meet the student-athletes' needs, which they recognized and highlighted as essential for their thriving and success. In the Swedish DCDE, which also was higher education, the most typical flexible solutions were to postpose or move exams, take the exams elsewhere, help athletes take their internship at a suitable location, and to increase length of enrollment. Training was organized to fit into the DC lifestyle of the student-athlete. Coaches knew the study plans of student-athletes and adapted their training to allow the athletes flexibility to study. The Spanish research group, who explored a sport-based DCDE for student-athletes in primary/secondary school (private sports club), responded to these stories by describing how the school displayed considerable flexibility but the sport less so. For examples, teachers allowed for flexible schedules and rearranged exams, whilst coaches did not adapt training or competition plans. The Finnish research group reflected on similarities between the Spanish context and their environment, highlighting that at the elite sport school for winter sports, the school day was built around the three weekly training sessions which student-athletes received credits for. The Danish research group explored an education-based DCDE and found the DC support team shared a philosophical understanding that all student-athletes are different, and therefore provided an individual study plan for each student-athlete. They quoted the manager of the DC support team: 'It's a mantra for us that there is no single solution'.

Stakeholders and student-athletes of the Danish DCDE spoke of this flexibility and the individual DC solutions as a key success feature.

Care of DC athlete's Mental Health and Wellbeing

Caring for student-athletes' mental health and wellbeing means that DCs are managed in a socially responsible manner. This feature was visible when the DCDEs recognized their responsibility for athlete wellbeing and provided specialized support. Ethical conduct guidelines and referral systems were embedded in policies to support appropriate practices.

In the UK sports friendly university, the care of student-athletes' mental health and wellbeing was largely the responsibility of the sport psychology and lifestyle practitioners, who were sport psychology doctorate students in training (supervised by fully qualified sport psychologists). They followed ethical conduct guidelines for the protection of athletes in their work, and if they believed student-athletes had more complex needs, they referred them to a clinical support team. As an example of the UK DCDE prioritizing their student-athletes' mental health and wellbeing, and unlike many similar systems in UK, the DCDE did not demand that student-athletes compete for the university in order to limit unnecessary stress placed on them. In the Belgian environment, the student-athletes were young (i.e. 12-18 years old) and lived at a boarding school, therefore specialized pedagogues cared for their wellbeing. The Finnish research group agreed that care of mental health was important, but described that their elite sport school lacked an organized support network for student-athletes with mental health problems (e.g., eating disorders, anxiety), although the coaches also agreed that this was an issue. A mental coach employed within the organization was primarily responsible for educating sport coaches and providing performance support for elite athletes representing national teams. The Finish research group found a need for better guidelines and support systems (e.g., referral systems). In response, the Danish research group shared that the head of the DC support team believed that the environment lacked guidelines, and that clear responsibilities for student-athletes' mental health were needed. In Denmark the student-athletes were protected by the Law of elite sport (which was also the case in Sweden and Finland) where it

is written that elite sport should be pursued in a socially responsible manner. The project research group agreed that ethical conduct not only at the national level, but also at the local level, was an essential success feature.

An Open and Proactive Approach to the Development of the Environment

As a final feature, an open and proactive approach to the development of the DCDE refers to stakeholders engaging in on-going development of their environment and their own competencies. Continuing professional development, evaluation of the environment, and engaging in scientific projects were described as a foundation for sharing knowledge and improving environment functioning.

The Belgian research group found it crucial, for the continued development of the Belgian DCDE, that stakeholders evaluated their services and engaged in research projects. The Belgian DCDE took a proactive approach towards its own development. The close collaboration between the DCDE, the Flemish Sport administration, and a research unit provided ongoing evaluation of the DC services. The UK research group shared how they also found systematic evaluation routines in the UK sports friendly university. The DC support team received feedback from student-athletes or stakeholders at the end of each academic year and adapted the service based on this feedback to enhance the systems' effectiveness. Based on this evaluation, resources could be taken away from services that had not been used by student-athletes and more resources given to the services most used. Additionally, the DC support team was encouraged to engage with the latest research to improve their service. In the Swedish DCDE, the DC support team regularly took part in national meetings on DC. The DCDE welcomed visitors from other environments and went on development trips to get innovative ideas and knowledge, and to share experiences, ways of working, challenges, and lessons learnt. In contrast, the Slovenian research group shared that a lack of a proactive approach to the further development of the DCDE was a limitation in their case. The Spanish research group contributed with a current example. At the time of investigation, the Spanish DCDE did not have a specific person responsible for providing DC support. As a result of the case study,

however, the private sports club realized that the responsibility to coordinate and integrate sport and studies should be clearer and employed two people for the task. This in itself bears witness to a proactive approach to strengthening the environment.

