Elite athletes’ perception of retirement support systems

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Abstract
Among factors that affect the success within the sports system is the support service for the development of athlete's career and retirement. The purpose of this study is to investigate the perception of athletes on available post-sports career assistance. The study included 379 athletes associated to the official organizations and/or benefit by the government program to high-performance athletes. It was used a structured questionnaire, from which the response rate was checked. Results showed that 43.2% report that the concentration on being high-performance is negatively affected by the concerns about the future, 74.7% claim the post-sport career assistance is insufficient developed, and 78.3% emphasize that career prospects after retirement are a serious problem. The results suggest that is necessary to improve the support for post-sport career athletes and perhaps take advantage of the knowledge of the former athletes as a potential workforce in areas related to sporting.

Keywords: Post-sport Career, Performance, Transition, Coping, Development.

1. Introduction
Achieve international sporting success has become increasingly important to a growing number of countries and there are several attempts to explain the factors that define success. By considering how competitiveness is evaluated in the economic field, De Bosscher et al. (2010) [7] supply a theory and method to compare elite sports structures. Consequently, it is expected that the debate of international comparative sports research is enriched. According to De Bosscher et al. (2006) [6] there was a need of an empirically ground theory about the policy setting that founded elite sporting success. Therefore, a conceptual framework was developed that can be used for making worldwide comparisons of elite sports policies, named SPLISS - Sports Policy factors Leading to International Sporting Success(SPLISS 2015) [8, 7, 23].

Considering this model, nine policy areas or ‘pillars’ were designed to incorporate a relevant influence on worldwide sporting success, and they could be considered as potential drivers of an efficient system: (pillar 1) financial resources; (pillar 2) organization and structure of sport policies; (pillar 3) foundation and participation; (pillar 4) talent identification and development system; (pillar 5) athletic and post-career support; (pillar 6) training facilities; (pillar 7) coach’ provision and development; (pillar 8) international competition and (pillar 9) scientific research on elite sport (De Bosscher et al. 2009; De Bosscher et al. 2010; SPLISS 2015) [8, 7, 23].

Among the pillars mention by this theory, there is the support for career and retirement of athletes, which the academic literature has been evolved specially in the last decade. According to Alfermann and Stambulova (2007) [1] sports career concerns the voluntary and constant practice of a sport activity chosen by an individual, aiming to reach its optimum performance level at sports events. From a holistic perspective, Wylleman and Lavalle (2004) [30] state that the sport development of an athlete involves phases and transitions in different levels, not only in the physical performance aspect, but also psychological, social, academic and vocational, in which one phase can be understood as a period with its own characteristics, and it is in progression. However, it should be noted that theories regarding phases describe general characteristics of a common or average individual. These attributes are accepted as being communal to the members of a particular group, but such theories do not include the description of details (Gallahue and Ozmun, 2006) [12]. So even when a model based on phases and transitions is adopted, it is necessary to consider factors such as sport, the level of performance and the significance that sport practice has to the athlete. These factors can modify the way the stages occur, especially from a chronological perspective.
Transitions are defined as a set of events that cause imbalances in sports athlete trajectory and can happen in two ways. The normative form when the actions are anticipated and there is a plan for the changes occurring, for instance, the passage from amateur to a professional career, and non-normative form, in which changes take place unexpectedly as a result of some event that may arise in the athlete's life, for example, an injury (Wylllem and Lavallee, 2004) [20]. The trajectory of an athlete of high-performance sport includes several transitions that have significant emotional impacts, such as the end of sports career (McArdle, Moore and Lyons, 2014) [20].

Fernandez, Stephan and Fouquerreau (2006) [20] consider the process of sports retirement decision as complex and multifaceted, with specific characteristics as the total requirement of physical and emotional commitment during the sport activity period, when sometimes means to relegate to the background other interests in life and the possibility of mandatory retirement at any age. These features make the process of transition in elite sport unique. Unlike what happens with other individuals, athletes leave their career still young and the final of this path does not necessarily mean a definitive end to occupational activities. Retirement can be conceived as a personal reconstruction period, because when athletes leave the sport, it becomes necessary to renegotiate its provisions and develops new ways to interact with the surroundings (Barker et al., 2014) [16].

