

How should athletes be supported before, during and after athletic retirement? Moving from an athletic-centred needs analysis to practical guidelines for career support stakeholders

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Final report for
The IOC Olympic Studies Centre
Advanced Olympic Research Grant Programme
2019/2020 Award

July 2020

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Abstract

The main objectives of the current study were to (a) gain insight in the perceived impact of athletic retirement on athletes' psychological health and well-being, (b) provide insight in the facilitators and challenges athletes face before, during and after athletic retirement, and (c) develop phase-specific guidelines for career support stakeholders. In the first phase of this study, interviews with athletes showed that (a) athletic retirement affected athletes both in a positive and a negative matter, (b) a wide range of phase-specific facilitators and challenges influence how athletes cope with the retirement process, and (c) athletes had specific support needs depending of the phase they were in. Building on these findings, phase two of this study consisted of two rounds of focus groups with a total of 28 Subject Matter Experts (SME's) to develop phase-specific practical guidelines for career support stakeholders. Twelve general guidelines on career support (e.g., a proactive approach, integration and coordination) were formulated, accompanied with phase-specific guidelines. Both action researchers and practitioners can use these findings and guidelines, however these should always be implemented and interpreted in a contextually and culturally sensitive manner.

Keywords: Post-athletic career, transitions, career planning, athletic retirement, career support, mental health, guidelines.

Executive Summary

Athletes face many different challenges in the preparation of and during the transition to the post-athletic career (e.g., Park, Lavalley, & Tod, 2013; Wylleman, De Knop, & Rosier, 2016). As a consequence of insufficient proactive support mechanisms during the athletic career (B-WISER, 2018) and/or inadequate coping with these challenges, a high number of retired elite athletes report mental health disorders (CMHD) (Vincent Goutteborge et al., 2017; Vincent Goutteborge, Kerkhoffs, & Lambert, 2016; van Ramele, Aoki, Kerkhoffs, & Goutteborge, 2017). Taking into account this high number, the complex nature of athletic retirement, and the need for competent support from the environment, the current study aimed at (a) gaining insight in the perceived impact of athletic retirement on athletes' psychological health and well-being, (b) providing insight in the facilitators and challenges athletes face before, during and after athletic retirement, and (c) developing phase-specific guidelines for career support stakeholders (Alfermann & Stambulova, 2007; Smith & McManus, 2009; N. Stambulova, Alfermann, Statler, & Côté, 2009).

In the first phase of this study, the objectives mentioned above were addressed by focusing on the athletes' perspectives. Using criterion sampling (Suri, 2011), 24 athletes (8 active elite athletes, 8 retiring elite athletes, and 8 retired athletes in a new career) participated in semi-structured face-to-face interviews. Thematic analyses were used to provide phase-specific insight in (a) the perceived impact of athletic retirement on their psychological health and well-being, (b) the facilitating factors of a successful transition, (c) the challenges athletes face, and (d) athletes' perceived needs of support services.

In line with earlier findings (Goutteborge et al., 2017; Goutteborge et al., 2016; van Ramele et al., 2017), athletes in this study showed difficulties in coping with the end-of-the-athletic-career-transition, further confirming the need for adequate support in preparation of and during this transition (Defruyt, Wylleman, Stambulova, et al., 2019; Defruyt, Wylleman, Torregrossa, et al., 2019; Wylleman et al., 2016). Despite these difficulties, participants mentioned facilitating factors which seemed to vary dependent of the specific phase. For example, openness for other interests (e.g., a dual career (DC)) was seen as an important facilitator by active elite athletes (confirming Torregrossa, Ramis, Pallarés, Azócar, & Selva, 2015), while maintaining a healthy lifestyle was found crucial during the transition, and being able to transfer certain transferable characteristics such as discipline and hardworking were found important by athletes in a new career after retirement from elite sport. Regardless of the specific phase, retired athletes perceived competencies transferable from elite sport to another environment (e.g., discipline, planning and goal setting competencies, perseverance) crucial in managing the transition, confirming the importance of a competency-based approach in (dual) career support (De Brandt et al., 2018; Smismans et al., submitted).

Phase-specific challenges were mentioned in the different phases of athletic retirement, mainly confirming earlier findings (e.g., the singular focus on elite sport during the athletic career potentially leading to identity foreclosure, Park et al., 2013; and the occupational delay leading retired athletes to having difficulties to catch up with the latest developments in their specific fields; e.g., Stambulova & Wylleman, 2019). Importantly, most of the main challenges found to hinder the transition, were situated already during the athletic career, further underlining the importance of a

timely, proactive approach in overcoming the challenges potentially leading to a crisis in the transition towards retirement (e.g., López de Subijana, Barriopedro, & Conde, 2015; Stambulova & Wylleman, 2019).

Finally, the interviews with the athletes provided useful insights in their perceived needs for support services (e.g., individualized DC pathways, physical support, inform employers of the value of elite athletes). One of the most remarkable findings was that almost all participants did not have a good overview and knowledge on the available support services, and thus saw a need for more information and awareness-raising towards both athletes and the sport environment. This confirms that career support practitioners should heavily invest in this, with using role models and communication for-and-by-athletes as suggested resources to do this (B-WISER, 2018).

Building on the results of this first research phase (i.e., the needs assessment), the second research phase aimed to formulate a set of phase-specific practical guidelines to shape support services in function of the athletic retirement process. A total of 28 Subject Matter Experts (SMEs) were involved in this second phase, with five focus groups being held with homogenous sub-groups (i.e., coaches, athletes, high performance directors, lifestyle coaches, and academic experts) and two follow-up expert focus groups with heterogeneous groups (i.e., the constellation of a mix of the roles mentioned above) to concretize the guidelines. As a final step, all participants of the study (athletes of research phase one and SMEs of phase two) received the opportunity to rate the relevance of the proposed guidelines and to add final comments, which was used to finalise the guidelines.

The second research phase resulted in (a) an overview of twelve general guidelines, applicable regardless of the specific phase athletes are in, and (b) phase-specific rationales on how active and retired elite athletes should be supported, with the addition of phase-specific options on how the support rationales could be delivered. The twelve general guidelines developed for career support stakeholders were: The importance of information provision and awareness-raising, the involvement of the sport world to gain their support for the broader development of athletes, tailor-made & whole person approach, proactive approach, a positive perspective on athletic retirement, providing personal contact opportunities, online solutions (to address their needs for flexibility), importance of follow-up, ensuring monitoring and evaluation of the support provided, continued support during and after the athletic career, integration and coordination of services, and last but not least, always taking into account the importance of the specific context.

Main rationales for the specific phases were provided, with an emphasis on supporting active elite athletes proactively with their broader personal development and in the exploration of professional interests and talents. An example of an option provided in this phase is the support in creating opportunities for elite athletes to engage in elite sport-friendly jobs/internships/volunteering. The support during the transition should be a 'logic' follow-up and build on the 'work' already done during the athletic career, but also offer additional support in case of crisis-transitions (because even athletes with a decent preparation during the athletic career, might face a crisis-transition when retiring; Wylleman et al., 2016). An example of a support option provided is the possibility for retiring athletes to engage in psychological support. Finally, the support for retired athletes in a new career should build on the previous phases, but should be

more 'autonomous'/reactive in nature as the retired athletes finds his/her way in a new, post-athletic career. For example, the support here might just focus on follow-up with the athlete from a distance, while he/she is being supported by the employer through a mentorship program.

Summarizing, the current project aimed to enhance the quality of future prevention and intervention programmes through gaining insight in the phase-specific: (a) facilitators and challenges athletes experience during the different phases of athletic retirement, (b) perceived support needs of active and retired elite athletes, and (c) concrete practical guidelines for career support stakeholders. By adopting this holistic and phase-specific perspective, we hope to advance elite sport stakeholders' understanding on the different factors and support needs influencing athletes' ability to successfully cope with the athletic retirement process. Furthermore, we recommend practitioners to read and use the practical guidelines within their practice, as these were formulated by SMEs from across the world. Nevertheless, it remains important to be aware of the contextual and cultural specificity within one's own context when implementing these (Stambulova & Ryba, 2014). Furthermore, we recommend both practitioners and researchers to involve elite athletes more directly in future participatory action research and/or in implementing support services. The current study illustrated that their direct involvement provides insight in what they really need, enhances awareness and involvement from their part on the importance of proactive career support, and is creating additional useful role models and career support ambassadors within the elite sport world (see also Ronkainen, Ryba, & Selänne, 2019). In the final section of this report, a link is made between the general guidelines provided by this study (e.g., online solutions), with examples of research and/or practical tools (e.g., Dualcareertools.com) already available. This should allow action researchers and evidence-based practitioners to implement these guidelines into their future studies and/or practice more easily.