Discussion

The present paper makes contributions to the current DC research on three levels: (1) theoretically by expanding on an ecological approach by demonstrating applicability of the DCDE and DC-ESF working models in different sociocultural contexts, (2) empirically by identifying essential features of European DCDEs, and (3) methodologically by showcasing the approach of multiple cases conducted in parallel by cultural insiders (i.e., national research groups) with following cross-case analysis conducted by the multicultural group of researchers.

The HEA Framework and Dual Career

The present paper shifts the attention from the individual student-athletes and their significant others (e.g., Brown et al., 2015; Wylleman, 2019) to the whole environment in which student-athletes are embedded. DC research has vigorously demonstrated that DC pathways contain several transitions with different demands and barriers, for which the athletes need specific resources and coping strategies (Stambulova & Wylleman, 2019). Previous research has also shown that student-athletes' motivation, identity, and health are related to DC, and that a DC is a protective factor against mental ill-health and identity foreclosure at the time of retirement from the athletic career (e.g., Stambulova & Wylleman, 2019; Stambulova et al., 2020). This research has been used successfully to design career assistance programs to organize DC support services (Torregrossa et al., 2020).

Using the HEA as a framework, the ECO-DC project also expands the HEA. Where previously, the HEA has mainly been used to study talent development environments, ECO-DC uses HEA to investigate a new type of environment, the DCDE. We looked at micro- and macro-structures, sport, study, and private domains, and how different parts of a DCDE collaborate to facilitate the development of student-athletes. First, a pioneer study of a DCDE within HEA

(Henriksen et al., 2020) provided a holistic description of a specific case. This current paper presents a cross-case analysis using the HEA as a lens to study the environments. To facilitate these studies, we developed contextualized versions of the original HEA models (DCDE and DC-ESF working models) designed specifically for DCDEs. As such we follow a current trend towards contextualized career research (Stambulova et al., 2020). The working models (Henriksen et al., 2020) guided the data collection in several different European contexts and were helpful in presenting the cases in a similar manner, thus preparing the grounds for the cross-case analysis.

European DCDE Essential Features

Investigating DCDEs across Europe allowed us to identify essential features of DCDEs. Ten features were divided under two overarching themes. Holistic structure refers to the roles and functions of the different components and relationships within the environment at both micro and macro levels and across the different domains, and thus relates to the descriptive DCDE working model. Shared DC philosophy refers to the daily DC processes and the underpinning values and ideas, and thus relates to the explanatory DC-ESF working model.

The list of ten essential features (see Table 2) enables us to provide the following summary portrait of successful European DCDE as reflected in the student-athletes' athletic and academic achievements, wellbeing, and satisfaction. The student-athletes are sufficiently supported by a designated DC support team or person. This team or person facilitates coordination and communication between key stakeholders at micro and macro levels across several life domains. These integrated efforts across the whole environment provide concordance and synergy in the student-athletes' daily life. There is a clear understanding of DC issues and support from teachers, coaches, families and peers. Student-athletes communicate and interact with mentors and role models in their daily life and have good access to expert support. The daily routines in the DCDE are designed in accordance with a set of shared key values and ideas. First, student-athletes are considered whole persons. Second, student-athletes are gradually empowered to take charge of their DCs. Third, flexible solutions are provided to help student-athletes shifting focus and balancing

resources towards studies, sport and private life. Fourth, caring for DC athletes' mental health and wellbeing should be important for everyone, but the primary responsibility lies with a few designated people. Finally, an open and proactive approach of the DC support providers helps to develop and optimize the whole DCDE.