The transition from active sports life to retirement may include personal factors, institutional factors or a combination of them (Fisher and Wrisberg, 2007) [11]. For Kadlick and Flmr (2008) [16] the reasons at the end of the career can be classified as sports-related or not. Among the reasons associated with the sport are decreased motivation, relationship problems, the difficulty of maintaining physical condition, economic problems, sports injuries, lack of prospects in the sport and age. On the other hand, the reasons unrelated to the sport are the conciliation of study and work demands, mobility, family aspects, the responsibilities as a partner and the lack of free time. According to Du and Tsai (2002) [9] economic, physiological and burnout causes for retirement were established to be negatively related to the life satisfaction of athletes. In contrast, there is evidence that the decision planned and voluntary retirement of sports is associated with a positive transition (Martin, Fogarty and Albion, 2014) [19].

Lally (2007) [16] declares that, the transition from active participation in sport for retirement, is related to losses in various areas such as networks of friends, identity, and public attention. Martin, Fogarty and Albion (2014) [20] reaffirm the losses of identity and prestige are problems to be negotiated in view of the negative psychological and social consequences associated with an excess of commitment to the role performed in the sport. Athletes should be encouraged to broaden the perception of their identity while still competing.

Stambulova, Yannick and Župančič (2007) [20] conduct a study that athletes reported feelings of emptiness, sadness and uncertainty after retirement. A significant signal of probable difficulties during and after retirement from elite sport happen when an athlete is uniquely centered on the sport, and having an intense and one-dimensional sportive identity (Torregrosa et al. 2015) [29]. Another aspect that needs attention was observed by Stephan, Torregrosa and Sanchez (2007) [26] who report difficulties faced by retired athletes with their body, which were negatively related to global self-esteem, physical self-esteem, perceived physical condition, sport competence, and physical attractiveness. This finding indicates the body changes can also be a potential source of stressful reactions among former elite athletes, as well as social and professional changes. However, it must recognize some positive aspects of post-career phase as the increase in free time, the absence of sports injuries, and reducing stress associated with the competitions (Martin, Fogarty and Albion 2014) [19].

Therefore, in the process of retirement, it should be noted factors such as readiness on the career-ending decision, how the transition is conducted, the level of athletic identity, the evaluation of the achievements in sports career and how is the planning for the period away from the competitive environment (Cecic Erpic, Wylllem and Zupančič, 2004) [3]. According to Stier (2007) [27] the athlete retirement process has four steps, including the first doubts, the search for alternative of sport life, the retirement decision itself and the establishment of a new identity, and these situations may overlap in some cases.

Fisher and Wrisberg (2007) [11] declare that it should be detected if the individual manifest signs of emotional or psychological stress and create a supportive environment in which the athlete is encouraged to talk over the plans for retirement. There must be a realistic reflection on the routine life after the sports career. It is also important that athletes keep in touch with people who were part of their career in the sport. Martin, Fogarty and Albion (2014) [19] claim that sport managers, career counselors, coaches, and parents can help in this process, working with athlete's identities, their strengths, interests or talents outside the sporting environment, and support them in the exploration and development of these other aspects of their identity. Park, Tod and Lavallee (2012) [21] suggest that providing preventive interventions throughout the early stages during the retirement process can be a positive to athlete’s well-being. In this sense, all support is crucial for this transition which is conceived much less problematic when planned as a process and not an isolated event (Torregrosa et al. 2004) [20]. For Fisher and Wrisberg (2007) [11] any intervention to help athletes who retire must include all components in this process. Thus, in the current study, we investigated the perception of high-performance athletes on available support services to post-sports career.

2. Method
This research used the theoretical frame of SPLISS. This model has the proposal to establish a collaborative research network for comparative studies between countries on high-performance sport, and it has the aim to coordinate, produce and share expertise in original research at the policy level, in cooperation with other guideline’s makers, national and global organizations, and researchers worldwide (De Bosscher et al., 2009; SPLISS, 2015) [8, 23]. This framework was created from inductive processes to combine all significant sources from a comprehensive body of literature on the subject. Subsequently, it was complemented with studies at the micro-level to comprehend success determinants for individual athletes in order to increase the content and context validity of the theoretical framework; two experimental studies were conducted, and it was clustered all relevant data into comprehensible and meaningful key themes. It was concluded that all key success drivers that can be influenced by policies can be distilled down to nine key areas or ‘pillars’, which were cited previously, and each pillar of SPLISS comprises a variable number of Critical Success Factors – CSF (De Bosscher et al. 2010) [7]. SPLISS consortium also offers opportunities for researchers and institutes to realize some parts of the projects suited to their own context (DeBosscher et al., 2009; SPLISS, 2015) [8, 23].
This study was part of a wider research project, coordinated in Brazil by Böhme and Bastos (in press) \[3\]. We decided to examine specifically the results in the support at the end of the athlete's career to make possible of a detailed analysis of the theme. The Critical Success Factors – CSF of this section of the athlete’s pillar includes post-career support programs and the availability of partnerships to guide high-performance athlete's post career (De Bosscher et al., 2009) \[8\].