Research topic and objectives

Athletic retirement in elite sports has received significant scientific attention over the past decades (e.g., Knights, Sherry, & Ruddock-Hudson, 2016; Park et al., 2013; Stambulova, Stephan, & Jäphag, 2007). Research into this topic evolved from explaining athletic retirement as a singular event to emphasizing retirement as a transition process (Torregrossa et al., 2015; Wylleman, et al., 2016). Before, during and after athletic retirement, athletes must cope with multiple transition demands (i.e., challenges) on different levels of development (Stambulova, 2003; Wylleman et al., 2016; Wylleman, 2019). Athletes have to mobilise their personal resources and strategies to cope effectively with these multi-level demands in order to experience a successful transition. Conversely, if athletes possess a lack of resources and/or are ineffective in their coping efforts, they might face a crisis-transition (Alfermann & Stambulova, 2007). Such crisis-transitions can be caused by challenges emerging before (e.g., identity foreclosure, overtraining, lack of pre-retirement planning), during (e.g., adjustment disorders, career-ending injuries) and after athletic retirement (e.g., social isolation, unemployment, eating disorders; Alfermann & Stambulova, 2007; Beable, Fulcher, Lee, & Hamilton, 2017; Gouttebarga, Frings-Dresen, & Sluiter, 2015; Park et al., 2013; Smith & McManus, 2009). Confirming that athletic retirement is not easy, research has shown that the incidence of common mental health disorders (CMHD) is relatively high for retired elite athletes (Gouttebarga et al., 2017; Gouttebarga et al., 2016; van Ramele et al., 2017). Recognizing the challenging nature of athletic retirement, there is a clear need for (a) more insight into the impact of athletic retirement on athletes' psychological health and well-being, (b) more insight in the facilitators and challenges athletes face before, during and after athletic career termination, and (c) phase-specific career support (Alfermann & Stambulova, 2007; Smith & McManus, 2009; Stambulova et al., 2009). In order to address this need, the current project entailed two distinct research phases. The first phase consists of athletes' need assessment and aimed at exploring (a) the impact of athletic retirement on athletes' psychological health and well-being, (b) the facilitators and challenges experienced by athletes during different phases of athletic retirement, and (c) athletes' perceived needs of support services in relation to these facilitators and challenges. Using the results from this first research phase, the second phase aimed at formulating a set of phase-specific practical guidelines to shape support services in function of the athletic retirement process.

Methodology

Research paradigm

The research project was guided by a pragmatic research paradigm (Giacobbi, Poczwardowski, & Hager, 2005). It is recognized that research outcomes are relative and researchers have to conduct a certain level of interpretation which is “always informed by the researchers’ own assumptions, values and commitments” (Braun & Clarke, 2013, p. 285). The objectives specified within the research project did not encapsulate the confirmation of an absolute truth, rather they collected data from which a useful understanding of athletes’ facilitators, challenges, and support needs in the context of athletic retirement derived. Those results guided the development of phase-specific, general guidelines, uncovering a practical level of truth and providing solutions to an applied research question within a specific context and population (Creswell, 2013; Giacobbi et al., 2005).

Phase 1: Needs assessment athletes

Sampling and Participants

Participants were selected using criterion sampling (Suri, 2011). In order to be eligible, athletes had to be recognised as elite by their respective national sport governing body and competing at minimum national level in team sports or international level in individual sports. Participants included 24 elite athletes ($M_{age} = 26.71 \pm 4.67$; 42% female, 58% male; 67% individual athletes, 33% team athletes) representing each phase of athletic retirement: (a) active elite athletes still active in elite sport (i.e., prior to retirement; $n = 8$), (b) retired elite athletes who voluntarily or involuntarily ended their elite sporting career and are not yet in a new, post-athletic career (i.e., during retirement; $n = 8$), and (c) retired athletes in a new, post-athletic career (i.e., post retirement; $n = 8$). Out of the 16 participating athletes retired from elite sports, four of them encountered an unplanned athletic retirement (i.e., injury = 2, health reasons = 1, loss of contract = 1). Athletes represented the sports of archery, basketball, beach volleyball, cycling, football, gymnastics, hockey, judo, rowing, sailing, swimming, tennis, triathlon, and waterpolo. Participants originated from both the Netherlands ($n = 6$) and Belgium ($n = 18$), as the current study did not want to focus on one specific context, but rather wanted to look at the challenges and support needs across different settings.

Procedure

Upon receiving institutional ethical approval, the contacts of potential participants were obtained through the National Olympic Committee of the Netherlands (NOC*NSF) and the Sports Administration of the Flemish Government (Sport Vlaanderen). Potential participants were invited to participate via e-mail. During this contact, participants also were informed on the background, aim and objectives of the research project. After participants agreed to participate, face-to-face interviews were scheduled at a time and quiet location of the participant’s choice.

Before the start of each interview, participants received and signed an informed consent highlighting the aim of the research project, the confidentiality of the information provided, the voluntary nature of participation, and the possibility to withdraw from the research project at any time without having to specify a reason. The interviews had an average duration of 79 minutes, with a minimum duration of 47 minutes and a maximum of 165 minutes.

Data collection

Directed by a semi-structured interview guide, a total of 24 face-to-face interviews were held between September 2019 and January 2020. Semi-structured interviews were chosen as the preferred data collection technique because they allow greater breadth and depth of information while discovering participant's experiences and interpretation of reality (Blee & Taylor, 2002). Questions surveyed participants' perspectives on the facilitators and challenges they experienced or foresaw in relation to athletic retirement, and on the support services they require in order to facilitate their transition out of sport. As suggested by Braun & Clarke (2013), questions were adapted or elaborated according to the demands of the specific situation.

Data analysis

The total of 24 interviews was audiotaped, transcribed verbatim and uploaded to NVIVO 12 to facilitate further data analysis. Thematic analysis was used to identify meaningful patterns in the dataset in a flexible manner (Braun, Clarke, & Weate, 2016). The analysis was approached inductively (i.e., data-driven) and included data familiarization, coding, pattern identification, revision, and naming (Braun et al., 2016). Data familiarization refers to reading and re-reading all data. After familiarization, relevant data was tagged with codes, which were consequently organized in overarching patterns (i.e., coding and pattern development). Themes were finally reviewed on data fit and a coherent interpretation (i.e., revision and naming).

Phase 2: Practical guidelines

Sampling and participants

Criteria based purposeful sampling was done within the elite sport network of the researchers and aimed at bringing together Subject Matter Experts (SMEs) in the field of career development and support. Participants included 9 international (i.e., Belgium, Denmark (n = 2), England, Ireland, Italy, Spain, Sweden, United States of America) academic experts in the topic of athletic retirement (78% male, 22% female) and 19 career support stakeholders (54% male, 46% female; 53% career support providers, 31% athletic entourage, 16% (retired) elite athletes).

Procedure

Upon receiving institutional ethical approval, the contacts of potential participants were obtained through the network of the applicant in elite sports, career support services, and academic experts. Additional contacts were provided by the Sports Administration of the Flemish Government (Sport Vlaanderen). Potential participants were invited to participate via e-mail. During this contact, participants also were informed on the

background, aim and objectives of the research project. After participants agreed to participate, two physical focus groups were scheduled at a time and central location (i.e., Vrije Universiteit Brussel) that suited all participants. The five remaining focus groups were, as a result of the COVID-19 outbreak, held via online meetings at a time that suited all participants. The focus groups had an average duration of 106 minutes, with a minimum duration of 88 minutes and a maximum duration of 132 minutes. Before the start of each focus group, all participants received and signed an informed consent via e-mail highlighting the aim of the research project, the confidentiality of the information provided, the voluntary nature of participation, and the possibility to withdraw from the research project at any time without having to specify a reason.

Data collection

Two focus group rounds were held to develop a concrete, context-independent, and phase-specific set of practical guidelines. Round one included five focus groups with specific, homogeneous groups of SMEs (e.g., coaches, athletes, high performance directors, lifestyle coaches, academic experts). These focus groups started with a presentation of the needs assessment conducted in phase one (i.e., results of the interviews with the 24 athletes; e.g., the challenges encountered, and the support needs expressed), and lead to the formulation of the first version of the specific guidelines for career support stakeholders (which was brought together by the main author after analysing the results of these five focus groups). Consequently, round two brought together heterogeneous groups of SMEs in two expert focus groups. In these focus groups, the guidelines were further optimized, removed, added and/or concretized.

Based on these two rounds of focus groups, the practical guidelines were brought together by the main researchers in an excel file. In order to ensure rigor, all participants from both the interviews and the focus groups were asked to individually rate the relevance of the guidelines quantitatively using a 5-point Likert Scale ('1 - Not relevant at all' to '5 - Very relevant'), with the possibility to add qualitative remarks (e.g., language, grammar and spelling, suggested improvements and/or additions). Based on this final feedback, the list of guidelines was finalised by the main authors of this research project.

Data analysis

All focus groups were, following the consent of the participants, audiotaped, transcribed verbatim and uploaded to NVIVO 12 to facilitate further data analysis. Thematic analysis was used to identify meaningful, phase-specific, challenge-based, practical guidelines in the dataset (Braun et al., 2016). The analysis used a deductive approach as it was driven by the predefined career phases (i.e., active phase, retirement phase, new career phase) and the associated challenges.

With regard to the excel file, mean scores on relevance were calculated for all guidelines. Twenty-one guidelines had an average score of 4 or higher. These guidelines were retained the same, with some guidelines being slightly adapted (on a language level) based on the qualitative remarks. Fifteen guidelines had an average score between 3 and 4. These items were adapted on a content level in line with the qualitative feedback provided. One guideline that scored below the cut-off point of 3

(i.e., ‘Administrative support (e.g., tax requirements)’), was removed. An overview of the average scores, qualitative feedback, and adaptations is not provided in the results section, as in line with our research paradigm, the goal was not to provide a quantitative overview, but rather to optimize the final set of guidelines.