Features already found to be important in several DC studies conducted in the European context included academic flexibility and role models. Previous research support that DC athletes require individualized solutions including sport and/or academic flexibility (Brown et al., 2015; Fuchs et al., 2016; Pink et al., 2018). Large workloads, set schedules, mandatory class attendance and a reluctance to allow for any alternative focus are all referenced as major DC barriers (López de Subijana et al., 2015). Further, the presence of tutors, mentors or role models offer DC athletes valuable resources for multifaceted identity development (Ronkainen et al., 2019) and observational learning (Gledhill & Harwood, 2015; Pink et al., 2018). While previous research considered various single aspects of student-athletes' environment, this study provides a coherent account of DCDEs as wholes. Not all environments in this study were characterized by all features, and therefore the above portrait should be seen as an ideal type. All DCDEs faced challenges. Nonetheless, the list of features can inform the development of tools and strategies to support further investigation and optimization of DCDEs.

DCDEs in a Larger Context

The DCDEs were in different countries (i.e. in different sociocultural contexts) with different national policy systems (Aquilina & Henry, 2010) and varied according to the number of student-athletes and sports they supported. Previous work has identified different national approaches taken to support DCs (Aquilina & Henry, 2010; Kuettel et al., 2018). Some countries have a state-centric regulation, others do not have formal structures for DCs at all, and not every country has a national policy for DC support. For example, the Slovenian sport friendly school was situated in a policy system with a lack of national regulations. The DCDE compensated this by providing flexible solutions for student-athletes in their daily lives. Thus, the DCDEs function as a bridge between the

national policy level and the student-athletes daily lives in their micro contexts. All DCDEs were unique and had developed their own ways of supporting student-athletes. Still, the environments in many ways employed the same principles in their work. These principles were, however, not implemented in the same way across the European DCDEs. Therefore, the uniqueness of each environment reflects that DCDEs are always contextually contained within socially and culturally available resources (Ryba, Stambulova, Si, & Schinke, 2013).

Previous research on successful talent development environments (Henriksen, 2010; Henriksen & Stambulova, 2017) provided inspiration to the current study in the form of an overall focus on the environment, a case study methodological approach, specific working models and definitions, and finally through a list of shared features (e.g., proximal role models; training that allows for diversification). The essential features of DCDEs partly overlap with the shared features of successful talent development environments, which is not surprising. Indeed, the athletes in most of the investigated talent development environments were also students, and all the case studies highlighted coordination between sport and school as a key to success (Henriksen et al., 2010a; 2010b; 2011). But these case studies did not investigate the environments *as DCDEs* and did not consider the school context in the same detail as the sport context. More specifically, the features related to the holistic structure of the DCDE (i.e., role models, integrated efforts and support of sporting goals by the wider environment) were essential in both the talent development and DC contexts. A unique feature of the successful DCDEs was the dedicated DC support team that managed the holistic structure of the DCDE (see also Henriksen et al., 2020; Linnér et al., 2019). The coherence and coordinated communication across domains were needed at the organizational level to avoid unnecessary contradicting pulls in the daily life of the student-athletes.

The shared DC philosophy was an essential overarching feature of DCDEs, whereas successful talent development environments were characterized by a coherent organizational culture (e.g., Henriksen et al., 2011). DCDEs cannot have strong coherent organizational cultures, simply because they are composite environments. They consist of several organizations that collaborate

(e.g., school and club), each of which has an organizational culture. The organizational culture is a set of shared assumptions (i.e. beliefs and values) specific to a particular group of people who interact regularly (Schein, 2010). Thus, this concept is relevant inside a club or a team, but not in a composite environment. Organizational culture might provide stability and clarity and safeguards against uncertainty and confusion (Pink et al., 2015). We argue that in composite environments, the shared DC philosophy serves the same function for athletes, coaches, managers, and teachers. Additionally, we consider coaches (see also Linnér et al., 2020), teachers and DC support providers (Defruyt et al., 2019) as the key social agents who are in a position to take responsibility for developing, furthering, and upholding such a shared philosophy. We believe that a degree of coherence between the culture of an organization (i.e. elite sports school or private club) and the shared philosophy of a DCDE is required for the whole environment to work.

