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Citation:

Patterson, L (2021) Considering the connections between doping and transitions out of sport: Desperate times and desperate measures? In: Athlete Transitions into Retirement: Experiences in Elite Sport and Options for Effective Support. Routledge. ISBN 9780367432867 DOI: <https://doi.org/10.4324/9781003020189>

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Document Version:

Book Section (Accepted Version)

This is an Accepted Manuscript of a book chapter published by Routledge in Athlete Transitions into Retirement: Experiences in Elite Sport and Options for Effective Support on 13 August 2021, available online: <http://www.routledge.com/9780367432867>

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Chapter 4: *Considering the connections between doping and transitions out of sport: Desperate times and desperate measures?*

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Abstract

Doping refers to engaging in behaviour that constitutes one or more of the anti-doping rule violations outlined in the World Anti-Doping Code (World Anti-Doping Agency, 2015), including possession, administration, trafficking of prohibited substances or methods, or complicity in (i.e., encouraging, aiding or covering up) any of these (WADA, 2020). Despite representing a wide range of behaviours, the term doping is typically more narrowly associated with the use of prohibited substances or methods. This is reflected in the focus of most programs implemented by sporting and anti-doping bodies, where the focus is on detection-deterrence activities such as urine/blood tests with resulting sanctions for testing 'positive'. However, to complement such efforts, preventive activities are also undertaken to address doping behaviours, including education and awareness campaigns. In order to effectively intervene to prevent doping, it is necessary to understand the risk and protective factors of doping behaviours. Evidence suggests that there are many and varied individual and environmental factors that may come together in complex interactions to underpin doping-related decisions (see Backhouse et al. 2016 and Ntoumanis et al. 2014 for reviews). Among the myriad factors, career transitions have been highlighted as a critical moment of vulnerability. Indeed, there is growing evidence that individuals may be at increased risk of doping if they are preparing to transition out of sport because they are likely experiencing declines in performance, difficulties keeping pace with younger counterparts/competitors, and/or uncertainty about their future (e.g., contract/sponsorship renewal); the latter of which can be confounded with financial and identity-related challenges (Kegalaaers et al., 2018; Kirby et al., 2011; Whitaker et al., 2017). Thus, upcoming athlete retirement may be a desperate time that leads to desperate measures. Unfortunately, doping can also be a desperate measure that leads to a desperate time – including forced retirement – among those athletes who 'doped' for other reasons. Some athletes are unable to return to sport following engagement in doping behaviours due to the physical, psychological, social and emotional consequences they experience, not least a lack of organisational support and intense scrutiny. Within this chapter, research connecting doping behaviours and career transitions will be discussed in greater depth and recommendations for support for athletes are proposed to decrease the likelihood of doping, in the first instance, and increase the likelihood that individuals who do dope may remain in sport and avoid career termination.

The definition and prevalence of doping

Doping refers to engaging in one or more of eleven anti-doping rule violations (ADRVs) outlined in the World Anti-Doping Code ('the Code', World Anti-Doping Agency [WADA], 2020); these include possession, administration, and trafficking of prohibited substances or methods, as well as complicity in any of these activities, prohibited association with anyone who has been found to have committed an ADRV, and acts to discourage or retaliate against anyone who reports doping-related information to authorities. Amongst the violations, the most commonly seen is *presence* of a prohibited substance or its metabolites or markers in an athlete's blood or urine sample, which is established via testing (often referred to as doping control). According to WADA's (2019) most recently published annual testing statistics, there were 1,459 (53%) confirmed analytical ADRVs (i.e., presence) among the samples collected in 2017. By comparison, a total of 345 non-analytical cases were recorded. Demonstrating the widespread nature of doping, the analytical ADRVs came from 89 sports/disciplines and 111 nationalities, and the non-analytical ADRVs were from 317 athletes of 47 nationalities from 41 sports.