Findings

The impact of athletic retirement on athletes’ psychological health and well-being

The process of data analysis showed a clear impact of athletic retirement on athletes, and in particular on their psychological health and well-being. Table 1 provides a summary list of which factors contributed to the perceived or expected type of impact of athletic retirement.

Table 1. Overview of the factors contributing to the perceived or expected type of impact of athletic retirement

Type of impact	Contributing factors
Positive impact	<ul style="list-style-type: none"> More free time Less strict lifestyle and fewer obligations Rich social life Feelings of relief
Negative impact	<ul style="list-style-type: none"> Feelings of unhappiness Suppression of feelings Identity crisis Feelings of insecurity and fear Overwhelming Missing the sport world Physical adaptations

Almost half of the interviewees (n = 10) stated that (they expect) athletic retirement will have or had a positive impact on their psychological health and well-being. Participants mentioned having more free time (e.g., for friends, family), a less strict lifestyle, and more room for a rich social life (e.g., parties) as reasons for the occurrence of this positive impact. Participant 16 explains it this way:

The normality. If you want to go out with your girlfriend on a weekend trip, you can just do that. During the athletic career, that is not possible because your performance will suffer from it. That certainly is pleasant about athletic retirement. You can stay up late once in a while when you feel like watching a movie. Those are things you cannot do during your athletic career.

One athlete even described athletic retirement as a great relief: “It was a relief that I did no longer had to and that it was actually over” (Participant 12).

However, out of all interviewees, 18 of them expressed that athletic retirement had or will probably have a negative impact on their psychological health and well-being.

Participant 4 clearly stated that it certainly will make him very unhappy: “I am going to be really unhappy. I also want to be left alone for a while with that unhappiness, like just let me be unhappy for a while”. To deal with this unhappiness, he mentioned his strategy would be to suppress his feelings: “Maybe, it is not that healthy, but I would just focus full-time on new things. I would just suppress my feelings about ending my sporting career”.

A small group of athletes (n = 3) mentioned having to say goodbye to your identity as an elite athlete as negatively impacting their psychological health and well-being upon athletic retirement. The following quote of participant 13 reflects the possible negative impact of an identity crisis on athletes’ psychological health and well-being:

You really have your identity as an elite athlete. The sport world is a big world. You can always meet people somewhere who know you and, yes, I do not know. And then you think: ‘What if I am not that person anymore?’ (Participant 13)

Next, as stated in the following quote by, amongst others (n = 5), participant 21, athletic retirement may initiate feelings of insecurity and fear:

Yes, well, now, there still is uncertainty. Those question marks of what my life will look like within one year, what direction will my further, post-athletic, professional career take. So, a little certainty and clarity in that would be nice. (Participant 21)

In addition, three interviewees indicated missing the sport world as impacting their psychological health and well-being in a negative manner. Participant 3, for example, indicated that having more time and being recovered from the mental process of retiring from sport was giving her doubts about her decision to retire:

Suddenly, it is summer vacation and there is much more time. And, of course, in the meantime, you are also fully recovered from the whole mental process and then it starts to become very difficult. Then, you are like: ‘I actually have time, I could have gone to that game’.

Finally, two participants emphasized the great impact of physical changes following athletic retirement. A major concern expressed to this regard, concerned an increase in weight. This factor even turned out to be a significant mental setback throughout the retirement process. Participant 8 described it as follows:

I have always been trained and then suddenly your weight and size increases. Actually, it was a very healthy weight, but not desirable at all for me. Everything actually changes when retiring from elite sport. Physically and emotionally. And that is very intense.

While 75% of the participants indicated that athletic retirement may influence their psychological health and well-being in a negative manner, only three participants stated that they needed to consult psychological guidance following their athletic retirement. Those interviewees mentioned they needed to reinvent who they are, what their competencies are and what they want in their (professional) lives after athletic retirement:

I thought in advance that I had other things and I would not end up in the so-called 'black hole'. But finally, I just noticed that it was, yes, that I had collapsed. That it just did not work. I started then for six months to have in-depth conversations with a psychologist on things like: Who are you? What are your qualities? What is your new identity? I had to cry a lot, but in the end, this gave me the chance to build up my energy again. (Participant 7)

In conclusion, looking at the impact of athletic retirement on athletes' psychological health and well-being, our data analysis process showed that the quality of the transition process, and thus the quality of psychological health and well-being outcomes upon athletic retirement, are influenced by both facilitators and challenges athletes face or have faced during both *pre- and post-retirement phases*. The data showed the importance of differentiating between three consecutive retirement phases in researching the topic of athletic retirement, namely:

- a) **Before** retirement, referred to as *the active phase* when athletes are still active in elite sport (i.e., a full-time sporting career or a DC 'elite sport and study' or 'elite sport and employment');
- b) **During** retirement, referred to as *the retirement phase* when athletes voluntarily or involuntarily ended their elite sporting career and are not yet in a new, post-athletic career;
- c) **After** retirement, referred to as *the new career phase* when athletes are in a new, post-athletic career.

The next sections will therefore describe our research findings *per* retirement phase to get more insight in (a) facilitators of a successful transition before, during, and after athletic retirement, (b) challenges athletes face before, during, and after athletic retirement, (c) needed support services before, during, and after athletic retirement, and (d) phase-specific practical guidelines to shape support services in function of the athletic retirement process.

The active phase: before retirement

Perceived facilitators, challenges, and needed support services before retirement

During the interviews with athletes in the active phase, participants mentioned several matters of influence on their athletic retirement process. In order to provide an insight in those influencing factors, a summary overview of active elite athletes' perceived facilitators, challenges, and needed support services in the context of the athletic retirement process is listed in Table 2. Table 2 represents three separate and independent columns with each column representing an enumeration of respectively athletes' perceived facilitators, challenges, and support needs.

Table 2. Active elite athletes' perceived facilitators, challenges, and needed support services in the context of athletic retirement

Facilitators	Challenges	Needed support services
The importance of different focuses (e.g., DC)	Single-minded focus on sport	Opportunities to gain work experience (e.g., internships) during the sporting career
Sufficient room for self-management (e.g., self-directed decision making, planning)	Lack of free choice and autonomy in career planning	Individualized DC pathways with enough room for autonomous choices regarding both the sporting and study schedules
A professional network	Lack of duality in the DC mindset within sport	Inform coaches and federations on the importance and challenges of the post-athletic career
A satisfying final result or season	Lack of uniform DC support services within sport	Finding adequate ways to reach out to elite athletes on the topic of post-athletic career
New plans and goals (e.g., foreign internship, new job)	Lack of knowledge of career support services	Multiple information sessions on existing support services taking into account athletic calendars
	Timing of career support services	

Table 2 shows that while active elite athletes indicated to realize the importance of different focuses during the athletic career (e.g., DC elite 'sport and education' as a back-up plan), a single-minded focus on sport still is a quite frequently mentioned challenge in the context of athletic retirement. Participant 20 evidenced this by stating: "I regret leaving school for sports. Because that was already – I have been cycling in competition since my eight years and everything must make room for sports. I have regretted that in the course of my career". However, according to the athletes, different focuses do only facilitate the athletic retirement process if the athletes receive enough room for self-management (e.g., self-directed decision making, planning) within those focuses. As stated by Participant 2, a lack of free choice and autonomy may hinder a successful retirement process:

Anyway, in terms of studies, you can only take up the half of your study credits. But that did not go so well for me. I always had problems with certain courses as I did not take up the right prerequisites for example while I could and would have taken up more credits than recommended if they allowed me to.

Zooming in on athletes fulfilling an extra focus next to their sport by pursuing a DC 'elite sport and education', it was mentioned that they were challenged with a lack of duality in the DC mindset of the sport world and the lack of uniform DC support services. It was stated that the focus should be on sports and other things can be planned around only if necessary. Participants indicated they lacked clear and uniform DC policies and support across different higher education institutions to cover this challenge of the sport world mindset regarding a DC:

The educational institution where you study determines so much about what is possible and what is not possible. I think the quality of your school's guidance during your athletic career has such an enormous influence on whether you keep doing it or stop. (Participant 16)

To counteract the abovementioned challenges, athletes indicated the need for (a) individualized DC pathways with enough room for autonomous choices regarding both the sporting and study schedules, and (b) informing coaches and sport federations on the importance and challenges of the post-athletic career.

Next to different focuses, participants highlighted building a professional network during the athletic career and having a prospect on new goals and plans as facilitating the athletic retirement process. It was emphasized that opportunities to gain work experience (e.g., internships) may stimulate both the development of a professional network and setting out new goals and plans. Participant 23 highlighted that his internship helped him to build and maintain a professional network:

I still have contact with [*name internship*]. I actually do that consciously because of the importance of a professional network and contact with the job market. I do not want to close the doors completely for going into the business world.

On the other hand, Participant 9 sees her upcoming internship as an ideal new plan and challenge giving her confidence and peace of mind about her athletic retirement process: "I am looking forward to doing other things and I immediately have other plans

for an internship abroad. So, actually, I immediately will enjoy the possibilities that come along with ending my athletic career”.

A last facilitator concerned a satisfying final sporting result or season, as mentioned by participant 19: “I became third at the World Championships. That was a very nice ending. I could also enjoy it.”