Practical Implications

The empowerment approach found in the present study helps student-athletes build personal resources to manage challenges and barriers. Autonomy supportive environments (Knight et al., 2018; Stambulova et al., 2015) with flexibility in both sport and educational domains teach student-athletes to be proactive and ask for help (i.e. facilitate adjustment/coping). The list of ten essential features can be a provisional practical guideline for DC practitioners (e.g., DC support providers, sport psychology consultants, coaches) to optimize DCDEs. We suggest that conversations around the essential features of DCDEs can help support providers and managers develop awareness and a clearer understanding of their role, relationships, and effectiveness. The list of ten essential features can be useful for evaluation and optimization of existing DCDEs and provide insights for stakeholders working on development of new DCDEs. Taking into account the differences between DC systems in different European countries, a valuable next step is to design context-sensitive interventions to optimize DCDEs (e.g., workshops) with inspiration from the content of Table 2. Further, ecological approaches previously used to develop the organizational identity of a talent development environment (Storm, 2020) and to create a high-performance culture in a national

team (Henriksen, 2015) might inspire practitioners within the DC context. The DCDE is a potential resource for the individual athlete, but how the individual DC athlete utilizes the benefits of the DCDE might not be similar for all individuals. Therefore we posit that future research could benefit from investigating how environments are experienced and utilized differently by individuals.

Methodological Reflections

The development of the list of essential features of DCDEs was a collaborative and reflexive task and included lengthy discussions among researchers and DC support providers representing seven countries and cases. The project research group possessed extensive experience and knowledge in the area of ecological perspectives, DC research, and DC support. The aim of reaching consensus in the project research group was fulfilled. Therefore, the cross-case analysis lends itself well to the naturalistic and analytical generalization (Smith, 2017), in the sense that we believe the list of features will resonate with DC support providers from across Europe and provide them with ideas to improve their practices. Additionally, the study provides the basis for the development of a monitoring tool to support a quantified evaluation of specific DCDE.

Unlike previous cross-case analyses within the field of talent development, in which the same researcher investigated all cases (e.g., Henriksen, 2010; Kuettel et al., 2018), no one person from the project research group has firsthand experience from all seven environments. The cases were in seven different countries and demanded language skills and cultural competence. We, therefore, relied on people thoroughly researching each national DCDE. A thorough process of getting familiar with all cases included reading reports and watching presentation videos from each national research group to get immersed with data. This was followed by a two-day meeting with several rounds of focus group discussions that challenged the results from both research and applied perspectives. The nature of the project also brought with it some ethical issues. In the focus group discussions, we had to accept the dual role as both participants (when representing, elaborating and discussing the cases) and researchers (when integrating and summarizing data across cases; Probst, 2016). The shifts in role required awareness and involved movement between different levels of

reflection. We aimed for reflexivity and transparency by talking openly about it and by clearly agreeing when we moved between the levels. We consider this approach successful and a format that can be replicated in other cross-national studies that aim to balance contextual sensitivity with a common message.

In the project research group all had their idiosyncratic approaches and backgrounds, and we used our different positions to challenge each other's blind spots. Despite the (member) diversity in terms of gender, nationality, and researcher/practitioner experiences, the project research group reached consensus on the ten essential features of European DCDEs based on analysis of diverse cases. We consider the list of the DCDE essential features (Table 2) to be provisional and open. The DCDEs included in this study represent a variety of cases (i.e. countries, types of DCDEs, age groups, and sports). It would be interesting to explore a case sample of similar types of environments to provide a more context-sensitive list of essential features of DCDEs for example, particular types of sport, types of DCDEs (Morris et al., 2020), or across different national support systems (Aquilina & Henry, 2010). Important nuances related to specific contextual factors need to be considered in more detail. Therefore, we invite fellow researchers to elaborate, clarify, and challenge the list in future research.