2.1 Participants
The study included 379 athletes, 240 men with mean age of 35.5, and 139 women with mean age of 30.4 years. The group of athletes were formed by: track and field (n=74), aquatics sports (n=70), handball (n=40), shooting (n=39), judo (n=27), fencing (n=24) hockey (n=24), canoe (n=17), cycling (n=15), sailing (n=14), archery (n=12), triathlon (n=12) and volleyball (n=11).

For inclusion, it was considered all athletes that had taken part in competitions representing Brazil, who was designed by the national sport organization, as well as all athletes benefit from the federal financial assistance program entitled Bolsa Atleta, which is targeted especially for athletes of high-performance in Olympic and Paralympic sports (Brazil, 2004) \[4\]. The detailed characteristics of the group are presented in the result's section.

2.2 Instruments
We used the questionnaire of the theoretical model developed and validated by De Bosscher et al. (2009) \[8\] and it was translated into Portuguese by Böhme and Bastos (in press) \[3\]. It is a structured questionnaire that seeks to identify elite sports climate. This study considered the questions of the general characteristics of the athletes and questions about access and quality of support systems that athletes receive at retirement.  

2.3 Procedures
After institutional research ethics committee’s approval, we made contact with all Brazilian Olympic sports confederations, to obtain the names and contacts of their elite athletes, which were part of their national teams, as well as with the National Department of High-Performance Sports, to obtain the list of athletes benefited with the athlete grant from federal government. All athletes were invited to participate of research, through e-mail, telephone, social networks or in person. They signed a consent form to participate and answered the online questionnaire. It was guaranteed the anonymity and confidentiality of data.

2.4 Statistical analysis
It was used the Microsoft Office Excel 2007 (Microsoft Corp., Redmond, Washington) to register and perform the descriptive analysis of data, in which was verified the frequency of responses.

3. Results
The results indicated that 21.9% of the sample was part of the international elite sport, being 2.1% on the highest three positions, 7.2% among the eight positions and 12.6% among the 16 positions at the world level. Besides, 30.7% of athletes were at the top eight positions in the Americas, and 36.6% represented Brazil in the national scope. Only 10.7% of the study participants did not belong to any conditions described above. Furthermore, 71.9% practiced the sport of choice for the first-time before age 15, and 69.2% decided to dedicate the sport they practice between 11 to 20 years. The results revealed that only 18.5% dedicated their time exclusively to sports activities, despite the high-performance profile of the athletes. The data showed that 7.9% study full-time and 41.5% study part-time; 15.1% of the athletes divide their time between sports activities and a full-time job and 8.7% to a part-time job. Regarding education, the data show that 59.4% graduated in higher education, 28.9% in high school, 3.7% in primary education and 7.9% in other categories of education. To analyze the income of athletes, it was considered the total annual income in local money and converted into US dollars, according to the currency rate at the end of the data collecting period. Figure 1 presents the answers of the athletes.

Regarding the issues on support at the end of the sports career, the results indicated that 58.4% of the athletes declared they could count on some support service; 20.8% declared they could not, and 20.8% answered they do not know. Figure 2 reveals the support services and the percentage of players who may or may not have such services. The Figures 3 to 8 present the results about the post-sport career support, according to the Likert scale.

Fig 1: Percentage of responses from athletes about the annual income in US dollars.

- less than $13,169.95
- $13,170.52 to $46,094.82
- $46,095.40 to $65,849.75
- $65,850.32 to $92,189.65
- more than $92,189.65
Fig 2: Percentage of responses from athletes about the support services available at the end of the career.