As remaining challenges, athletes highlighted a lack of knowledge of what is available in terms of career support services and a bad timing of career support services. It was therefore suggested to foresee multiple information sessions on existing support services considering athletic calendars and to find adequate ways to inform athletes on the existence of such information sessions. As stated by Participant 1, athletes are not willing to engage in information sessions or career support when overlapping with athletic endeavours:

That is our busiest period. Then I am not going to go to career support. That is in the middle of the season, you are not yet thinking about quitting your elite sporting career, you are not there yet, you want to enjoy your time that you still have.

In order to inform athletes more adequately on available support services, Participant 21 suggested traditional letter correspondence or personal calls:

But if they [*support initiatives/services*] had called last year, for example, I would certainly have responded and listened. I do not know if I would have really gone into it for beyond. But, I think, yes, if I had received a phone call, I might have recorded and listened. Or, for example, I might think if you get something by mail [*not digitally*] that it might attract a little more attention. You are going to open that letter anyway and read it once. So, maybe that will give a little more attention than an e-mail.

Practical guidelines to support elite athletes before retirement

Based upon athletes’ reported facilitators, challenges, and support needs, our data showed that *supporting athletes before retirement* should focus on the following rationale:

Personal development as part of the elite sporting career (developing certain resources in various areas during the athletic career). Efforts are made to support athletes in their broader personal development, and in the exploration of professional interests and talents.

Table 3 provides a set of practical guidelines to fulfil the above rationale and to optimize the guidance and support provided to athletes before retirement. As shown in Table 3, two overarching themes within this set of practical guidelines were identified analysing the focus group data: (a) practical guidelines targeting athletes’ internal resources (i.e., strengthening of the internal person and empowering the elite athlete, and (b) practical guidelines targeting external resources (i.e., certain support/guidance to facilitate the athletes’ situation).

Table 3. A set of practical guidelines to optimize the guidance and support provided to athletes before athletic retirement

Overarching theme	Practical guideline	Explanation
Internal resources	Personal development plan	Support and guide elite athletes in drawing up a personal development plan.
	Development of competencies	Trigger and support elite athletes in the development and awareness of (transferable) competencies (skills, attitudes, knowledge; e.g., networking, planning, perseverance, etc.) through individual coaching, workshops (e.g., management, social media, entrepreneurship, networking, etc.) and online tools (e.g., http://www.dualcareertools.com).
External resources	Athletes' broader development as part of sport organisations' vision	Where possible, integrate the broader and personal development of elite athletes as an active part of the vision and organisational goals of elite sport organisations, and integrate such engagement structurally in the relationship between elite sport organisations and their athletes.
	Career coaching	The possibility to enter into an individual trajectory with a competent career coach in which the elite athlete can reflect on him/herself (values, competencies, personality), and the alignment of this with the labour market (areas of interest, possible sectors/jobs, channels to work).
	E-learning options	E-learning options provided by different types of organisations such as educational institutions, work organisations, and sport organisations.

Transparent DC guidelines	National, uniform or clear, transparent guidelines for DC support in higher education.
Tailor-made educational trajectories	Individualized education trajectories with retention of sufficient autonomy of the elite athlete (e.g., free choice of number of credits to be taken, free choice of education area).
Job/internship opportunities	<p>Opportunities for elite athletes to engage in elite sport-friendly jobs/internships/volunteering during their active athletic career. Clear communication about scheduling and expectations between athlete, sport club, and employer are crucial to make this work.</p> <p>Opportunities for elite athletes to prepare for an employment within the sport (e.g., coach education).</p>
Role models	The use of role models and personal stories to frame the importance of broader development.

The retirement phase: during retirement

Perceived facilitators, challenges, and needed support services during retirement

During the interviews with athletes in the retirement phase, participants mentioned several matters of influence on their athletic retirement process. In order to provide an insight in those influencing factors, a summary overview of retiring elite athletes' perceived facilitators, challenges, and needed support services in the context of the athletic retirement process is listed in Table 4. Table 4 represents three separate and independent columns with each column representing an enumeration of respectively athletes' perceived facilitators, challenges, and support needs.

Table 4. Retiring elite athletes' perceived facilitators, challenges, and needed support services in the context of athletic retirement

Facilitators	Challenges	Needed support services
Creating and using a(n) (international, sport-minded) professional network	Psychological, physical and social adaptation	Intensive individualized and accessible transition support
Transferable characteristics (e.g., perseverance, discipline, maturity)	Crisis-transition	A (compulsory) exit trajectory every athlete can rely on from the very first moment of retiring
Maintain an active and healthy lifestyle	A lack of interests outside the sport	Sharing of experiences between athletes
Start and/or run a family	Lack of transition period	Physical support to finish sport at the highest level in a responsible manner
Be open and honest with the sporting entourage	The taboo of needing support	Continued financial support
Sharing experiences		
Explore and research existing literature or other information		
Having clear future goals in mind		
Good reactions from athletes' environment on their decision to retire from elite sport		

Just like active athletes, retiring athletes pointed a professional network and having clear goals in mind out as facilitators in the context of athletic retirement. Participant 10 even stated that his professional network was the most important factor in his successful transition out of elite sport:

I have done everything via my own network. That is mainly daring to be vulnerable and say: 'Well, I am looking for a job. What do you think suits me?'. Then doors will open automatically and everyone you send a letter to such as: 'I am a retired elite athlete and I want ...' Yes, everyone wants to meet and drink coffee with you. And showing your face, and investing time in it, I think that is the most important thing.

Secondly, a balanced new daily lifestyle was a factor indicated by retiring athletes as facilitating the athletic retirement process. Factors such as a healthy active lifestyle and a balanced family life were mentioned as important to pursue a balanced new lifestyle. Participant 19 and 20 illustrated it as follows: "I became aware of the fact that after my elite sporting career, I still had to keep active. That that would help me with my mental health and well-being as well."

I had one big advantage: my son had just been born. I actually had my son with me for four months. I think if I did not have him during that period, it would have been much more difficult. But thanks to him, I had other things to do.

The required psychological, physical and social adaptation upon athletic retirement may however challenge a balanced new daily lifestyle. For example, feelings of rejection on the job market, adapt to daily family life, financial insecurity, and physical changes were mentioned by Participants 1, 19, and 20 as challenging adaptations:

I immediately understood what was so stressful and difficult about looking for a job. You always feel rejected. There is always something that you are rejected for. Work experience, for example. 'Do you have work experience?' 'No, I have never worked, sir. Or at least, I have never seen it as working.' 'Okay, and now you should work. Are you afraid of that?' 'No, no!' 'Do you know what working means?' 'No, sir, I do not know what that means.' 'Then how come you are not afraid of that?' 'Uhm.' (Participant 1)

Never see each other during the elite sporting career, or even if she went to see competing me in a game, or sometimes I was home for two days but then I was away again for a month. And suddenly, I was at home every day, that was most difficult actually. (Participant 20)

During your sporting career, you can live from the sport, from the money you get from it, but afterwards it is sometimes really difficult. Then you realize very well that you must look actively for the financial part. (Participant 19)

Those who retired from elite sport, they have sometimes difficulties to – yes, their fat percentage increases, their physical condition is extremely changed, heart diseases are more common than people think. And physical support can play a major role in this, which, I think, also affects mental health. (Participant 19)

To counteract the two last challenges above, Participant 19 suggested the implementation of both financial and physical support: “A little financial support right after the end of the athletic career would not hurt. It is not necessarily to benefit, on the contrary, it is just to make the transition a bit easier, more efficient.”

I think, for example, there can be a kind of platform with retired Olympians or retired elite athletes, or even another athlete who can help his colleagues to, for example, appoint a program of activities and meetings every month or every two weeks. For example, take a mountain bike tour, climbing, walking, cycling, swimming, water polo, etc. There are so many game and sport activities to keep those people busy and provide them a safety net they can rely on.

A third facilitator appeared to be consulting and sharing information and experiences regarding the athletic retirement process. For example, explore and research existing literature on athletic retirement and sharing experiences may be of help for a successful transition out of sport. In the context of this facilitator, some participants indicated practices to share their experiences with other athletes as a support need, while other participants autonomously shared their retiring experiences by respectively writing a blog and making an announcement on social media. They illustrated it as follows: “I announced my athletic retirement to the outside world via social media. I received a lot of good reactions. Everyone had really shown understanding” (Participant 19).

What I did was writing a blog post at some point and put it online. I am very happy I did this. I did not have to tell the same story for a hundred of times to people I met. Besides, I also have received very positive reactions on my blog. (Participant 3)

Participants 3 and 19 both stated that sharing their experiences provoked good reactions from the environment facilitating their transition out of sport.

Next to this communication to the outside world, be open and honest to the sporting entourage was also indicated as important to facilitate the transition out of sport: “I have really been honest with everyone in the sport federation and in the end that is the best thing you can do, I think” (Participant 3).

Lastly, a frequently recurring facilitating factor throughout the interviews included the added value of specific characteristics athletes developed during their sporting career such as perseverance, discipline and maturity. Participant 15 referred to this as follows:

I think certainly that every elite athlete has grown up much earlier and that we can take care of ourselves much better. And of course, we also have learned to have a lot of discipline and perseverance throughout the athletic career.