Testing statistics likely show only a fraction of the true number of athletes doping. This is due to the limited number of athletes who are tested compared to the total number of athletes participating across all sports, nations and levels of competition, as well as the limited period of time that many substances remain in the body and can be detected by tests and the fact that the science of testing is usually lagging behind the science of pharmacological advances (i.e., the creation of new substances and methods) (de Hon et al., 2015). Thus, a growing body of research indicates that doping may be more prevalent than indicated by testing statistics. As an example, de Hon et al. (2015) reviewed different methods of estimating prevalence, such as self-report and Randomised Response Technique questionnaires, and concluded that rates of intentional doping among elite adult athletes are between 14% and 39%. Of course, much like testing, some of the alternative methods of measuring prevalence that were included in this review also have limitations. For instance, self-report research is vulnerable to social desirability and/or misinterpretation of questions (de Hon et al., 2015).

Whether utilising prevalence rates from testing statistics, other forms of measurement, or even anecdotal accounts, there is convincing evidence that doping

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happens. And, since doping is against the rules of sport, it should be addressed. What is more, the harmful consequences that an individual may experience due to doping, including legal, financial, social, emotional and self-imposed sanctions, mean that doping *must* be addressed. The experienced consequences of individuals who have engaged in doping behaviours are covered later in this chapter, but, in short, they likely include being banned from sport, loss of contract/sponsorship, condemnation, and negative physical and/or mental health effects. Of particular importance to this chapter, doping can act as a catalyst for athlete retirement. Before this is considered in greater depth, let us consider what might lead an athlete to dope in the first place.

Factors associated with doping behaviours

In order to devise effective strategies to address doping, social scientists have conducted research to better understand the risk and protective factors that may influence athlete doping behaviours (see Backhouse et al., 2016 for a review). At an *individual* level, influential factors include (lack of) knowledge of anti-doping rules and regulations (e.g., Johnson et al., 2013), a belief that doping is (un)acceptable (e.g., Woolf & Mazanov, 2017), and a perception that doping is (not) necessary to cope with the demands of the sport (Didymus & Backhouse, 2020) or to achieve one's goals (e.g., Teetzel & Weaving, 2014). Notably, the importance placed on achieving sporting goals in relation to other goals outside of sport can also play a part (e.g., Lentillon-Kaestner & Carstairs, 2010). Furthermore, individuals who defined success in self-referenced terms, i.e., focussing on their own performance as opposed to outcomes such as winning, are at a lesser risk of doping (Erickson et al., 2017).

Building on this notion, doping is more likely if winning is emphasised by people around the athlete, and if the structure of the sport (e.g., funding) reinforces this emphasis (e.g., Kirby et al., 2011). Indeed, important *environmental* influences include the climate or culture within which individuals reside. The country in which an individual competes (e.g., Overbye, 2016), the sport they are involved with (e.g., Chan et al., 2014), and the level of competition they participate at (e.g., Weaving & Teetzel, 2014) can all increase or decrease the likelihood that an athlete might dope. From a social perspective, there is strong evidence that individuals who are close to the athlete play a significant role in

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increasing or decreasing risk of doping (e.g., Chan et al., 2014). This includes fellow athletes, coaches, parents, family members, and friends. These people may influence an athlete directly, through explicit instruction or pressure (e.g., Kegelaers et al., 2018), as well as indirectly, if the athlete perceives that the significant other(s) would accept or reject doping behaviours (e.g., MacNamara & Collins, 2014).

Significantly, doping behaviours appear to often be dependent upon a complex interaction of individual and environmental factors, in that doping happens if an athlete finds themselves feeling a particular way (e.g., low in confidence) in a particular environment (e.g., high external pressure). Evidence shows that specific situations individuals find themselves in are pivotal. In particular, doping is more likely when an athlete experiences injury (e.g., Didymus & Backhouse, 2020; Whitaker et al., 2017) and/or performance dips (e.g., Mazanov & Huybers, 2010). In addition, doping behaviours can be triggered by transitions between different training environments (e.g., Kirby et al., 2011) or from one stage of development to another (or level of competition to the next) (e.g., Lentillon-Kaestner & Carstairs, 2010). Providing the rationale for this chapter, retirement from sport has been highlighted as a critical moment of athlete vulnerability to doping.