- Specific programmes: 38.5% Yes, 61.5% No
- Sport psychologist: 49.1% Yes, 50.9% No
- Building a social network: 23.5% Yes, 76.5% No
- Building a professional network: 25.5% Yes, 74.5% No
- Adapted curriculum for education: 32.0% Yes, 68.0% No
- Career coaching: 50.0% Yes, 50.0% No
- Financial support: 44.0% Yes, 56.0% No
- Financial advice: 52.1% Yes, 47.9% No
- Others: 82.4% Yes, 17.6% No

Fig 3: Percentage of responses from athletes about being well informed regarding of the support services available after the sports career and the professional future.

- Strongly agree: 2.3%
- Agree: 11.2%
- Neither agree nor disagree: 11.2%
- Disagree: 31.3%
- Strongly disagree: 29.0%
- I don't know: 15.1%

Fig 4: Percentage of responses from athletes about the claim that the post-sports career support is well developed in Brazil.

- Strongly agree: 1.2%
- Agree: 0.8%
- Neither agree nor disagree: 6.2%
- Disagree: 28.8%
- Strongly disagree: 45.9%
- I don't know: 17.1%
Fig 5: Percentage of responses from athletes about the fact that he or she is worried about what will happen after the sports career.

Fig 6: Percentage of responses from athletes about the statement that concerns about future prospects out of the sport affect negatively the ability of total concentration on being a high-performance athlete.

Fig 7: Percentage of responses on the claim that the career prospects of high-performance athletes after retirement is a serious problem in Brazil.
The initial analysis of the results indicates that the annual amounts received by athletes are insufficient to accumulate economic capital, and probably it will not allow them to spend the rest of their lives with what they have accumulated as athletes, as shown in Figure 1. This is corroborated by the percentage of athletes who share their time between sports, work and study, and the percentage of the group that hoped to find a job right after the end of athletic career, as presented in Figure 8. These findings are echoed in a study developed by Santos (2013) [22], which shows that even when individuals considered themselves as professional athletes, they do not conceive this occupation as a job.

Another preliminary evaluation arises from the combination of information about the mean age of the group, the age at which the group decided to practice sport and the level of performance of these athletes. These data suggested that these athletes experienced the sport for a long time and possibly developed a social and cultural capital related to the sport that is hardly achieved otherwise. Thus, it is plausible to consider that this group can be characterized by having specific knowledge about sport environment, and at the end of their career as athletes, they will have to find new ways of professional occupation.

Regarding to the main purpose of this research, which is to identify the perception of the athletes of retirement support systems, the results indicated that 60.3% of athletes believed they could count on some assistance service, but contradictory 74.7% said they were not well informed about what kind of aid it is available once they end the sport career as an athlete and their professional future. The concern of athletes on the prospects for the future adversely affected the ability of total concentration on being a high-performance athlete in 43.2% of cases. Moreover, for 59% of the athletes, there is a concern about what will happen after retirement, and the perception of 78.3% of the athletes indicates that the perspective at the end of career is a serious problem in Brazil, and 74.7% of athletes claim that the post-sports career support is not well developed in the country.

Considering that SPLISS is characterized as a theoretical and methodological model recently developed for nations to assess their own policies for the improvement of the sport across the pillars, and can establish a comparative analysis with other countries, it is important to identify the available results from the same framework to make it possible to identify the strengths, weaknesses and initiatives that can enhance sport's policies in each pillar. In the case of critical success factors related to support system in athlete’s transition to retirement were found reports from Switzerland and Northern Ireland, which may be compared to the Brazilian results.

In a report made by Kempf et al. (2014) [17], using SPLISS in Switzerland, the results indicated that 91% of athletes had expected to get a job after the sports career, a result that shows similarity to the response of Brazilians. In the case of Switzerland, this expectation was explained by the fact that 30% of athletes combine sport and work. Another result shows agreement between the two countries which is the low percentage of athletes who consider support for the post-sport career in their countries as good. In Switzerland, this group represents only 25% of the athletes interviewed and probably relates to individuals who have benefited from support actions available in Switzerland, which include the development of a network of professionals, support for education and career coaching. Such actions are designed to facilitate the necessary adjustments to the athlete after the sports retirement.

