

Life after doping – a cross-country analysis of organisational support for sanctioned athletes

Abstract

Aim: This article investigates the available support services/interventions offered by sporting organisations worldwide for athletes facing career transitions resulting from suspensions due to violating anti-doping policy. The authors aim to provide an overview of existing support systems and raise an awareness of the need of customised and structured support for sanctioned athletes as part of duty of care in sport,

Method: Web-based data was initially collected. Following this we contacted each sport organisation by email with a request to answer prepared research questions. Fifty sport organisations were contacted, including the International Olympic Committee (IOC) and National Olympic Committees (NOCs). The data from 22 sport organisations representing five continents are presented.

Results: The data are presented under five main themes: Termination of support, Psychological support, Financial support, Informative support, and Development in progress. The central finding is that none of the sporting organisations in this study has established a structured support programme or system for supporting doping sanctioned athletes to date.

Conclusion: In most cases sanctioned athletes are simply cut off from all organisational support and left to cope on their own when they are likely to be vulnerable. We argue there is a need for better awareness and support programmes of the challenges faced by athletes following a competition ban or other forced exit from sport due to an anti-doping violation.

Keywords: doping, sport career transitions, organisational support, transition support, stigma

1. Introduction

Anti-doping researchers have identified a range of ways that athletes may be harmed or suffer negative effects resulting from anti-doping processes (c.f. Dimeo & Møller, 2018). The World Anti-Doping Agency (WADA), a global anti-doping policy making body, sets out ten mechanisms through which an athlete may commit an anti-doping rule violation (ADRV) (WADA, 2015). Probably the most readily understood violation is returning a positive test for a prohibited substance. The initial positive result sets off a chain of events that can present various difficulties for athletes. For example, the provisional suspension given while waiting for a decision not only prevents competition, but may also be made public, leaving the athlete open to negative attention and scrutiny before the details have been established. If a decision includes a sanction in the form of a competition ban, athletes may lose sponsorships, income, relationships in their sport community, and may face social isolation due to the stigmatising nature of being labelled a doper (Coomber, 2014). Though there is evidence that up to 40% of positive tests are the result of inadvertent use (de Hon, 2016)—meaning the athlete did not intend to enhance their performance—athletes still face the negative outcomes of an ADRV.

In many ways, competition bans act as a form of involuntary retirement from sport (Lavallee, Grove, & Gordon, 1997). Though athletes given short bans may return to sport, some will face a permanent forced retirement. In either case, these points represent career transitions during which athletes may be especially vulnerable to issues like mental health problems and may require additional support while transitioning away from a full-time sport career. Based on publicly available information, the number of athletes potentially facing such transitions is not insignificant, though the full scale of this problem is hard to measure. We can make some rough estimates but not all the required information is available to be truly accurate. Drawing from WADA's 2017 Testing Statistics report we know that 1.43% of 322,000 tests per year result in an Adverse Analytical Finding (AAF), which is 4,596 (WADA, 2018). Of course, AAFs are not the same as sanctions for a number of reasons: that some positive tests are accounted for by

Therapeutic Use Exemptions (TUEs); others are multiple tests on the same athlete; and others are so innocuous that the athlete only receives a warning. It is also possible that the B sample is returned negative, or the athlete successfully proves it was contamination (this outcome is very rare). While the most recent years' statistics are not yet available, WADA reported that in 2016 there were 1,595 ADRVs and that figure increased by 13% to 1,804 in 2017 (WADA 2019). Therefore, we can say that the number of athletes who face some form of anti-doping punishment has been in the region of 1,600-1,800, and that as the trend is upwards it may mean the 2018 and 2019 figures will be higher. However, we do not know for how long these athletes (or support personnel) have been banned or how many of them make an attempt to return to sport.

If the ban is four years or more, they are less likely to make a return to sport and less likely to have career opportunities as a coach or related role. They will be stigmatised as a deliberate doper as a four-year ban usually involves a substance or method associated with deliberate cheating such as EPO, blood doping, growth hormone or anabolic steroids. The Testing Statistics report has categories of the substance or method found. Athletes in this situation are more likely to suffer the negative mental health pressures as they have suddenly lost their reputation and livelihood. Dimeo and Møller (2018) provide case studies of athletes who have committed suicide, attempted to commit suicide, suffered severe depression or had their lives dramatically changed by a doping sanction.