Conclusion

DCDEs support student-athletes in combining sport and school. Such environments vary in terms of their type, sports context, national culture, target groups, and degree of effectiveness. In the current study, national research groups investigated seven DCDEs across Europe. A large and diverse project research group of both researchers and practitioners, with extensive knowledge and experience in DC research and support, shared and discussed the seven cases in focus groups to find consensus on essential success features of European DCDEs. We identified ten essential features of European DCDEs that contributed to the success of the environments. Two overarching features were a holistic structure and a shared DC philosophy. The HEA supports holistic and ecological exploration of athletes' DCDEs, and we encourage practitioners to evaluate and optimize their

environments based upon the current findings. Appropriately contextualized, the ten features can serve as an inspiration for evaluating and optimizing. Case studies are time consuming and, from a practical perspective, rarely possible for DC support providers to conduct as part of their daily workload. The development of a monitoring tool based on the essential features, therefore, might be an important next step.

Author note

[1]The project research group includes those who took part in the focus group discussions in this study (the authors plus names removed for the purpose of blind review). The findings presented in Table 2 constitute an intellectual output of the work in this group. The national research groups provided empirical data for this study. The ECO-DC consortium includes all people involved in the Erasmus+ Sport project entitled “Ecology of Dual Career - Exploring Dual Career Development Environments across Europe” (ECO-DC).

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References

Aquilina, D. (2013). A study of the relationship between elite athletes' educational development and sporting performance. *International Journal of the History of Sport, 30(4)*, 374–392. https://doi.org/10.1080/ 09523367.2013.765723

Aquilina, D., & Henry, I. (2010). Elite athletes and university education in Europe: a review of policy and practice in higher education in the European Union Member States. *International Journal of Sport Policy*, *2*(1), 25–47. https://doi.org/10.1080/19406941003634024

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, *11*(4), 589–597. https://doi.org/10.1080/ 2159676X.2019.1628806.

Brown, D. J., Fletcher, D., Henry, I., Borrie, A., Emmett, J., Buzza, A., & Wombwell, S. (2015). A British university case study of the transitional experiences of student-athletes. *Psychology of Sport & Exercise*, *21*, 78–90. https://doi.org/10.1016/j.psychsport.2015.04.002

Cartigny, E., Fletcher, D., Coupland, C., & Taylor, G. (2019). Mind the gap: A grounded theory of dual career pathways in sport, *Journal of Applied Sport Psychology*. https://doi.org/10.1080/10413200.2019.1654559

Chmiliar, L. (2010). Multiple-case designs. In A. J. Mills, G., Durepos & E. Wiebe (Eds.), *Encyclopedia of case study research* (pp. 583-584). Thousand Oaks, CA: SAGE Publications, Inc. https://doi.org/10.4135/9781412957397.n216

Debois, N., Ledon, A., & Wylleman, P. (2015). A lifespan perspective on the dual career of elite male athletes. *Psychology of Sport and Exercise*, *21*, 15–26. https://doi.org/10.1016/j.psychsport.2014.07.011

De Brandt, K., Wylleman, P., Defruyt, S., Smismans, S., Morris, R., Deason, E., Taelman, K. (2019). Exploring dual career development environments across Europe: A holistic

ecological approach. In: T. Breitbarth et al. (Eds.) *Abstract book of the 27th European Sport Management Conference* (p. 533-534). Sevilla, Spain: Melia Sevilla.

De Brandt, K., Wylleman, P., Torregrossa, M., Schipper-van Veldhoven, N., Minelli, D., Defruyt, S., & De Knop, P. (2018). Exploring the factor structure of the dual career competency questionnaire for athletes in European pupil- and student-athletes. *International Journal of Sport and Exercise Psychology*. 1–18. https://doi.org/10.1080/1612197X.2018.1511619

Defruyt, S., Wylleman, P., Torregrossa, M., Schipper-van Veldhoven, N., Cecić Erpič, S., & De Brandt, K. (2019). The development and initial validation of the dual career competency questionnaire for support providers (DCCQ-SP). *International Journal of Sport and Exercise Psychology*, *0*(0), 1–18. https://doi.org/10.1080/1612197X.2019.1581827

ECO-DC (2018). *Erasmus+ Sport Project: "Ecology of Dual Career: Exploring Dual Career Development Environments across Europe."* Downloaded from https://dualcareers.eu/

European Commission. (2012). *EU Guidelines on Dual Careers of Athletes: Recommended Policy Actions in Support of Dual Careers in High-Performance Sport*. Brussels. https://doi.org/10.2766/52683

Fuchs, P. X., Wagner, H., Hannola, H., Niemisalo, N., Pehme, A., Puhke, R., …Guidotti, F. (2016). European student-athletes' perceptions on dual career outcomes and services. *Kinesiologia Slovenica*, *22*(2), 31–48.