Doping to avoid retirement from sport

Previous research has indicated that individuals may be at an increased risk of doping if they are preparing to transition out of sport. Maquirriain and Baglione (2016) associated the risk of doping during later stages of an athlete's career with age, when they examined doping offences (N=47) committed in tennis between 2003 and 2014. They found that the average age of players who had committed offences was 26.40 (± 3.48) years, and they commented that most violations are therefore after the age at which a tennis player 'peaks' (at approx. 24 years old). Consequently, they concluded that likelihood of doping is related to players being in the "decline phase" of their careers and referred to this as an "end-game effect" (p. 1061). Further support for the connection between age/stage of career and doping is provided by Piffaretti (2011), who reported a similar average age amongst doping-sanctioned athletes (27.6 ± 3.95 years), with three out of 11 interviewees being over 30 years of age. Likewise, Aibel and Ohi (2014)

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discovered that 45% of cyclists sanctioned between 2005 and 2012 were 30-35 years old and 13% were over 35 years old. Given that cyclists in these age groups made up only 21% and 4% of the total rider population in the top two divisions of cycling in the world (on which their analysis was based), this equates to 24% and 9% over-representation, respectively.

Aubel and Ohl (2014) suggested that elite cyclists' vulnerability to doping might, in part, be explained by their 'precarious' working conditions, where cyclists live with substantial amounts of uncertainty due to the short length of contracts and careers. Supporting their suggestion, they reported the average career length of a cyclist was 4.7 years (3-7 years range for 50% of the rider population). They concluded that cyclists might "need drugs in order to keep their jobs" (p. 1101) and "the hope of extending careers might explain why [older riders] are more readily than younger riders to cross the line" (p. 1098). In a rare study involving "admitted dopers" (N=5), Kirby et al. (2011) also established that doping occurred later in athletes' careers and this was driven by a desire to stay in the sport as long as possible. Several interviewees reported being outperformed and suggested their doping was initiated to "keep up, rather than surpass" (Kirby et al., 2011, p. 212). Athlete vulnerability was often underpinned by, or related to, a series of poor performances and/or coming back from injury or time off. Aligned with Aubel and Ohl's suggestion that doping risk may be related to precarious working conditions, some admitted dopers also suggested that their behaviours were, to some extent, caused by their wages being connected to their performances and wanting to establish a stable financial situation to support their family (Kirby et al., 2011). Yet, this was not the case for everyone; other admitted dopers identified the perceived potential financial damage (i.e., losing one's income in the long term due to not being as employable after serving a ban) as a deterrent to doping (Kirby et al., 2011), and the reality of this is discussed in the next section.

Retirement from sport due to doping

In addition to being a risk factor for doping, as briefly mentioned earlier, there is some indication that retirement may also be a consequence of doping. In one of very few

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studies that explored this explicitly, Maquirriain and Baglione (2016) concluded that a ban from sport may accelerate retirement. They found that 12% of (N=46) players who committed doping offences (N=47) in tennis between 2003 and 2014 did not return to professional tennis. In addition, average time to retirement after a doping sanction was under three years (35.7 ± 31.03 months). In terms of understanding why the players retired, the authors presented data to show that players were unable to achieve the same levels of performance as before their suspension. Specifically, only 27.65% of players reached their highest ranking in their career after being sanctioned with an ADRV (Maquirriain & Baglione, 2016). This is interesting, as the average length of sanction was relatively short (11.13 ± 9.20 months), which means that the players (on average) did not spend as much time away from their sport as they might if were sanctioned post 2015, when the 'standard' doping sanction was increased from two to four years. If this research were to be replicated across more recent sanctions, it would be interesting to see if the percentage of players not returning increases (above 12%). The connection between sanction length and likelihood of continuing/retiring is something that has been suggested previously (Hong et al., 2020), but is yet to be thoroughly investigated. In Maquirriain and Baglione's (2016) study specifically, aside from sanction length, the players' capacity to attain previous performance levels (and general decision to not return to sport) could be connected to their age, because those receiving sanctions were typically older, and beyond their 'peak' for tennis, as discussed previously.