Athletes who are sanctioned may struggle to make a return to sport. They are likely to lose their sponsorship deals, potentially lose their contracts with a club or team, miss out on training and competitions, and may not receive much advice and support during their ban. Sports fans might associate all forms of doping with cheating so athletes making a return are treated with suspicion. This is especially difficult for athletes in sports where it is difficult to continue training during a ban without sharing facilities or staff with other athletes. The Code lays out a rule against associating with athletes or other support personnel who are currently sanctioned; it would be

considered an ADRV for any athlete, coach, or manager to work or train with a sanctioned athlete (WADA, 2019b, p.3). On top of living with the stigma of being labelled a ‘doper’, they may lose the opportunity to make a return to sport.

WADA sets out as part of its mission to ‘respect the rights and integrity of clean athletes’ (WADA, 2019a). If we understand clean athletes to be those who do not run afoul of WADA’s rules, we are left to wonder about the rights and integrity of athletes who do violate those rules. This article focuses on this issue in addressing the central research question: Do sporting organisations provide support/interventions to high-performance athletes who have used banned substances and, as a result, have damaged/terminated their athletic careers? For the purposes of this article, an organisational intervention or organisational support is defined as a planned programme or services offered by a sporting organisation specifically designed to assist athletes in preparing for career transitions (Lavallee et al., 2014). Drawing on data collected from sport organisations, we explore what resources are available to athletes facing a career transition as a result of a doping sanction. We argue that as part of sport’s duty of care to athletes, sport organisations and governing policies must consider the needs of athletes facing career transitions resulting from anti-doping.

2. Sport career transitions

Career termination is an inevitable experience that high-performance athletes will face in a range of circumstance. Retirement is a transition moment that can increase risks, especially if they are unprepared for it (Hong & Coffee, 2018) and it also invites identity and coping issues (Sinclair & Orlick, 1994). Researchers have shown that high-performance athletes may be at an increased risk of suicide that is potentially associated with injuries, substance abuse, and relatively early retirement from their sporting career (Baum, 2005).

Studies in the area of sport career transitions have identified common reasons for athletes to terminate their sporting careers. The ideal career termination can be when an athlete retires

voluntarily, for their own personal, social, or athletic reasons (Taylor et al., 2005), or for pursuing a different career path (Lavallee, Grove, & Gordon, 1997). However, voluntary retirement also invites various difficulties, for instance when the decision is made due to the stress caused by competitions or discord with their coaches (Kerr & Dacyshyn, 2000). Lavallee et al. (1997) have identified various causes of retirement including work/study, lost motivation, the politics of sport, decreased performance, financial issues, decreased enjoyment, age, injury, and deselection. Although Lavallee et al. (1997) only considered age, injury, and deselection as involuntary reasons for retirement, other reasons can be considered to contribute to involuntary retirement. For instance, some athletes may terminate their sporting career because they are disaffected by politics of sport, are forced to reorder their priorities (work/study commitments, finance), or they become less competitive (decrease in performance) (Taylor et al., 2005). However, there should be one more significant reason for involuntary career termination: being suspended due to violating anti-doping policy.

Researchers in the area of sport career transitions have considered how to assist high-performance athletes with issues related to transitions within or out of sport. This research shows that national sporting organisations have developed career counselling programmes for high-performance athletes (Anderson & Morris, 2000; Sinclair & Hackfort, 2000; Taylor et al., 2005; Wylleman et al., 1999). Anderson and Morris (2000) insisted that sporting organisations have responsibility to encourage athletes to have a balanced life between sporting and non-sporting careers, and to develop a well-rounded identity during their sporting careers. Since career transition support programmes enable sporting organisations to create an appropriate environment for high-performance athletes (Anderson & Morris, 2000), the organisational context of career development programmes is critical to help athletes have a smooth and healthy transition (Lavallee, Gorely, Lavallee, & Wylleman, 2001). With regard to this, Hong and Coffee (2018) provided an overview of organisational support provided to high-performance athletes from 19 different countries. Their study reviewed programmes around the world, identifying their

similarities, differences, and difficulties so that sporting organisations might improve the support through sport career transition programmes. However, their findings did not explore whether or not the provision of such transitional support is accessible when athletes who were previously eligible for the services are sanctioned due to doping ADRVs. This is a key driver of the current research: to contribute to our understanding of transitions and transitional support to the literature.