Guidotti, F., Cortis, C., & Capranica, L. (2015). Dual career of European student-athletes: a systematic literature review. *Kinesiologia Slovenica*, *21*(3), 5–20.

Henriksen, K. (2010). *The ecology of talent development in sport: A multiple case study of successful athletic talent development environments in Scandinavia* (Doctoral thesis). Department of Sports Science and Clinical Biomechanics, University of Southern Denmark.

Henriksen, K. (2015). Developing a high-performance culture: A sport psychology intervention from an ecological perspective in elite orienteering. *Journal of Sport Psychology in Action, 6*, 141–153. https://doi.org/10.1080/21520704.2015.1084961

Henriksen, K., & Stambulova, N. (2017). Creating optimal environments for talent development: A holistic ecological approach. In: J. Baker, S. Cobley, J. Schorer, & N. Wattie (Eds), *Routledge handbook of talent identification and development in sport*, Abingdon, Oxon: Routledge, 2017, p. 271-284. https://doi.org/10.4324/9781315668017

Henriksen, K., Stambulova, N., & Roessler, K. K. (2010a). Holistic approach to athletic talent development environments: A successful sailing milieu. *Psychology of Sport and Exercise, 11*, 212–222. https://doi.org/10.1016/j.psychsport.2009.10.005

Henriksen, K., Stambulova, N. and Roessler, K. K. (2010b). Successful talent development in track and field: Considering the role of environment. *Scandinavian Journal of Medicine and Science in Sports, 20*, 122-132. https://doi.org/10.1111/j.1600-0838.2010.01187.x

Henriksen, K., Stambulova, N., & Roessler, K. K. (2011). Riding the wave of an expert: A successful talent development environment in kayaking. *The Sport Psychologist, 25*(3), 341–362. https://doi.org/10.1123/tsp.25.3.341

Henriksen, K., Storm, L., Kuettel, A., Linnér, L., & Stambulova, N. (2020). A holistic ecological approach to sport and study: The case of a dual career development environment in Denmark. *Psychology of Sport and Exercise, 47*, 101637. https://doi.org/10.1016/j.psychsport.2019.101637

Hodge, K., & Sharp, L. (2016). Case studies. In B. Smith, & A. C. Sparkes (Eds.). *Routledge Handbook of Qualitative Research in Sport and Exercise* (pp. 62–74). New York, NY: Routledge.

Khan, S., & VanWynsberghe, R. (2008). Cultivating the under-mined: Cross-case analysis as knowledge mobilization. *Forum Qualitative Sozialforschung / Forum: Qualitative Social Research, 9(1).* http://nbn-resolving.de/urn:nbn:de:0114-fqs0801348

Kiens, K., & Larsen, C.H. (accepted, 2020) Combining sport and study in high school: An insight into a dual career environment in Estonia. *Case Studies in Sport and Exercise Psychology*.

Knight, K. J., Harwood, C. G., & Sellars, P. A. (2018). Supporting adolescent athletes' dual careers: The role of an athlete's social support network. *Psychology of Sport and Exercise, 38*, 137–147. https://doi.org/10.1016/j.psychsport.2018.06.007

Korhonen, N., Nikander, A., & Ryba, T. (2020). Exploring the life form of a student athlete afforded by a dual career development environment in Finland. *Case Studies in Sport and Exercise Psychology*, *4*, 108-116. https://doi.org/10.1123/cssep.2020-0005

Küttel, A., Christensen, M. K., Zysko, J., & Hansen, J. (2018). A cross-cultural comparison of dual career environments for elite athletes in Switzerland, Denmark, and Poland. *International Journal of Sport and Exercise Psychology, 18*, 454-471. https://doi.org/10.1080/1612197X.2018.1553889.