While age, performance capacity and length of time away from sport are sensible explanations for athletes retiring after being sanctioned for doping, the response athletes receive from the sporting community likely has an important role to play. In fact, it has been proposed that the combination of social, psychological and financial consequences brought about by doping-related bans from sport make them the component of anti-doping policy that has the greatest impact on athlete well-being (Elbe & Overbye, 2015) in general, not just on decisions to retire. With regards to finance, even before engaging in banned practices, individuals interviewed by Kirby et al (2011) had acknowledged that if they were not 'accepted' back into the sport, they would not be an appealing prospect to an employer or sponsor. In fact, admitted dopers discussed their fear of losing income as a deterrent to doping. Ultimately, some of these fears were realised, as well as several

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of the interviewees experiencing a negative public reaction (i.e., the social and psychological consequences).

These findings are corroborated by Georgiadis and Papazoglou (2014), who interviewed five elite Greek athletes who had tested positive during the previous year. They concluded that doping led to significant career disruption; the athletes described being “ditched” by sports organisations (e.g., losing income, having to leave athlete accommodation) and media coverage causing their achievements to be “annihilated in the eyes of the people” (p. 66). Combined with the sanction already requiring them to take several years out of sport, these experiences often left athletes with no choice but to retire. One athlete illustrates:

In the morning, I woke up just to find myself trembling with fear; not so much due to what I would deal with in sports, but with what I would face later in the future. What would I do from that point on? Back in the old days, it was different. I was certain that when I would stop competing there would be some open doors waiting. But after that [the positive doping sample], I only see closed doors everywhere (Athlete A; Georgiadis & Papazoglou, 2014, p. 68).

The athletes recounted an emotional rollercoaster, filled with uncertainty and condemnation. Georgiadis and Papazoglou (2014) likened the psychological consequences of doping experienced, including the loss of athletic identity, to those associated with career termination. Furthermore, the emotions the athletes described were compared to those reported by athletes whose careers have been *involuntarily* terminated due to injury, e.g., shock, anger. However, in addition, the athletes in this study – who each claimed they had not doped intentionally – also had to process feelings of fear and shame that came from the social stigma and thoughts of losing family and friends.

Dimeo and Møller (2018) dedicated an entire chapter of their book, *The Anti-Doping Crisis in Sport. Causes, Consequences, Solutions*, to discussing the social stigma attached to doping. They presented a number of example cases to illustrate, what they termed, the devastating consequences that athletes who have been associated with doping have experienced. These included isolation/ostracism (i.e., being shunned by fans, teammates) and being branded with an association with doping forever (e.g.,

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increased scrutiny, public humiliation and/or criticism by the media). Dimeo and Møller (2018) also presented evidence of serious mental health issues among athletes who have doped, such as suicide/suicide attempts and depression. Of course, they acknowledge that some of the athletes found to have committed doping offences could have been experiencing mental health issues prior to the violation; in fact, they suggest that doping behaviour might itself have been indicative of the need for support. Nonetheless, their insights, which were based on collated media coverage and athlete autobiographies, corroborated interview research conducted with admitted dopers (Kirby et al ., 2011) and sanctioned athletes (Georgiadis & Papazoglou, 2014; Piffaretti, 2011). Taken together, existing evidence signals the importance of considering the impact that a sanction can have on an athlete's ability to return to sport, as well as their capacity to continue living, after doping.

Support available for individuals sanctioned for doping

The risk of an athlete retiring from sport due to a doping sanction could perhaps be minimised if appropriate support were in place. Backhouse (2015) proposed that timely interventions are necessary to ensure that substance (or method) use does not escalate, in the first instance, followed by longer term support with processing the consequences. Athletes interviewed by Georgiadis and Papazoglou (2014) identified the need for counselling to cope with the entire experience, from the point of testing positive to where they were at the time of being interviewed and beyond. Similar calls for counselling were made by Dimeo and Møller (2018), who questioned the anti-doping system for predominantly focussing upon the act of doping rather than the person engaging in doping behaviours. Specifically, they suggested that very little consideration is given to how challenging the situation must be that athletes find themselves in prior to and after doping. They proposed that a more 'person-centred' lens must be adopted, where the 'suffering' of individuals is acknowledged and people are afforded empathy, or at least respect, for the fact that they have lost their job, their income and face real uncertainty about their future employment (Dimeo & Møller, 2018).