3. Cases on life after doping

There has been increased awareness within academic research about the impact of a sanction on an athlete. However, the small number of studies in which ‘doped’ athletes have been interviewed have tended to focus primarily on the reasons why they doped, not about the consequences. These studies have also been limited to athletes who have deliberately doped, and not included discussions of alternative situations such as inadvertent doping or even forced doping. Nonetheless, we can highlight several cases of sanctioned Olympic athletes who have struggled with the pressures of stigma, public criticism, peer criticism, and a significant narrowing of their career opportunities.

An example from the 1990s is that of English track and field athlete, Diane Modahl. She was falsely accused of using testosterone and was banned for two years. She appealed and won her case, but lost significant financial costs to the point that she was bankrupt. In her autobiography she tells of her depression, despair, and suicidal thoughts during her appeal period and in the aftermath (Modahl, 1995). Several years later, another English runner, Dwain Chambers, was part of the BALCO scandal in the early 2000s. He was banned for two years. Again, details of the stress and anxiety he suffered can be found in his autobiography. He was also vilified by other athletes when he made a return to the sport. Upon retirement, he failed to secure employment in sport and felt disappointed that prominent sports leaders continued to criticise him in public (Chambers, 2010). Marion Jones was also caught up in the BALCO scandal and was stripped of

her medals from the 2000 Olympics. Her emotional recovery was further disrupted by a prison sentence related to BALCO but not to doping. She did not return to track and field (Jones, 2011).

Several cyclists have suffered from doping cases. In 2004, the Scottish cyclist David Millar was banned for two years after investigators found a syringe with EPO in his apartment. He wrote a detailed account explaining his sense of isolation and pressure in the aftermath of the sanction (Millar, 2011). Tyler Hamilton was an American Olympian who joined the US Postal professional team with Lance Armstrong. He confessed to doping in 2011, helping the case against Armstrong, and had significant problems with depression over several years. He has not made a return to cycling (Hamilton & Coyle, 2012). One of his other teammates, Floyd Landis, had faced many personal and financial issues that emerged from his positive test after winning the 2006 Tour de France. Another cyclist from this time period who was banned for doping was Michael Rasmussen. He has explained in books and media interviews how his depression led to suicidal thoughts and on-going emotional issues (Dimeo & Møller, 2018).

Such examples are episodic, and we cannot say for certain how many sanctioned athletes have suffered such dramatic emotional turmoil. Many athletes do not wish to relate their stories in public. However, we can see from the above (e.g. depression, financial issues, and suicidal thoughts) that the consequences can be serious.

4. Method

The present study is part of a large project of organisational support programmes for high performance athletes across the world focusing on organisational support for WADA sanctioned athletes. Data collection and analysis have been conducted by replicating Hong and Coffee (2018)'s study on sport career transition organisational intervention programmes for high-performance athletes. The ethics approval has been granted by the General University Ethics Panel (GUEP) at the University of Stirling.

4.1. Data collection

Web-based data collection was conducted first to find any relevant information to answer the research question between May 2018 and September 2019. As Hong and Coffee (2018) applied, data collection was initiated by investigating the International Olympic Committee (IOC) and National Olympic Committees (NOCs) websites to identify relevant websites of sporting organisations that could be able to answer the research question. The data from Hong and Coffee (2018) confirmed that the IOC and NOCs have developed support programmes for high-performance athletes and that they have practitioners/staff members who keep in contact with athletes. In this study, the IOC and NOCs have been chosen as the focus for two main reasons. First, NOCs are responsible for Olympians, all of whom are subjected to the WADA Anti-Doping Code. Second, many are mainly amateur athletes who do not have contracts with professional teams or lucrative sponsorship deals, which makes them more vulnerable when they have limited resources and support from their NOCs.

4.2. Procedure

None of sporting organisations in this study had made public the information associated with support provision for sanctioned athletes. The first author then contacted each sporting organisation to clarify information by requesting further information via emails, video calls, and by visiting some of the organisations (IOC, the Oceania National Olympic Committee [ONOC], and Sport Singapore). Although she initiated to contact some of the organisations through networks developed through the previous study, in the majority of cases she had to start with a general enquiry from each sporting organisation's website. Often, the previous contact persons no longer worked for their organisations. She was then directed to the person in charge at the time of the data collection.