Despite retiring athletes recognized that there are multiple facilitators to transition successfully out of sport, it should be noted that three participants did not effectively cope with athletic retirement leading them to a crisis-transition:

I actually thought at the end: ‘Now I have filled everything in correctly. I have a job, I have nice friends. I am really looking forward to continue with my new professional career.’ But then I started to get a bit of a problem after the summer. I missed the team, I missed the group feeling. I thought in advance that the so-

called 'black hole' would not bother me, because I had other things. I was prepared and ended my sporting career with a very good season. I had a lot of fun weekends away, with friends, family, and my boyfriend. I also travelled a lot. And finally, I think, October, late October, early November, I completely collapsed. (Participant 7)

Participants indicated intensive individualized and accessible transition support and a (compulsory) exit trajectory every athlete can rely on from the very first moment of retiring as needed services to avoid difficulties upon athletic retirement. Next to counteract the challenging adaptations and crisis-transitions, such support can also counteract a lack of interests outside the sport, the lack of a transition period (i.e., from one day to the next no longer be an elite athlete and receive the associated support), and the taboo of needing support.

Practical guidelines to support elite athletes during retirement

Based upon retiring athletes' reported facilitators, challenges, and support needs, our data showed that *supporting athletes during retirement* should focus on the following rationale:

The retirement period should be approached as a part of the entire (athletic) career. It builds on personal and holistic development through intensive and active guidance and support. If crisis-transitions still occur, athletes will be monitored closely.
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Table 5 provides a set of practical guidelines to fulfil the above rationale and to optimize the guidance and support provided to athletes during retirement. As shown in Table 5, two overarching themes within this set of practical guidelines were identified analysing the focus group data: (a) practical guidelines targeting athletes' internal resources (i.e., strengthening of the internal person and empowering the elite athlete, and (b) practical guidelines targeting external resources (i.e., certain support/guidance to facilitate the athletes' situation).

Table 5. A set of practical guidelines to optimize the guidance and support provided to athletes during athletic retirement

Overarching theme	Practical guideline	Explanation
Internal resources	Personal development plan	Support and guide elite athletes in drawing up a personal development plan.
	Development and awareness of (transferable) competencies	Trigger and support elite athletes in the development and awareness of (transferable) competencies (skills, attitudes, knowledge; e.g., networking, planning, perseverance, etc.) through individual coaching, workshops (e.g., management, social media, entrepreneurship, networking, etc.) and online tools (e.g., http://www.dualcareertools.com).
	Job search competencies	Support athletes to become more competent in the targeted search for suitable vacancies, drawing up a CV, and preparing for a job interview.
External resources	Career coaching	The possibility to enter into an individual trajectory with a competent career coach in which the elite athlete can reflect on him/herself (values, competencies, personality), and the alignment of this with the labour market (areas of interest, possible sectors/jobs, channels to work).
	Networking	Supporting elite athletes in their new career by bringing them into contact with existing networks of stakeholders.
	Continued payment	In specific cases (e.g., difficulty to find a new job, if athlete needs to follow continued education), provide a period of continued payment after ending the athletic career

Facilitate contact with employers

Job fair for former elite athletes.

Employment database for former elite athletes with a link to elite sport-friendly companies (e.g., employers willing to recruit former elite athletes and meeting certain criteria).

Make the added value of elite athletes in the workplace explicit towards employers.

Mental support for crisis-transitions

Mental support for crisis-transitions (via a network of doctors and medical experts, specific healthcare centre, sport psychologists, support groups with other retired elite athletes, involving the close environment such as parents and partner).

Continued access to support services

Continued access for retiring elite athletes to a multidisciplinary team (if possible, of the own sport federation, if not possible provided externally) to help facilitate their transition out of sport (e.g., nutritional counselling, sport scientists, career counsellor, (sport) psychologist, etc.). While this availability is important, it may not compromise the autonomy and self-regulation of the athlete.

The new career phase: after retirement

Perceived facilitators, challenges, and needed support services after retirement

During the interviews with athletes in the new career phase, participants mentioned several matters of influence on their athletic retirement process. In order to provide an insight in those influencing factors, a summary overview of retired elite athletes' perceived facilitators, challenges, and needed support services in the context of the athletic retirement process is listed in Table 6. Table 6 represents three separate and independent columns with each column representing an enumeration of respectively athletes' perceived facilitators, challenges, and support needs.

Table 6. Retired elite athletes' perceived facilitators, challenges, and needed support services in the context of athletic retirement

Facilitators	Challenges	Needed support services
Transferability of competencies (e.g., planning skills, discipline, networking, etc.)	Unrealistic expectations of job opportunities Time gap between graduation and job market entry (i.e., occupational delay) Lack of job experience No desire for functions in sport	Online platform Inform employers on the value of elite athletes Support in entrepreneurship

Retired elite athletes highlighted one broad facilitator being the transferability of competencies. Participants stated that competencies such as, amongst others, planning skills, discipline, perseverance, dealing with monotony, using setbacks as a positive stimulus, hardworking, networking, and drive may facilitate their transition out of sport and into a new, post-athletic career. Participant 21 stated the possible added value of an elite athlete in other environments than sport as follows: "I think other advantages are more in terms of character traits perhaps. Drive, perseverance, and not giving up too quickly in difficult times. So, I think that is an advantage". Participant 15 rather referred to the transferability of discipline and hardworking from elite sport to another environment as a facilitating factor in the athletic retirement process:

You must have a lot of discipline to keep up with the required rhythm of elite sport. It does not come naturally. You have to put a lot of effort into it. You also have to make sacrifices and give up a lot, so I really think elite sport brought me a lot of advantages and many life lessons for the future.

Given the conviction of the retired elite athletes concerning the transferability of competencies, they suggested to adequately inform employers on the value elite athletes can add to a company.

On the other hand, unrealistic expectations of job opportunities, the gap between graduation and job market entry (i.e., occupational delay), and lack of job experience were indicated as challenges in athletes' retirement process. Also, athletes indicated that having no desire for functions in sport may hinder a smooth transition into a new, post-athletic career and thus their athletic retirement process. While multiple times the opportunity to perform a function in sport arises, athletes reported being tired of the sport world after giving their best as an elite athlete. Participant 8 told:

It is quite funny actually. My coach from New Zealand always said to me: '*Name*', you do not quite fit in the elite sporting world.' And I never understood what he meant by that. But when I retired from elite sport, I understood. I have so many interests, but also in people, who people are, instead of always being competitive.

To counteract those perceived challenges, participants suggested support in entrepreneurship and an online platform to connect retired elite athletes and elite sport-friendly employers. Participant 1 suggested the specific implementation of such a platform as follows:

Every athlete will be confronted with athletic retirement. So, why is there no platform where those athletes and big companies or other employers are brought together? That you [*retired elite athlete*] end up in a database and that this database goes to companies and that it is a bit commercialised. Or you make a kind of employment agency of it and really sell it as something positive.

Practical guidelines to support elite athletes after retirement

Based upon retired athletes' reported facilitators, challenges, and support needs, our data showed that *supporting athletes after retirement* should focus on the following rationale:

Retired athletes in a new, post-athletic career continue to build on their broader personal development as autonomously as possible and invest in building a sustainable, new career. Support and guidance should remain accessible for at least two years after effectively ending the athletic career but has a more reactive character.

Table 7 provides a set of practical guidelines to fulfil the above rationale and to optimize the guidance and support provided to athletes after retirement. As shown in Table 7, two overarching themes within this set of practical guidelines were identified analysing the focus group data: (a) practical guidelines targeting athletes' internal resources (i.e., strengthening of the internal person and empowering the elite athlete, and (b) practical guidelines targeting external resources (i.e., certain support/guidance to facilitate the athletes' situation).

Table 7. A set of practical guidelines to optimize the guidance and support provided to athletes after athletic retirement

Overarching theme	Practical guideline	Explanation
Internal resources	Job search competencies	Support athletes to become more competent in the targeted search for suitable vacancies, drawing up a CV, and preparing for a job interview.
External resources	Networking	Supporting elite athletes in their new career by bringing them into contact with existing networks of stakeholders.
	Continued payment	In specific cases (e.g., difficulty to find a new job, if athlete needs to follow continued education), provide a period of continued payment after ending the athletic career
	Enhance interaction opportunities between the labour market and retired athletes	Job fair for former elite athletes.
		Employment database for former elite athletes with a link to elite sport-friendly companies (e.g., employers willing to recruit former elite athletes and meeting certain criteria).
	Make the added value of elite athletes in the workplace explicit towards employers.	
	Continued access to support services	Continued access for retired elite athletes to a multidisciplinary team (if possible, of the own sport federation, if not possible provided externally) to help facilitate their transition out of sport (e.g., nutritional counselling, sport scientists, career counsellor, (sport) psychologist, etc.). While this availability is important, it may not compromise the autonomy and self-regulation of the athlete.

Mentorship

Mentorship in the workplace, facilitated/provided by the employer.

General, phase-independent guidelines to optimize the guidance and support provided to athletes in the context of athletic retirement

Next to the developed phase-specific guidelines that can provide guidance to elite athletes and their stakeholders in the context of athletic retirement, our findings in Table 8 showed the importance of some general guidelines. Those general guidelines were shown to be phase-independent and should be considered closely when implementing adequate and optimal support services for active and retired elite athletes. However, during the focus- and expert groups, it was clearly stated that contextual, (inter)national differences must always be considered when implementing those guidelines: “I think about international perspectives. I think it should be for sure also culturally sensitive. That it is adapted to the context in which those guidelines should be implemented” (Focus Group Participant 21). “The aim is that with those general guidelines, you can go to a sport federation or sport club and they can use them, of course adapted to their context or implemented in function of their context” (Focus Group Participant 6). Which principles are priority and most important thus will depend on the context. For example, in a context lacking clear support services and initiatives leading athletes to not engage in their broader personal development, the implementation of the general guideline ‘integration and coordination’ is of higher importance than for example ‘online solutions’.