This sentiment echoed those of Piffaretti (2011), who signalled an urgent need for primary, secondary and tertiary intervention to be introduced. Based on interviews with

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sanctioned athletes (N=11, all male), he identified three phases that most athletes progress through following notification of their violation. In the 'acute phase' (first 2-3 weeks), most athletes found it challenging to come to terms with what had happened, reporting distress, anger and denial. This was typically followed by a 'realisation phase', as athletes confronted the situation. Here, it was common for athletes to experience great sadness, disappointment and regret, at the loss of career opportunities and the impact their circumstances were having on others (e.g., family). Despite this, athletes were able to begin to manage their emotions to some degree. In the third stage, which Piffaretti (2011) referred to as 'acceptance', many athletes experienced progressively less emotional upset; most athletes were even able to 're-organise' themselves personally and/or professionally to create a 'new life' (e.g., having a baby, finding a new job/career). This type of growth was one of a number of positives that the majority of the athletes (9/11) were able to identify. Other positives seemed to revolve around gaining perspective, such as being less concerned with what people think, money not being as important as it had been previously, and a higher value being placed on relationships with those close to them. However, it is important to note it could take 18 months for athletes to reach this point, and some athletes had still not achieved this level of 'recovery' from the sanction by the time they were interviewed. Notably, how athletes experienced their sanction and their recovery from it, Piffaretti proposed, seemed to be related to their interpretation of the event, e.g., accepting it as the right consequence for their own actions versus seeing it as unfair and exaggerated because the doping was unintentional.

The athletes interviewed by Piffaretti (2011) highlighted a lack of support from 'official structures'. This is something that Dimeo and Møller (2018) have more recently commented on, positing that little, if any, support appears to be available for individuals associated with doping. Providing evidence of this, Hong and colleagues (2020) investigated the support provided across organisations, using a combination of web searches and a survey. Fifty organisations were contacted, primarily National Olympic Committees (NOCs), and 22 (44%) provided information across five (out of six) continents. Most organisations reported that they did not currently have a support program in place for athletes associated with doping. Across the support that was provided, Hong et al. (2020) attempted to identify the components of the Holistic Athletic

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Career (HAC) Model (Wylleman, Reints & Deknop, 2013, cited in Hong et al., 2020); only psychological (i.e., counselling, access to a sport psychologist) and financial support (i.e., funding to pay for judicial processes) were present, and these types of support were mentioned by only two and one organisation, respectively. Outside of the components of HAC, some 'informative support' was offered, which comprised anti-doping education being accessible; but limited details of exact content was provided by survey respondents. Overall, the authors concluded that organisations did not provide support for athletes related to coping with being suspended from sport for doping, including the myriad consequences they would likely experience (Hong et al., 2020).

Though there is currently limited support specific to helping athletes to rehabilitate from doping and, in turn, avoid retirement from sport, it was positive to see that some organisations expressed an interest in learning what other organisations provide. Hong et al. (2020) suggested this was a sign that organisations might be willing to learn from others' best practice to develop a programme of their own in the future. In addition, the International Olympic Committee (IOC) reported having a scheme in development, as they 'recognise the importance of this matter' (Hong et al., 2020). In this vein, it must not be forgotten that a number of programs are available to aid career transitions generally, such as the IOC Athlete Career Programme (Athlete365 Career+) and the International Paralympic Committee (IPC) Adecco Career Programme. Beyond this, career support is also provided by a number of sports institutes (e.g., English Institute of Sport's Performance Lifestyle Advisors and 'More2Me' campaign) and players' associations (e.g., Professional Cricketers' Association Personal Development and Welfare Programme).