4.3. Sporting organisations

Sporting organisations, mainly NOCs, from 50 countries were initially contacted and data was collected from 24 organisations based in Australia, Belgium, Botswana, Canada, Denmark, France, Germany, Hong-Kong, Ireland, Japan, Malaysia, Netherlands, New Zealand, Norway, Portugal, Singapore, South Korea, Spain, the United Kingdom (UK), and the United States of America (USA) including the IOC and ONOC. The data from Norway and the UK has been excluded from this study. The organisation from the UK asked the research team to double check the information provided with their senior colleague but the senior colleague did not respond at all within the time period of data collection. The organisation from Norway provided the relevant websites, but the required information was not available. Therefore, the data from 22 sporting organisations will be presented in this paper.

Other sporting organisations on the list of 50 countries were contacted at least five times within the time of data collection. They were excluded from the list of the data collection because they did not respond to email requests or refused to answer the questions. However, it is worth noting that the data was collected from five out of six continents across the world.

4.4. Data Analysis

The data collected was analysed based on the research question and the theoretical framework, the Holistic Athletic Career (HAC) model (Wylleman, Reints, & De Knop, 2013), which lays out five different levels of athletes' career transitions throughout their sporting career: Athletic, Psychological, Psychosocial, Academic and Vocational, and Financial. Each response to the research question regarding transitional support was coded according to which level(s) of support were available. Responses indicating no support were coded as 'no support'. Responses that did not fit the HAC were coded under new, emergent codes. This led to three additional codes, as discussed below.

241 Table 1: Approach to doping sanctioned athletes by country and sport organisation

Country	Sporting organisation	Answer to the research question
Australia	Australian Institute of Sport (AIS)	Have limited in the contact with an athlete during their ineligible period.
	South Australian Sports Institute (SASI)	No structured support programme/intervention is available yet. Aware that anti-doping education should be taken. The Australian Anti-doping staff delivers the educational programme. Data-based has been developed so it is possible to check if an athlete completes the educational course or not.
Belgium	ADEPS (Administrative service of the Ministry of the French Community of Belgium)	In case of banned substance use, the collaboration is terminated.
	Sport Vlaanderen (Administration of the Ministry of Sport)	No structured support programme/intervention is available yet.
Botswana	Botswana National Olympic Committee	A counselling session is arranged and beyond that anti-doping workshops are arranged for elite athletes generally.

Canada	Canadian Olympic Committee	No structured support programme/intervention is available yet.
Denmark	Team Denmark	No structured support programme/intervention is available yet. They are immediately excluded from our support
France	Ministry of Sports	No structured support programme/intervention is available yet. However, some psychologists who are able to support such athletes are available.
Germany	German Olympic Sports Federation (DOSB)	No structured support programme/intervention is available yet.
Hong Kong	Sports Federation & Olympic Committee of Hong Kong, China (SF&OC)	Athletes who violate the anti-doping rules would not be able to benefit from the support programme.
IOC	IOC	Fully aware of the importance of this matter. A scheme development is in progress. Athlete 365 Career + is an open access programme. Therefore, sanctioned athletes are still able to use the services. Other additional services are up to NOCs.

Ireland	Sport Ireland Institute	No structured support programme/intervention is available as such case has not happened yet. Keen to learn support schemes from other organisations.
Japan	Japanese Olympic Committee	No structured support programme/intervention is available yet.
Malaysia	National Sports Council of Malaysia	In most cases, there is no intervention for dope-positive athletes. Most of the time, the government will have to terminate them from the programs and the same goes to their associations. All athletes who involved in doping and found guilty by the disciplinary committee had been given notice of termination, and all allowance and even sponsorship packages will be stopped once they are found guilty. However, those athletes who work with the government will not penalised legally even if they were found guilty after the doping case heard.
Netherlands	NOC*NSF (National Olympic committee & National sports federation)	NOC*NSF, together with the Dutch government, recently just launched a procedure for athletes that make costs