Linnér, L., Stambulova, N., Lindahl, K. (2019). "Support upon request": Exploring a dual career development environment at a Swedish university. In: B. Strauss et al. (Eds.) *Abstract book of the 15th European Congress of Sport and Exercise Psychology* (p. 274). Muenster, Germany: WWU Muenster.

Linnér, L., Stambulova, N., Storm, L. K., Küttel, A., & Henriksen, K. (2020). Facilitating sports and university study: The case of a dual career development environment in Sweden. *Case Studies in Sport and Exercise Psychology*, *4*, 95-107. https://doi.org/10.1123/cssep.2020-0011

López de Subijana, C., Barriopedro, M., & Conde, E. (2015). Supporting dual career in Spain: Elite athletes' barriers to study. *Psychology of Sport and Exercise, 21*, 57–64. https://doi.org/10.1016/j.psychsport. 2015.04.012

Lupo, C., Mosso, C. O., Guidotti, F., Cugliari, G., Pizzigalli, L., & Rainoldi, A. (2017). Motivation toward dual career of Italian student-athletes enrolled in different university paths. *Sport Sciences for Health 13,* 485–494. https://doi.org/10.1007/s11332-016-0327-4

McGannon, K. R., Smith, B., Kendellen, K., & Gonsalves, C. A. (2019). Qualitative research in six sport and exercise psychology journals between 2010 and 2017: An updated and expanded review of trends and interpretations. *International Journal of Sport and Exercise Psychology*. https://doi.org/10.1080/1612197X.2019.1655779

Miles, M., Huberman, A. and Saldaña, J. (2014). *Qualitative data analysis. A methods sourcebook* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Morris, R., Cartigny, E., Ryba, T., Wylleman, P., Henriksen, K., Torregrossa, M., Lindahl, K., & Cecić Erpič, S. (2020): A taxonomy of dual career development environments in European countries, *European Sport Management Quarterly*. https://doi.org/10.1080/16184742.2020.1725778

Nikander, A., Ronkainen, N., Korhonen, N., Saarinen, M., & Ryba, T. (accepted, 2020). From athletic talent development to dual career development? A case study in a Finnish high performance sports environment. *International Journal of Sport and Exercise Psychology.*

Pink, M., Lonie, B. E., & Saunders, J. E. (2018). The challenges of the semi-professional footballer: A case study of the management of dual career development at a Victorian Football League (VFL) club. *Psychology of Sport and Exercise, 35*, 160–170. https://doi.org/10.1016/j.psychsport.2017.12.005

Pink, M., Saunders, J., & Stynes, J. (2015). Reconciling the maintenance of on-field success with off- field player development: A case study of a club culture within the Australian Football League. *Psychology of Sport and Exercise, 21*, 98–108. https://doi.org/10.1016/j.psychsport.2014.11.009

Probst, B. (2016). Both/and: researcher as participant in qualitative inquiry. *Qualitative Research Journal, 16*(2). https://doi.org/10.1108/QRJ-06-2015-0038

Ramis, Y., Mejías, J.T., Pons, J., Muñoz, J., & Torregrossa, M. (2019): Testing the waters of dual career: An ecological assessment of a Catalonia water sports club. In: B. Strauss et al.

(Eds.) *Abstract book of the 15th European Congress of Sport and Exercise Psychology* (p. 275). Muenster, Germany: WWU Muenster.

Ronkainen, N., Korhonen, N., Nikander, A., Saarinen, M., & Ryba, T. (2019): Uncovering basic assumptions of the dual career philosophy: A Finnish case of dual-career development environment. In: B. Strauss et al. (Eds.) *Abstract book of the 15th European Congress of Sport and Exercise Psychology* (p. 275). Muenster, Germany: WWU Muenster.

Ryba, T. V., Stambulova, N., Si, G., & Schinke, R. J. (2013). ISSP Position Stand: Culturally competent research and practice in sport and exercise psychology. *International Journal of Sport and Exercise Psychology, 11*(2), 123–142. https://doi.org/10.1080/1612197X.2013.779812

Schein, E. H. (2010). Organizational culture and leadership (4th ed.). San Francisco, CA: John Wiley & Sons.