Table 8. General guidelines in order to realize an adequate and optimal implementation of support services

General guideline	Explanation
Information & Awareness	<p>Informing elite athletes and their environment (e.g., families, coaches, employers, sport organisations). Possible forms of information sharing include: (online) overview of available support initiatives, (online) overview of contact persons, focus on research-based initiatives, and use of best practices.</p> <p>Mobilizing and engaging elite athletes to actively promote the added value of a broader, personal, and holistic development through testimonials and for-and-by-athletes communication.</p>
Support from the sports world	<p>Creating support within the sporting environment (e.g., sport organisations, coaches, policy institutions, etc.) with regard to the importance of the broader personal development of elite athletes for the active, as well as the post-athletic career.</p>

Tailor-made & 'Whole Person' (holistic) approach	Focus on the specific needs of an elite athlete ('one size does NOT fit all'), taking into account different development levels (= holistic: athletic, psychological, psychosocial, academic/vocational, financial, legal development)
Proactive approach	Encourage and support elite athletes to actively pursue a broader personal development in addition to the athletic development in order to optimize and facilitate the active, transition/retirement, and new, post-athletic phase. Proactively focusing on preparation, strengthening competencies, and broad development instead of focusing only on reactive support when crisis-transitions occur.
Positive approach	Approach the broader development and preparation for a new, post-athletic career as a positive, (new) challenge which benefits the athlete's development. Outlining the end of the athletic career as an event accompanied by positive aspects, such as the opportunity to develop a different, new professional career, rather than using terms such as 'game over'. This does not mean that potential challenges/difficulties should not be mentioned, but it is not the intention to describe the transition process as a negative life event in itself.
Personal contact	Where possible, use of personal contact moments to sufficiently trigger the awareness of elite athletes (and their environment) to be able to design more tailor-made guidance to the elite athlete.
Online solutions	Online solutions to promote the personal development of elite athletes (e.g., workshops, training courses, contact moments, educational material, etc.) to cover the required flexibility in an athletic career. After all, in addition to personal contacts, it is crucial that elite athletes are given opportunities to autonomously develop on different levels.
Importance of follow-up	Emphasize the continued availability of both formal and informal support and guidance, as well as the creation of openness. While this availability and follow-up has been shown to be important, it may

not compromise the autonomy and self-regulation of the (retired) elite athlete.

Monitoring & evaluation	Try to work systematically by monitoring and evaluating the provided support, as well as the holistic progression of the elite athlete. Both 'soft measures' (e.g., evaluations of the support provided by the athletes) and more 'hard measures' (e.g., number of athletes you support) can be used.
Continued support during and after the athletic career	Continued support from various organisations and agencies both during, and after the athletic career should be foreseen. The post-athletic support should build on and be integrated with the support/steps provided/taken during the athletic career.
Integration & Coordination	Clear coordination and integration in the various support services and initiatives offered by different types of organisations (e.g., sport organisations, policy institutions, employment agencies, etc.). Even though the specific implementation of guidelines and support services depends on the specific context, a form of coordination and integration is crucial to adequately inform, guide, and support active and retired elite athletes.
Importance of context	Contextual, (inter)national differences must always be taken into account when implementing the general guidelines. It can therefore be stated that all the above principles apply to all contexts, but that their specific implementation is always context-dependent.

Discussion

The aim of the present study was to contribute to the practice of support provision for athletes in their athletic retirement process. The specific objectives of the research project were to (a) explore the impact of athletic retirement on athletes' psychological health and well-being, (b) explore the facilitators and challenges experienced by athletes during different phases of athletic retirement, (c) explore athletes' perceived needs of support services in relation to the facilitators and challenges, and (d) formulate a set of challenge-based, phase-specific practical guidelines to shape support services in function of the athletic retirement process in collaboration with different stakeholders.

In general, we consider that the identified facilitators, challenges and supporting needs confirm numerous previous studies on the widely researched topic of athletic retirement (e.g., Kuettel, Boyle, & Schmid, 2017; Park et al., 2013, Stambulova & Wylleman, 2019; Torregrossa et al., 2015). However, our study contributes to the existing literature by responding to different recommendations of Knights and colleagues (2016) and Wylleman (2019) and by its innovative nature. First, we gained a deeper understanding and focus of facilitating factors in the athletic retirement process using a qualitative approach. Second, we considered athletes who have just entered into the retirement phase. Third, we focused on implementing guidelines to assist athletes through the retirement process. And fourth, we examined the topic of athletic retirement with attention to mental health and well-being. Furthermore, our study is innovative in that it uses a temporal, phase-like approach of exploring athletic retirement (Stambulova et al., 2020). Using this approach, our findings confirmed that athletic retirement should be seen as a transition process covering both pre- and post-retirement phases, rather than a singular event (Wylleman et al., 2016).

In line with earlier findings (e.g., Gouttebauge et al., 2017; Gouttebauge et al., 2016; van Ramele et al., 2017; Wylleman, 2019), transitioning out of elite sport challenges elite athletes' psychological health and well-being. For example, as also described in the literature review of Park and colleagues (2013), athletes in this study reported that feelings of insecurity and an identity crisis impacted their psychological health and well-being in a negative manner. However, responding to Knights et al.'s (2016) identified lack of studies focusing on positive outcomes among retired elite athletes, our results also showed a positive impact of athletic retirement on athletes' psychological health and well-being. Factors such as a less strict lifestyle and fewer obligations, more free time, a rich social life, and feelings of relief were shown to have a positive impact. However, just like Knights et al. (2016), we recommend future research to focus more closely on positive mental health and well-being outcomes among athletes in the athletic retirement process.

Confirming the International Society of Sport Psychology Position Stand (Stambulova et al., 2020), athletes' facilitators, challenges, support needs and strategies varied across the three phases (i.e., active, retirement, new career phase) of athletic retirement. Athletes indicated a broad overview of phase-specific facilitators and challenges strongly in line with previous research findings. For example, the singular focus on elite sport during the active athletic career potentially leading to identity foreclosure (Park et al., 2013), characteristics retiring athletes developed during their elite sporting career transferable to other environments (e.g., perseverance, discipline,

maturity; Coffee & Lavalley, 2014; Dywer & Gellock, 2018), and occupational delay leading retired athletes to having difficulties to catch up with the latest developments in their specific fields (e.g., Stambulova & Wylleman, 2019). In line with the study of Wylleman and colleagues (2016), the indicated facilitators and challenges were shown to not only occur in the athletic career (e.g., a satisfying last result or season, lack of interests outside of sport), but also in relation to other development domains, including the psychological (e.g., new plans and goals, taboo of needing support), psychosocial (e.g., professional network, adapting to the new daily family life), academic/vocational (e.g., transferable competencies, lack of duality in the DC mindset within sport), and financial domain (e.g., financial insecurity). Importantly, most of the challenges found to impede the athletic retirement process were situated in the active phase. This finding underlines the importance of a timely, proactive approach in overcoming the challenges potentially leading to a crisis-transition (e.g., López de Subijana et al., 2015; Stambulova & Wylleman, 2019).

In order to optimally use the facilitators and counteract the challenges, the interviewees provided useful insights in their perceived needs for support services (e.g., individualized DC pathways, physical support, inform employers on the added value of elite athletes). Unfortunately, our study findings confirm the lack of institutional considerations and support in guiding athletes in their athletic retirement process. Participants indicated the need for the implementation of psychological guidance, financial support, and support in their broader personal development (e.g., Fuchs, Niemisalo, Pehme, & Svetec, 2016; Pink, Saunders, & Stynes, 2014; Ryan, Thorpe, & Pope, 2017). Remarkably, consistent with the findings of the Erasmus + Sport Project 'Be a Winner In elite Sport and Employment before and after athletic Retirement' (B-WISER), the majority of the athletes indicated clear information- and awareness-raising as an important support need as they lack knowledge on the available support services. In line with the B-WISER project (2018), the participants in our focus- and expert groups indicated the use of role models and communication for-and-by athletes to implement the practice of information- and awareness- raising.

Building on the indicated need for practical implementation of support services to guide and empower athletes in different phases of the athletic retirement process, we developed both general and phase-specific guidelines for elite sport stakeholders. A total of twelve general guidelines, accompanied with seventeen phase-specific guidelines were developed using a well-structured, evidence-based, two-stage approach. We believe that this approach ensures that the guidelines can be used in a structural way by elite sport stakeholders in supporting active and retired elite athletes in their athletic retirement process. For example, in line with existing literature (Wylleman, 2019), using the guidelines, career support providers can contribute to active elite athletes' preparation for their transition out of sport by readying them at different developmental levels. This can entail the development of a personal development plan to support athletes in reflecting on their current and future interests, goals, and performances or support athletes in the development of certain competencies. Second, the guidelines may be of help for support providers (e.g., psychologist) during and after the athletic retirement process. Psychologists, for example, can be called in to help athletes experiencing psychological difficulties following their transition out of sport (e.g., identity confusion, coping with feelings of anxiety, depression). Given the practical value of the developed guidelines, we encourage applied projects and elite sport stakeholders to consider those practical

guidelines in their practices. Nevertheless, contextual and (inter)national consideration when implementing the guidelines remains important (Stambulova & Ryba, 2014; Stambulova & Wylleman, 2019).