		in juridical procedures related to doping or match fixing. Athletes will be helped financially to undertake their procedure. Reason to do this is to give athletes a fair process.
New Zealand	High Performance Sport NZ	No structured support programme/intervention is available as such case has not happened yet.
ONOC	Papua New Guinea Olympic Committee	There has been only one case. This case made the organisation aware that depression, mental-wellbeing should be considered. Limited access to sport psychologists should be addressed in the Pacific regions.
	Fiji National Olympic Committee	
Portugal	National Olympic Committee of Portugal, through the Portuguese Olympic Athletes Commission	No structured support programme/intervention is available yet.
Singapore	Singapore Sport Institute	As long the athlete is still carded under the SSI High Performance System, he/she will receive support from SSI.
Spain	The High Performance Sports Centre of Catalonia (CAR)	No structured support programme/intervention is available yet but it provides information regarding contact with the national coaches and federations.

South Korea	The Korean Sport Olympic Committee (KSOC)	No special restrictions for such athletes. The support services provided by the KSOC are all available for athletes who are on the KSOC athlete registration system.
USA	U.S. Olympic and Paralympic Committee	No structured support programme/intervention is available yet

5. Results and Discussion

None of the sporting organisations in this study has established a structured support programme or system for supporting doping sanctioned athletes to date (Table 1). However, there were various ways in which they responded to cases of suspended athletes and all the data was able to be categorised under five different themes. Two of the themes from the HAC model were found in the data analysis: Psychological and Financial Support. Termination of Support and Development in Progress were identified from the data which have not been reported in the previous study of support programmes for high-performance athletes (c.f. Hong & Coffee, 2018). Lastly, Informative Support was also identified which considered as crucial for athletes in transitions (Pummell & Lavallee, 2018).

5.1. Termination of support

Four out of twenty organisations – ADEPS, Team Denmark, SF&OC, and National Sport Council of Malaysia – explicitly indicated that they would terminate their support when an athlete is shown to have violated anti-doping policy. With regard to this, Singapore Sport institute (SSI) mentioned that the support would still be provided if an athlete met the eligibility requirements. However, SSI has not indicated if the eligibility rules for the system include any anti-doping policy related terms.

Athletes who have limited access to resources are especially at risk of experiencing traumatic transitions, and sporting organisations are responsible for ensuring that athletes develop a balanced life and identity during their sporting careers (Anderson & Morris, 2000). The availability of support of each individual athlete is one of the critical factors in their ability to cope with career transition (Pummell & Lavalley, 2019). Although sporting organisations worldwide have responded to the need for establishing relevant athlete career transition support programmes (Hong & Coffee, 2018), their responsibilities to their athletes and support **services could** be reconsidered with a view towards including suspended athletes who are likely to face traumatic transitions with their stigma.

5.2. Psychological support

Two out of twenty organisations – Botswana National Olympic Committee and Ministry of Sports (France) – mentioned that they provide some psychological support for sanctioned athletes via counselling sessions and sport psychologists. However, it is not clear if there have been some cases that suspended athletes have taken an advantage of their support provision, which was beyond the research questions asked in this study. With regard to psychological support, the ONOC mentioned that there has been one case of a suspended athlete that made clear the need for psychological support for mental health issues such as depression. They also addressed the issue of limited access to sport psychologists in the Pacific regions. Researchers have demonstrated that athletes experience substantial psychological distress and adjustment following their career transitions (Lavalley, Nesti, Borkoles, Cockerill, & Edge, 2000) and that the severity of their distress could be judged based on alcohol consumption, drug abuse, participation in crime, and anxiety and depression following retirement (Chamalidis, 1997; Mihovilovic, 1968). Although sanctioned athletes might be able to return to their sporting career, their psychological distress would not be less than other athletes facing retirement. Stambulova (1994) proposes a way of assisting athletes in transition crisis, highlighting the need to develop a continuous psychological support system. In Hong &

Coffee's (2018) study, a number of organisational sport career transition intervention programmes provide counselling sessions as a form of psychological support. However, the support is not tailored for suspended athletes and it is not clear if they can access the psychological support services even after being sanctioned in most cases.