In Northern Ireland, it was also used the SPLISS for collecting information about the support to the athletes during and post-career. According to the report, there are services during the career to prepare them for retirement in the sport, and athletes have support programs up to six months after the end of career that included support to apply for job, curriculum development and preparing for interviews. However, the report does not present detail data on such support, and further it indicates that there are no specific agreements or partnerships with institutions to guide the athlete during and after the career, and there are no initiatives to recruit retired athletes to work in sectors related to sports (Sport Northern Ireland, 2012) [24].

Concern about retirement athletes in the academic field finds resonance in sports management organizations, like International Olympic Committee. The Athletes Commission (International Olympic Committee, 2014) [15] reiterates the importance of programs to support the athlete's retirement and created a program in order to help athletes prepare more effectively for the eventual transition. This program, by the
end of 2012 was implemented in over 60 countries and served more than 11,000 athletes, and comprises three basic aspects: education, life skills and employment, and provides resources and training relating to such aspects. There was no information indicating that the IOC program was developed in Brazil, but considering the result found in this study is plausible to assume that most athletes are unaware of this program. For the Athletes’ Committee (International Olympic Committee, 2002) [14] athletes, especially young ones, must understand the end of the career is a natural fact, and their role in society as active individuals, goes beyond the sport scene. In this sense, the official sports organizations must share responsibilities in helping the management of athlete's life after the career through mentoring programs, education, and other intervention support. Therefore, the sporting structure in the athlete's environment must be able to assistance effectively their efforts, so that they can overcome these challenges as best as possible. For such actions to be effective, it is necessary to identify the perception of athletes on the present structure and to improve support programs. It is also important to consider that even the athletes who persevered for long periods in the sport may not have positive experiences in this environment (Wrisberg, 1996) [13], and consequently, the progression to another phase of the professional life requires appropriate preparation to avoid the athletes reproduce in new work positions the negative experiences they lived as athletes. This scenario leads to reflecting on possible trajectories to support athletes, who are at the end of their career. One possibility that should be considered is the use of the athlete's knowledge of the sports environment in occupations related to the area. According to Hoffman (2005) [13] the body of knowledge of the physical activity, and therefore, includes sports activities, has three different sources: theoretical knowledge, the knowledge gained through experience and knowledge from professional practice. From this assumption, it must be considered that athletes already have broad experience in sports, and the use of experience combined with knowledge from some educational program, and job opportunities may produce professionals with substantial qualification. It must be considered that besides helping athletes in the transition from sporting life to retirement, this kind of support programs also can be useful in the development of sport itself. Through vocational analysis to identify the potential of the athletes, specific educational programs for former athletes could be design to activities related precisely for the areas suggested by De Bosscher et al. (2009) [8], which includes management of financial resources, policy development and sport organization, organization of sport participation, talent identification, sports infrastructure management, sports training, organization of international competitions, scientific research and even sponsorship and media activities. It is possible to leverage the knowledge and the athlete’s network in order to enhance other professional functions in sport, and still make the athlete's retirement less traumatic, because their occupational activities take place in the same environment, but in a different position (International Olympic Committee, 2014) [13]. Thus, it could be created a virtuous cycle of exploitation of knowledge and potential of former athletes to the development of all sports systems.

Regardless to the limitation of this research, it is necessary to mention the difficulty of establishing a comparison with other studies, considering the SPLISS itself is a recent research framework. Another aspect that should be taken into account is that this study particularly focuses on the perception of athletes on support systems to sports retirement and does not use the full SPLISS model. Anyway, it is necessary that research on this approach be made, and results reveal so that it can be structured programs, which actually help the athletes at the end of sports career. Consequently, it is expected to detect and compare the strategies that effectively work. In this sense, it will be possible to share expertise and to make innovative changes in the sports policies thought different countries, as is the purpose of SPLISS.

5. Conclusions
In conclusion, this study reveals that the perception of the athletes about the support system at the end of the sport career is mostly negative. The results revealed that the majority of the athletes believed that the prospect for high-performance athletes after retirement is a problem and express concern about what will happen after the sports career. Part of the research group expressed that this state of apprehension impairs the performance as a high-level athlete. These findings suggest that it is necessary to make improvements in the support system for athletes who are in the process of retirement, and perhaps take advantage of the former athletes as a potential workforce in other areas of the sport. New studies that include intervention programs and case studies can be particularly enriching for future discussions about this topic.

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7. References