Strengths of the project

First, by focussing on athletic retirement, this research project addressed a highly relevant topic to Olympians as well as to sport psychology research (e.g., Stambulova, Ryba, Henriksen, 2020). The theoretical and practical contributions of the project are highly valuable on both an individual, and an organisational level. On an individual level, the results are valuable for Olympians themselves guiding them in their transition from elite sport to a new, post-athletic career and preventing them from experiencing mental health issues upon athletic retirement. On an organisational level, the project results can be used by sporting organisations and institutions, such as the International Olympic Committee or National Olympic Committees to raise awareness on athletes' athletic retirement process, and to practically implement the guidelines into future studies and/or practice in order to (a) prepare Olympians optimally for their next career, (b) maintain Olympians' psychological health/well-being, and (c) avoid mental health disorders.

Second, given the potential complexity and multifaceted nature of the athletic retirement process, the emphasis on different qualitative research methods (i.e., semi-structured interviews, different rounds of SME focus groups) can be considered as a strength. Qualitative approaches allow researchers to explore the underlying mechanisms and processes more carefully and contextualized, which may remain undetected when using quantitative approaches (Galli & Gonzalez, 2015; Ungar, 2003).

Third, the innovative approach of taking a phase-specific perspective which considers elite athletes' facilitators, challenges, and support needs in three consecutive athletic retirement stages (i.e., before, during, after; Torregrossa, et al., 2015), at different levels of development (i.e., a holistic perspective; athletic, psychological, psychosocial, academic/vocational, and financial level; Wylleman et al., 2016) can be considered an important strength of this project.

Fourth, we consider the identification of a common structure for guidelines for support services across different countries as a strength of the project. While Aquilina and Henry (2010) noted important differences in elite sport structures and regulations across European Member States, this project identified common guidelines regardless of context-dependent factors. Although contextual, (inter)national differences must be considered when implementing the general and specific guidelines, all the guidelines developed throughout the project apply to all contexts (Aquilina & Henry, 2010). The distinct applied focus by making available those athletic retirement stage specific guiding methods and recommendations for both athletes, as well as elite sport stakeholders is also considered as a strength of the research project.

Furthermore, the evidence- and challenge-based, and two-stage process followed to develop the guidelines, the wide range of experience-based results from athletes in different stages of athletic retirement, and the broad involvement of expert practitioners in career support, coaches, elite sport governing body representatives, high

performance directors, sport psychologists and academic experts, can be considered as an important strength of the project.

Limitations of the project

While former research indicated the possibility of interindividual differences in the context of athletic retirement, such as gender differences and type of sport (Reints, 2011), no specific attention was given to potential interindividual differences in the experienced facilitators, challenges, and supporting needs of active and retired elite athletes. The current study mainly focused on the phase-specificity of the facilitators, challenges, and support needs in athletes' transition process. We recommend future studies to build on this by researching interindividual differences across and within the specific phases of athletic retirement.

This study aimed at providing guidelines for career support across the world. However, linked to this objective, important limitations should be pointed out. First, the participants of the interviews in the first research phase were only from Belgium and the Netherlands, and thus represented a small part of the pool of athletes across the world. As such, it remains important to be cautious with generalizing the findings on the facilitators, challenges, and the needs analysis to the general athlete population. Concerning the guidelines, the second phase tried to counter this context-specificity by involving SMEs from across the world. Taking the latter into account, and also acknowledging that the focus groups focused on developing guidelines that were not directly related to a specific context, a cautious claim could be made that these are more generalizable in nature. Nevertheless, when implementing and specifying the guidelines within the own context, it remains crucial for action researchers and practitioners to apply them in a culturally sensitive matter, taking into account the specificities of the context (Stambulova & Ryba, 2014).

Despite the call for more studies focussing specifically on a DC 'elite sport and work' (Stambulova & Wyleman, 2019), the current project did not address this challenge specifically. Future studies are encouraged to gain more insight in the challenges that are specific for this combination, while practitioners will have an important role in making such combinations possible, as the current study confirmed that the possibilities to engage in such combination remain very rare (B-WISER, 2018).

Recommendations

As the guidelines developed in this project are practical recommendations on their own, it does not make sense to repeat these guidelines within the current section. Nevertheless, an overview of the general guidelines is provided below, linking these with examples of existing research and/or practical services/tools already in place. This can aid researchers and practitioners to build on the practices and information available when implementing the general guidelines within their own practice or research.

- **Information & Awareness:** As one of the main challenges and support needs remains the awareness-raising in elite athletes and the sport environment in general, it is recommended that practitioners use the right tools and channels for this. For example, the factsheets (see annexes 1 and 2) developed as a result of this project, can be used freely in their information campaigns through different channels (e.g., social media, websites, club visits, etc.). Furthermore, involvement of athletes is key to bring the message across, as the current study confirmed that communication for-and-by athletes remains the most convincing way of involving elite athletes in career development and support. The recent study of Ronkainen, Ryba, and Selänne (2019) is a must-read in this regard, as it provides more insight in how role models might impact career and identity construction of youth athletes.

- **Support from the sport world:** Several good example case studies have been published on how specific sport organisations and/or clubs are supportive of the broader development of their athletes (e.g., Pink, Lonie, & Saunders, 2018; Pink et al., 2014; Ryan, 2015) or how the social network in general can enhance this process (Knight et al., 2018). In spite of these potentially inspiring case studies, it is important to note that a lot of work remains to be done in raising awareness within the sport field. An important step to take in this regard is the addition of more career support educational material and knowledge as part of the curricula of all sport practitioners (e.g., coaches, sport psychologists etc.), as well as intensifying and optimising the educational possibilities for career support practitioners in elite sport and educational contexts (e.g., Defruyt et al., 2019; Hong & Coffee, 2018; Wylleman, Stambulova, Toregrossa, Schipper-Van Veldhoven, & Defruyt, 2018).

- **Tailor-made & ‘Whole Person’ (holistic) approach:** The importance of a whole person and tailor-made approach has been emphasized before and is the main rationale behind the holistic athletic career (HAC) model (Wylleman, 2019). How this model can be used in supporting elite athletes in a tailor-made fashion is illustrated on page 229 of the [GEES Handbook](#) (Wylleman, De Brandt & Defruyt, 2017).

- **Proactive approach:** Researchers already acknowledged the importance of a proactive approach in career development, with several opportunities to facilitate a timely proactive approach during the athletic career. For example, DC ‘elite sport and study’ (e.g., Barriopedro, 2017; Torregrossa, Ramis, Pallarés, Azócar, & Selva, 2015), career planning during the athletic career (López de Subijana, Barriopedro, & Conde, 2015; Park, Lavalley, & Tod, 2013), personal development and the active exploration of interests (Lúcia, Paula, & Nogueira, 2016) have shown to be useful in preparing the post-athletic career. From a more practical perspective, a toolkit with practical tools to proactively encourage and support elite athletes to pursue broader personal development and explore job interests, is provided in the [B-WISER toolkit](#) (B-WISER, 2018).

- **Positive approach:** A positive approach means that athletes and practitioners do not only focus on challenges and difficulties, but also look at the potentially positive elements and competencies before, during after the transition to the post-athletic career. Several instruments have been developed to measure the more positive elements related to the career development of elite athletes, that can also be used in practice: the Motivation toward Sports and Academics Questionnaire (SAMSAQ; Lupo et al., 2015), the Dual Career Competency Questionnaire for Athletes (DCCQ-A; De Brandt et al., 2018), the Athletes' Competency Questionnaire for Employability (ACQE; Smismans et al., submitted). Especially the latter seems to be relevant, as it can be used to show athletes which competencies from the sport world they can develop and/or use in the labour market as well. As such, it has the potential to aid athletes in developing the confidence, as it illustrates that they do not have to start from 'scratch' when entering the job market. A potential use of the ACQE in practice is explained on page 13 of the above-mentioned [B-WISER toolkit](#) (B-WISER, 2018).
- **Personal contact:** Engaging in a trust-based relationship and building a rapport with athletes is crucial to engage in career coaching that does surpass "the superficial". Confirming the importance of this personal contact, more than half of the competencies found important in (dual) career support providers encompass competencies that are directly related to the personal contact with the athletes and their environment (i.e., relationship competencies, awareness of athletes' environment, empowerment competencies, advocacy and cooperation competencies; Defruyt et al., 2019). Although the GEES project, B-WISER project and researchers (e.g., Hong & Coffee, 2018) illustrated that career practitioners do not need to be psychologists, it remains crucial that they know how to build rapport and invest in forming personal relationships with the athletes and their environment (Defruyt et al., 2019).
- **Online solutions:** Considering (a) the flexibility required to reach elite athletes (i.e., their unpredictable and often busy schedules), and (b) the recent developments related to the COVID-19 Pandemic, online solutions for career support have gained importance. [Dualcareertools](#) (DCT) is a good example of an online solution for career practitioners and elite athletes, as it brings together evidence-based self-assessment tools to help active and retired athletes, and DC support providers to better understand their (dual) career competencies. It takes 10 minutes to fill in, and provides a direct visual feedback report and the possibility to involve others in 360° evaluations.
- **Importance of follow-up:** While the importance of this follow-up might seem straightforward as a principle, it is not always well established. Finding the balance between empowering the athlete (and thus providing enough

autonomy, letting go of the athlete) and showing availability or even direction towards the athlete, is a difficult balance to achieve (Pink et al., 2015).