5.3. Financial support

National Olympic committee & National sports federation (NOC*NSF, Netherlands) has recently launched its financial support for athletes who undergo juridical procedures related to doping and match fixing. They have developed this scheme to ensure a fair process for athletes. The latest support provision differs from the financial support in general provided by other sporting organisations. Hong (2017) reported the contents of organisational sport career transition intervention programmes from 19 different countries. Four of 19 countries explicitly mentioned financial support within their support programmes: Financial planning and advising (the Canadian Sport Institute Network), Managing Finances (High Performance Sport New Zealand), Financial support for educational and vocational courses (the Korean Olympic Committee and the Korea Foundation for the Next Generation Sports Talent), and Financial support through scholarship (the Swiss Olympic). ADEPS (Belgium) also mentioned financial and administrative support but the specific financial support provided is unknown.

Stambulova (2003) indicated that athletes need to develop strategies for their financial independence and seek financial support to cope with career transitions, which has been addressed by some of the sporting organisations above and by NOC*NSF's new financial support provision. However, in the same study of Hong (2017), identified that NOC*NSF did not provide any financial related support for high performance athletes in particular for suspended athletes, but they provided 1) carer advice and career coaching; 2) educational guidance; 3) employment and training agency; 4) application and networking skills; 5) time management; 6) personal branding; 7) social media skills; topsport life skill coaching.

5.4. Informative support

The High-Performance Sports Centre of Catalonia (CAR) indicated that they provide information regarding contact with the national coaches and federations. There was no further information on what support the athletes can access once they are in touch with the national coaches and federations. The importance of informative support has been highlighted for athletes' career transitions (Pummell & Lavalley, 2019). Although the authors particularly examined the informative intervention for junior tennis players for their junior to senior career transitions by sharing senior tennis players' experience, it found that the experience of athletes who have successfully undergone similar transitions was considered helpful. This could be applied to a transitional support intervention for suspended athletes. The Botswana National Olympic Committee indicated that anti-doping workshops are arranged for elite athletes in general. The South Australian Sports Institute also mentioned that they were aware that anti-doping education should be taken, and the Australian Anti-Doping Agency staff members deliver an educational programme. Since its database has been developed, it is possible for them to check if an athlete completes the educational course or not. Although anti-doping education is crucial to protect athletes from violating anti-doping policy, an intervention to provide explicit information and guidelines for coping with life after being suspended and stigmatised is still missing.

5.5. Development in progress

The IOC pointed out that they were fully aware of the importance of this matter and there is a scheme in development. An alternative is the Athlete 365 Career + programme provided by the IOC, which is an open access online programme that sanctioned athletes are also able to access. In the case of South Korea, the KSOC provides its athlete career support programme without any restriction as long as they are on the KSOC registration system. Since elite athletes at all levels are eligible to register, they confirmed sanctioned athletes would be able

to access their support services if they are in the system. However, high-performance athletes demand tailored support services (Park et al., 2012; Petitpas & Champagne, 2000). Although the IOC provides a framework of support provision, it commented that additional services depend on each National Olympic Committee (NOC). The NOCs in this study include the Botswana National Olympic Committee, Canadian Olympic Committee, German Olympic Sports Federation, Japanese Olympic Committee, Korean Sport Olympic Committee, National Olympic Committee of Portugal, NOC*NSF, ONOC, Sports Federation & Olympic Committee of Hong Kong, U.S. Olympic and Paralympic Committee. As discussed earlier, each NOC has responded to the issue in a different way, but none have established a structured support programme/system yet for sanctioned athletes. In addition, the ONOC and Sport Ireland Institute commented that they would be keen to learn what other organisations have developed their schemes for suspended athletes. This implied that good practice of established support system/intervention could be shared to help other sporting organisations who shared the same concerns to develop a new scheme in their context.

6. Conclusion

Athletes sanctioned for anti-doping violations face involuntary retirement from sport, or at least an involuntary transition, which may have negative outcomes on their lives, health, and overall well-being. The data presented here demonstrates that with few exceptions, sport organisations have little in the way of support available for sanctioned athletes. In most cases athletes are simply cut off from all organisational support and left to cope on their own when they are likely to be vulnerable. This points to a need for better awareness of the challenges faced by athletes following a competition ban or other forced exit from sport due to an anti-doping violation. In addition to broadening our understanding of the lack of support for doping-related career transitions, the findings in this paper signpost the issue of athlete welfare and well-being related to doping and career transitions to researchers and sport stakeholders. This is especially important as the latter are often bound, either

through policies or ethics, to provide a ‘duty of care in sport’ to the athletes for which they are responsible.