Smith, B. (2017). Generalizability in qualitative research: Misunderstandings, opportunities and recommendations for the sport and exercise sciences. *Qualitative Research in Sport, Exercise and Health, 10*(1), 137–149. https://doi.org/10.1080/2159676X.2017.1393221

Smith, B. (2019). Paradigm. In D. Hackfort, R. J. Schinke, & B. Strauss (Eds.). *Dictionary of sport psychology* (pp. 205–206). London: Elsevier.

Smith, B., & McGannon, K. R. (2017). Developing rigor in qualitative research: Problems and opportunities within sport and exercise psychology. *International Review of Sport and Exercise Psychology*, *11*(1), 1–21. https://doi.org/10.1080/1750984X.2017.1317357

Sorkkila, M., Aunola, K., & Ryba, T. V. (2017). A person-oriented approach to sport and school burnout in adolescent student-athletes: The role of individual and parental expectations. *Psychology of Sport and Exercise, 28*, 58–67. https://doi.org/10.1016/j.psychsport.2016.10.004

Stake, R.E. (2006). *Multiple case study analysis*. New York, NY: Guilford Publications.

Stambulova, N., Engström, C., Franck, A., Linnér, L., & Lindahl, K. (2015). Searching for an optimal balance: Dual career experiences of Swedish adolescent athletes. *Psychology of Sport and Exercise, 21*, 4–14. https://doi.org/10.1016/j.psychsport.2014.08.009

Stambulova, N., Henriksen, K., & Ryba, T. (2020). Career development and transitions of athletes: the International Society of Sport Psychology Position Stand Revisited. *International Journal of Sport and Exercise Psychology*. https://doi.org/10.1080/1612197X.2020.1737836

Stambulova, N., & Wylleman, P. (2015). Dual career development and transitions (Editorial). In N. Stambulova and P. Wylleman (Eds.), Special Issue "Dual career development and transitions", *Psychology of Sport and Exercise, 21*, 1–3. https://doi.org/10.1016/j.psychsport.2015.05.003

Stambulova, N., & Wylleman, P. (2019). Psychology of athletes' dual careers: A state-of-the-art critical review of the European discourse. *Psychology of Sport and Exercise, 42*, 74-88.

Storm, L.K. (2020). Creating a sustainable talent development culture: Context-driven sport psychology practice in a Danish talent academy. *Case Studies in Sport and Exercise Psychology, 4*, 58-66. https://doi.org/10.1123/cssep.2019-0034

Tekavc, J., Wylleman, P., & Cecić Erpič, S. (2015). Perceptions of dual career development among elite level swimmers and basketball players. *Psychology of Sport and Exercise, 65021*, 27–41. https://doi.org/10.1016/j.psychsport.2015.03.002

Tessitore, A., Capranica, L., Pesce, C., De Bois, N., Gjaka, M., Warrington, G., Mac Donncha, C., Doupona, M. (2020). Parents about parenting dual career athletes: A systematic literature review. *Psychology of Sport & Exercise*. https://doi.org/10.1016/j.psychsport.2020.101833.

Torregrossa, M., Ramis, Y., Pallarés, S., Azócar, F., & Selva, C. (2015). Olympic athletes back to retirement: A qualitative longitudinal study. *Psychology of Sport and Exercise, 21*, 50–56. https://doi.org/10.1016/j.psychsport.2015.03.003

Torregrossa, M., Regüela, S., & Mateos, M. (2020). Career assistance programs. In D. Hackfort, & R. J. Schinke (Eds.), *The Routledge International Encyclopedia of Sport and Exercise Psychology. Volume 2: Applied and Practical Measures* (pp. XX-XX). New York, NY: Routledge.

Wylleman, P. (2019). A developmental and holistic perspective on transitioning out of elite sport. In M. H. Anshel (Ed.), *APA handbook of sport and exercise psychology: Vol. 1. Sport psychology* (pp. 201– 216). Washington, DC: American Psychological Association.

Wylleman, P., Reints, A., & De Knop, P. (2013). A developmental and holistic perspective on athletic career development. In P. Sotiaradou, & V. De Bosscher (Eds.), *Managing high performance sport* (pp.159–182). New York, NY: Routledge.