- **Monitoring & evaluation:** In order to convince the athletes and sport world in general of the added value of engaging in career support, it is recommended that career support practitioners keep track of the effectiveness and efficiency of their support (B-WISER, 2018). Many different variables can be taken into account to do this. Specially to convince the sport world, it is important to illustrate that decent career development and support can aid athletes' sport performances as well, which recent findings seem to indicate (e.g., Lavallee, 2019). Other interesting research findings illustrated the possible added value of engaging in a DC for a healthy identity development (e.g., Aquilina, 2013) or even illustrated that DC athletes have a higher study efficiency than the general population of student-athletes (De Brandt, 2017). While these and other studies provided interesting information, it is even more crucial that practitioners themselves engage in monitoring and evaluation of their practice. Several tools have been developed to aid practitioners to monitor different types of data, including for example competencies (see dualcareertools.com), general satisfaction follow-up questionnaires (e.g., p. 216 of [GEES Handbook](#)), and a measurement tool to assess the quality of DC Development Environments (ECO-DC, 2020).
- **Continued support during and after the athletic career:** This study and previous research have illustrated that many athletes have difficulties with the fact that, from one day on another, they lose their support structures when retiring from elite sport. A good practice example of how continued support is guaranteed during and after the athletic career, comes from the National Olympic Committee of the Netherlands (NOC*NSF). They approach the new career as part of the athletic career up to two years after retirement. In practice, this means that most of the athletes can make use of the career support structures up to two years after athletic retirement to help them to have a smooth transition out of sport (see website in Dutch: [TeamNL@Work](#)).
- **Integration & Coordination:** Integration and coordination of career support services is important to strive for quality support and clarity for elite athletes. On a worldwide level, the International Olympic Committee strives to provide a clear structure and opportunities worldwide through the Athlete365 Career+ programme and through the Olympic Studies Centre (e.g., by including career support and DC as priority fields). On a European level, the EU Guidelines (European Commission, 2012) and the financial support that was provided for over 64 international DC programmes through the Erasmus+ Sport programmes of the European Commission the past few years, are worth mentioning. On a sport-specific level, the Mind the Gap programme is another specific example of optimising the quality through integrated and coordinated services. Mind the

Gap aims at enhancing the support structures and quality of player development programmes in football through (amongst others) applying research findings to educate and train Player Development Managers (PDMs) across Europe. Common for all above-mentioned initiatives is that they aim to enhance quality support and the integration and coordination of services, while respecting the national differences and contextual specificities. The development of specific international educational programmes for career practitioners (with associated accreditation) should be high on the agenda to further establish an intellectual and educational integration of career support (Defruyt, 2019). Finally, on a national level, the development of the [Swedish national guidelines](#) is an excellent example of an integration process that resulted in clear guidelines and support structures on a national level, bringing together the perspectives and needs of all stakeholders (sport, education, employers).

- **Importance of context:** The major tenets of the cultural praxis of athletes' career provide useful insights and guidelines for practitioners and researchers to take into account and implement this last general guideline. Amongst others, the use of holistic ecological approaches (e.g., Henriksen, Storm, Kuettel, Linnér, & Stambulova, 2020), contextualizing all steps of implementing research and/or good practices, deeper explorations of individual pathways, and multicultural and transnational career consulting are important tenets of this cultural praxis that are worth considering in this regard (Stambulova & Wylleman, 2019).



Conclusions

Our study has shown to be relevant to the IOC priority field '*Psychological and emotional health of elite level athletes after retirement: Awareness, intervention and prevention programmes to protect athletes*'. The project enhanced the quality of future prevention and intervention programmes as it resulted in a broad overview and clear description of the facilitators and challenges athletes experience during the different phases of athletic retirement (e.g., single-minded focus on sport, financial insecurity, unrealistic expectations of job opportunities), a broad overview and clear description of athletes' perceived support needs during the different phases of athletic retirement (e.g., individualized DC pathways, physical support, inform employers of the value of elite athletes), and a set of general, as well as concrete practical phase-specific guidelines for career support services and different stakeholders. Adopting this holistic and phase-specific perspective advances elite sport stakeholders' understanding and increases awareness on the different factors influencing athletes' ability to successfully cope with the athletic retirement process and maintain psychological health and well-being. Furthermore, the developed guidelines can aid in gaining more insight in the responsibilities of stakeholders linked to the athletes' developmental pathway (Knight, Harwood, & Sellars, 2018).

Annexes


Annex 1: Factsheets general guidelines

Developed with the support of the Advanced Olympic Research Grant Programme, provided by the Olympic Studies Centre


VUB   **SPORT PSYCHOLOGY & MENTAL SUPPORT RESEARCH GROUP**

SUPPORTING ATHLETES BEFORE, DURING AND AFTER ATHLETIC RETIREMENT

GENERAL GUIDELINES



Information & Awareness	Tailor-made & whole person	Positive approach	Online solutions	Monitoring & evaluation	Integration & coordination
Support from the sports world	Proactive approach	Personal contact	Follow-up	Continued support	Context



SUPPORTING ATHLETES BEFORE, DURING AND AFTER ATHLETIC RETIREMENT

GENERAL GUIDELINES



Information & awareness
Provide information on and awareness about available career support services towards elite athletes and their environment.



Support from the sports world
Create support and engagement from the sports world.



Tailor-made & holistic approach
Focus on the specific needs of an elite athlete, taking into account the whole person.



Proactive approach
Focus on preparation, strengthening competencies, and broad development during the athletic career.



Positive approach
Approach preparation for a post-athletic career as a positive, (new) challenge for the broader development.



Personal contact
Use of personal contact moments to sufficiently trigger the awareness of elite athletes (and their environment).



Online solutions
Provide online solutions to promote the personal development.



Importance of follow-up
Emphasize the continued availability of both formal and informal support and guidance, as well as the creation of openness.



Monitoring & evaluation
Monitoring and evaluating the provided support, as well as the holistic progression of the elite athlete via both soft, and hard measures.



Continued support
Continued support from various organisations and agencies during, and after the athletic career.





Integration & coordination
Clear coordination and integration of the various support services and initiatives offered by different types of organisations.



Context
Contextualization must be considered when implementing the basic principles.



Annex 2: Factsheets phase-specific guidelines





**SPORT PSYCHOLOGY
& MENTAL SUPPORT
RESEARCH GROUP**


Developed with the support of the Advanced Olympic Research Grant Programme, provided by the Olympic Studies Centre

SUPPORTING ATHLETES BEFORE, DURING AND AFTER ATHLETIC RETIREMENT


Active athletes preparing their retirement have to cope with a set of specific **challenges and barriers**.




Single-minded focus on sport




Bad timing of career support services




Lack of free choice and autonomy




Lack of knowledge of career support services



Lack of duality in a DC



Lack of uniform DC services




RATIONALE


Personal development is a part of the elite sporting career.

- Developing **resources** in various areas
- Support athletes in their **broader development**
- Support athletes in the exploration of **professional interests and talents**


Preventive guidelines targeting athletes' entourage, career support providers, and athletes themselves.




Personal development plan




Transparent DC guidelines




Development of competencies




Individual career support trajectories




Tailor-made educational trajectories




Job/internship opportunities




E-learning options



Role models



Career coaching



Athletes' broader development as part of sport organisations' vision

SUPPORTING ATHLETES BEFORE, DURING AND AFTER ATHLETIC RETIREMENT

During their retirement, former athletes have to cope with a set of specific **challenges and barriers**.



Needing support is taboo



Lack of interests outside of sport



Physical, psychological, and social adaptation



Lack of transition period

RATIONALE

The **retirement period** is a part of the entire (sporting) career.

- It builds on **personal** and **holistic** development
- **Intensive and active support**
- Close monitoring if **crisis transitions** occur

Intervention guidelines targeting athletes' entourage, career support providers, and athletes themselves.



Personal development plan



Mental support for crisis transition



Development and awareness of (transferable) competencies



Facilitate contact with employers



Networking



Job search competencies



Continued financial support in specific cases



Career coaching





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SUPPORTING ATHLETES BEFORE, DURING AND AFTER ATHLETIC RETIREMENT

After their retirement, former athletes in a new, post-athletic career have to cope with a set of specific **challenges and barriers**.



Unrealistic expectations of job opportunities



Occupational delay



Lack of job experience



No desire for functions in sport

RATIONALE

Build **autonomously** on the broader personal development

- Invest in building a **sustainable, new career**
- Support and guidance should remain accessible for at least **two years** after ending the sporting career
- Support has a more **reactive** character

Reactive intervention guidelines targeting athletes' entourage, career support providers, and athletes themselves.



Continued access to a multidisciplinary support team



Mentorship in the workplace facilitated by the employer



Job search competencies



Enhance interaction opportunities between the labour market and retired athletes



Networking



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