Current anti-doping policies tend to focus almost exclusively on ‘clean athletes’, or those who do not face anti-doping sanctions. While these policies might make sense given the rhetoric around doping, there is little support available to athletes receiving anti-doping sanctions. In light of what research has shown regarding the high rates of inadvertent use as the root cause for a positive tests (de Hon, 2016) and the higher risks for athletes facing unplanned retirements (Hong & Coffee, 2018), this seems to be an approach with a distinct lack of empathy. However, these athletes are owed a duty of care by governing organisations, including when facing career transitions such as retirement or enforced breaks. As such, it seems appropriate to recommend that anti-doping organisations and sport governing bodies re-evaluate their current support structures for all athletes and make adjustments that would include provision for sanctioned athletes.

This study does have limitations. Although it was not the aim of current study, the authors appreciate that empirical evidences on athletes’ perspectives on such support have not been provided in this study. Future research might also consider evaluating the specific needs of such athletes and their perceived support in order to design transitional interventions to address these needs. Although a large number of sporting organisations, NOCs in particular, have been investigated, other sporting organisations not included in this study (e.g. National Anti-Doping Organisations) may have developed their own support systems. It would be worth investigating support system and available resources from other relevant organisations such as individual sport federations, as well as professional and non-Olympic teams, clubs, and leagues. Once again, the data presented in this paper should be used as a starting point to examine such support rather than as a comprehensive account of support available.

Conflict of interest

The authors have no conflict of interest

References

- Anderson, D., & Morris, T. (2000). Athlete lifestyle programs. In D. Lavalley & P. Wylleman (Eds.), *Career transitions in sport: International perspectives* (pp. 59–80). Morgantown, WV: Fitness Information Technology.
- Baum, A. L. (2005). Suicide in Athletes: A Review and Commentary. *Clinics in Sports Medicine*, 24(4), 853-869.
- Chamalidis, P. (1995). Career transitions of male champions. In R. Vanfraechem-Raway & Y. Vanden Auweele (Eds.), *Proceedings of the 9th European Congress of Sport Psychology* (pp. 841-848). Brussels: European Federation of Sports Psychology.
- Chambers, D. (2010). *Race Against Me: My Story*. Bodmin: Libros.
- Coomber, R. (2014). How social fear of drugs in the non-sporting world creates a framework for doping policy in the sporting world. *International Journal of Sport Policy and Politics*, 6(2), 171-193.
- de Hon, O. M. (2016). *Striking the right balance: Effectiveness of anti-doping policies* (Published doctoral thesis). Utrecht University.
- Dimeo, P., & Møller, V. (2018). *The anti-doping crisis in sport: causes, consequences, solutions*. Oxon: Routledge.
- Hamilton, T. & Coyle, D. (2012). *The Secret Race: Inside the Hidden World of the Tour de France, Doping, Cover-ups, and Winning at all Costs*. New York: Bantam
- Hong, H. J. (2017). *A psycho-educational curriculum for sport career transition practitioners: development and evaluation* (Unpublished doctoral thesis). University of Stirling, Stirling, Scotland, the United Kingdom.
- Hong, H. J., & Coffee, P. (2018). A psycho-educational curriculum for sport career transition practitioners: development and evaluation. *European Sport Management Quarterly*, 18(3), 287–306.