Implications for practice

Piffaretti (2011) suggested that sanctioned athletes should be offered 'systemic follow-up' to aid their rehabilitation, comprising psychological-, physical- and occupationally-oriented provision. Addressing some of the main consequences discussed earlier in this chapter, psychological support from a certified professional could help athletes process the sanction, including understanding what may have contributed towards their doping behaviour and what will happen in the coming months (e.g.,

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procedures/legal advice, changes to social environment, media coverage) (Piffaretti, 2011). Under this umbrella, Piffaretti (2011) proposed that athletes could be put in touch with others who have experienced a similar situation, who might be able to empathise with the athlete's circumstances. Physical provision related primarily to enabling athletes to continue training, in order to minimise any challenges they would face when returning to competitive sport (e.g., lack of fitness/practice) (Piffaretti, 2011). In addition, helping athletes to maintain some level of normalcy with their training might mitigate some of the negative psychological consequences if it provides structure and purpose (Piffaretti, 2011). To accommodate this type of support, sport science support and coaching staff would be required – but, it is important that their involvement is permitted by WADA, otherwise these individuals may be liable to the Prohibited Association violation. Lastly, occupational support would help athletes, who might have limited experience with employment beyond sport, to identify appropriate opportunities and plan for their future (Piffaretti, 2011). This type of support might go some way to addressing the financial concerns that sanctioned athletes report experiencing (Piffaretti, 2011).

Of course, prevention is better than cure! Therefore, effort must be invested into supporting athletes who are vulnerable to doping due to upcoming retirement, *before* they take the decision to engage in doping behaviours. Here, adopting the three-pronged approach of psychological, physical and occupational support suggested by Piffaretti (2011) for rehabilitation would likely be preventative, addressing some of the main risk and protective factors. From a physical perspective, it is important that athletes have confidence in their ability to perform and/or achieve their goals (Erickson et al., 2015; Ntoumanis et al., 2014). Therefore, athletes can benefit from access to facilities and trained staff (e.g., coaches, sport scientists, medical professionals) that can aid them with their development, including providing athletes with individualised nutritional plans and strength training programmes (Whitaker & Backhouse, 2016).

In addition to providing this type of practical support, staff working with athletes can aid doping prevention efforts by establishing social norms that make it clear that doping is not accepted. For example, research into protective factors for doping has shown that coaches can have a positive influence by instilling participants with a sense of right and wrong (Erickson et al., 2015; Ntoumanis et al., 2014). This is not to say that

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staff working with athletes need to adopt a controlling or threatening stance. Rather, they should be clear about the values they hold and wish to see in others. Such values can be introduced formally through contracts or codes of conduct and should be regularly reinforced through verbal and non-verbal communications. However, an issue to be overcome in this regard is that many individuals in the athlete support network, such as coaches, do not feel well-prepared to engage in anti-doping efforts (Patterson & Backhouse, 2018; Patterson, Backhouse & Lara-Bercial, 2019). Therefore, more must be done to support the support network through appropriate provision of learning opportunities.

While on the topic of staff learning opportunities, those working with athletes could be provided with education around recognising moments of vulnerability including career termination explicitly, but also other critical incidents that might be associated with career termination such as injury, (de-)selection, contract/funding renewal, performance dips and difficulty achieving a goal or coping with demands. In order for staff to feel confident taking action once vulnerabilities are recognised, they could be trained in having difficult conversations around performance development and age/stage of development, with transparency and sensitivity. Understandably, some practitioners may still feel uncomfortable working with athletes in relation to matters that might be emotionally charged or sensitive. Therefore, in an ideal world, professional psychological support for athletes should also be available. Services such as counselling are especially important for those who experience challenges throughout their athletic career. While it is difficult for some sporting contexts to implement this level of support due to restricted resource, there may be avenues that can be explored with charities or athlete foundations/associations.

The suggestion for psychological support aligns well with recent developments in the United Kingdom, where there are plans to introduce new Professional Standards for Personal Development Practitioners¹, whose role will include supporting athletes throughout transitions, including beyond their sporting career. This type of service, which also encapsulates occupational support, can aid doping prevention efforts as research

¹ <https://www.eis2win.co.uk/article/new-professional-standards-for-personal-development-practitioners/>

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into protective factors for doping has shown that some protection from engagement in doping behaviours is provided by athletes developing life skills (i.e., resilience, coping, self-control/regulation) and an identity beyond sport (Erickson et al., 2015; Ntoumanis et al., 2014). However, such development should be intentional, rather than assumed to happen naturally as a consequence of other activities. Furthermore, activities that aid athletes in developing their life skills and exploring the employment opportunities that may be available to them beyond their sporting careers will require organisational support, through structures and funding systems, within national federations and other sporting organisations.

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