- 417 Jones, M. (2011). *On the Right Track: From Olympic Downfall to Finding Forgiveness and the*
418 *Strength to Overcome and Succeed*. New York: Howard
- 419 Kerr, G., & Dacyshyn, A. (2000). The retirement experiences of elite, female gymnasts. *Journal of*
420 *applied sport psychology*, 12(2), 115-133.
- 421 Lavallee, D., Gorely, T., Lavallee, R., & Wylleman, P. (2001). Career development programs for
422 athletes. In W. Patton & M. McMahon (Eds.), *Career development programs: Preparation*
423 *for life long career decision making* (pp. 125–133). Camberwell: Australian Council for
424 Educational Research Press.
- 425 Lavallee, D., Grove, J. R., & Gordon, S. (1997). The causes of career termination from sport and their
426 relationship to post-retirement adjustment among elite-amateur athletes in Australia.
427 *Australian Psychologist*, 32, 131-135.
- 428 Lavallee, D., Nesti, M., Borkoles, E., Cockerill, I., & Edge, A. (2000). Intervention strategies for
429 athletes in transition. In D. Lavallee & P. Wylleman (Eds.), *Career transitions in sport:*
430 *International perspectives* (pp. 111-130). Morgantown, WV: Fitness Information Technology.
- 431 Mihovilovic, M. A. (1968). The status of former sportsmen. *International Review for the Sociology of*
432 *Sport*, 3(1), 73-96.
- 433 Millar, D. (2011). *Racing Through the Dark: The Fall and Rise of David Millar*. London: Hachette
- 434 Modahl, D. (1995). *The Diane Modahl Story: Going the Distance, The Heartbreaking Truth Behind*
435 *the Headlines*. London: Hodder & Stoughton.
- 436 Park, S., Lavallee, D., & Tod, D. (2012). The development of an athlete career transition programme:
437 A case study. *QMIP Bulletin*, 13, 11–19.
- 438 Petitpas, A., & Champagne, D. (2000). Practical considerations in implementing sport career
439 transition programs. In D. Lavallee & P. Wylleman (Eds.), *Career transitions in sport:*
440 *International perspective* (pp. 81–93). Morgantown, WV: Fitness Information Technology.

441 Pummell, E. K. L., & Lavallee, D. (2019). Preparing UK tennis academy players for the junior-to-
 442 senior transition: Development, implementation, and evaluation of an intervention program.
 443 *Psychology of Sport and Exercise*, 40, 156–164.

444 Sinclair, D. A., & Hackfort, D. (2000). The role of sport organization in the career transition process.
 445 In D. Lavallee & P. Wylleman (Eds.), *Career transitions in sport: International perspectives*
 446 (pp. 131–142). Morgantown, WV: Fitness Information Technology.

447 Stambulova, N. B. (1994). Developmental sports career investigations in Russia: A post-perestroika
 448 analysis. *The Sport Psychologist*, 8(3), 221–237.

449 Stambulova, N. B. (2003). Symptoms of a crisis-transition: A grounded theory study. In N. Hassmen
 450 (Ed.). *Svensk idrottspsykologisk Förening* (pp. 97–109). Örebro, Sweden: Örebro University
 451 Press.

452 Taylor, J., Ogilvie, B., & Lavallee, D. (2005). Career transition among elite athletes: Is there life after
 453 sports? In J. M. Williams (Ed.), *Applied sport psychology: Personal growth to peak*
 454 *performance* (pp. 595–615). Columbus, OH: McGraw-Hill.

455 World Anti-Doping Agency. (2018). 2017 Anti-Doping Testing Figures Report. WADA. Retrieved
 456 from <https://www.wada-ama.org/en/resources/laboratories/anti-doping-testing-figures-report>

457 World Anti-Doping Agency. (2019a). Who we are. WADA. Retrieved from [wada-ama.org/en/who-](https://www.wada-ama.org/en/who-we-are)
 458 [we-are](https://www.wada-ama.org/en/who-we-are)

459 World Anti-Doping Agency. (2019b). World Anti-Doping Code 2015 with 2019 amendments. WADA.
 460 Retrieved from [https://www.wada-ama.org/sites/default/files/resources/files/wada_anti-](https://www.wada-ama.org/sites/default/files/resources/files/wada_anti-doping_code_2019_english_final_revised_v1_linked.pdf)
 461 [doping_code_2019_english_final_revised_v1_linked.pdf](https://www.wada-ama.org/sites/default/files/resources/files/wada_anti-doping_code_2019_english_final_revised_v1_linked.pdf)

462 Wylleman, P., Lavallee, D., & Alfermann, D. (1999). *Transitions in the career of competitive athletes*.
 463 Lund: FEPSAC.

464 Wylleman, P., Reints, A., & De Knop, P. (2013). Athletes' careers in Belgium. A holistic perspective
465 to understand and alleviate challenges occurring throughout the athletic and post- athletic
466 career. In N. Stambulova, & T. Ryba (Eds.), *Athletes' careers across cultures* (pp. 31–42).
467 New York NY: Routledge—ISSP.