



## Athletes' perceptions of performance enhancing substance user and non-user prototypes

L. Whitaker<sup>a,\*</sup>, J. Long<sup>a</sup>, A. Petróczy<sup>b</sup>, S.H. Backhouse<sup>a</sup>

<sup>a</sup> Carnegie Research Institute, Leeds Metropolitan University, Leeds, UK

<sup>b</sup> School of Life Sciences, Kingston University, Kingston Upon Thames, UK

### ARTICLE INFO

#### Article history:

Received 13 October 2011

Received in revised form 22 March 2012

Accepted 27 March 2012

#### Keywords:

Doping  
possible selves  
athlete characteristics  
anti-doping education  
prevention ;sport

### ABSTRACT

**Aim:** This study explored athletes' perceived prototypes of performance enhancing substance (PES) users and non-users to facilitate a broader understanding of the risk/protective factors for doping use.

**Method:** A cross-sectional study was conducted involving n=147 current/ex-competitive athletes. Following ethical approval, athletes (mean age = 25.51, SD = 8.47 years; 40.8% male) from 30 sports completed an online open-ended questionnaire. Participants were required to describe their perceived positive and negative images of PES users and non-users. Inductive content analysis established the main themes within the data.

**Results:** The perceived prototypes of PES users and non-users were most commonly related to: motivation to succeed, confidence, commitment, temperament, fear of competition, rule abiding, reliability and sociability. Characteristically, PES users were seen as motivated, confident, unreliable and rule breakers, whereas non-users were perceived to be role models, reliable and risk averse.

**Conclusion:** The results suggest athletes' perceptions of PES user characteristics may not be solely negative. Athletes who perceive PES user prototypes favourably may be vulnerable to doping via motivation that is elicited from future possible selves. Therefore, athletes' perceptions of PES user and non-user prototypes may act as risk/protective factors for doping.

**Implications:** Tailored anti-doping should target athletes' prototype perceptions to enhance the prevention of doping in sport.

© 2012 Elsevier Ltd. All rights reserved.

Despite the efforts of the World Anti-Doping Agency (WADA), the International Olympic Committee and sports federations, doping continues today with athletes employing more sophisticated doping regimes to evade the testers (Fainaru-Wada & Williams, 2006). Owing to the clandestine nature of doping, the potential health risks for athletes, particularly long-term, are largely unknown (Kayser & Smith, 2008). Regardless of the much improved detection methods and significant increase in the number of doping tests conducted over the past seven years, the proportion of cases producing adverse analytical findings has remained around 2% (WADA, 2009a). Yet, an investigation based on the Athlete Biological Passport found the overall prevalence of blood doping among Track and Field athletes to be estimated at 14%, with some disciplines reaching as high as 48% (Sottas, Robinson, Fischetto, Dollé, Alonso, & Saugy, 2011). These findings suggest that current detection methods are ineffective in deterring athletes from

using performance enhancing substances (PES). Furthermore, current anti-doping policy does not serve health protection as it merely attempts to catch those who are using PES rather than prevent use. Thus, the figures indicate that a high proportion of athletes are at risk of suffering from potential doping-related health complications in the future (Kayser, Mauron, & Miah, 2007). Nevertheless, in recognition of the limitations of detection-based deterrence, the WADA has placed more emphasis on prevention-based deterrence (Fahey, 2009).

Prevention-based approaches aim to stop the use of PES before it occurs. Such an approach is more suited to efforts aimed at preventing potential health consequences associated with doping. However, to be effective, prevention needs to be tailored and monitored. As a result, we need to identify which athletes are most vulnerable to doping and what makes these athletes more vulnerable than others. Research has highlighted the need to understand the underlying psychosocial mechanisms of PES use, including the decision making processes athletes go through when determining performance enhancement methods (Petróczy & Aidman, 2008). Consequently, the prototype/willingness model (Gibbons, Gerrard, Blanton, & Russell, 1998; Gibbons, Gerrard, & Lane, 2003)

\* Corresponding author. Carnegie Research Institute, Leeds Metropolitan University, Headingley Campus, Leeds, LS6 3QS, UK, Tel.: +44 0 113 812 4684.

E-mail address: [l.a.whitaker@leedsmet.ac.uk](mailto:l.a.whitaker@leedsmet.ac.uk) (L. Whitaker).

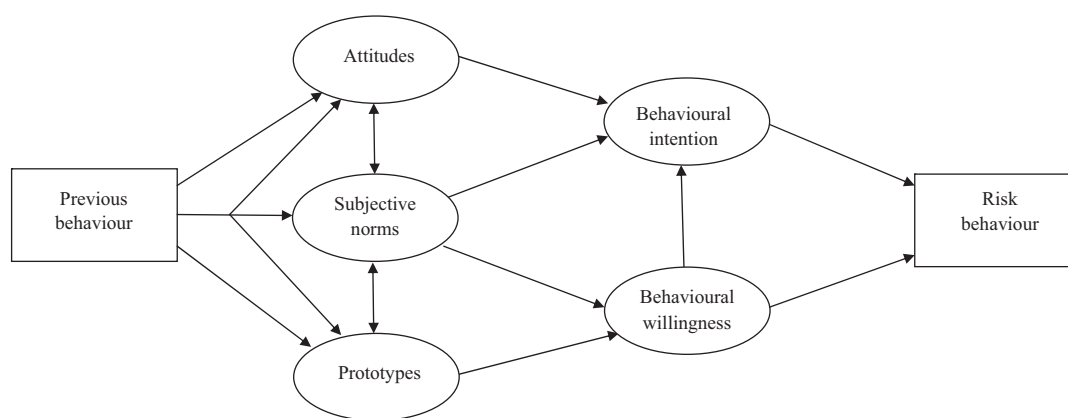


Figure 1. Prototype Willingness Model (Gibbons et al., 1998; Gibbons et al., 2003).

could be effectively applied to gain an understanding of athletes' decisions to use PES and help to recognise the type of athletes who are most vulnerable to doping. Given the dearth of research exists on what characterises a PES user (Backhouse, McKenna, Robinson, & Atkin, 2007), it is necessary to contrast athletes' perceptions of PES users and non-users in order to determine which characteristics could act as risk/protective factors for doping use. The present study assesses athletes' perceptions of what characterises PES users and non-users in an attempt to inform efforts aimed at building doping behaviour models. Focusing on athletes' prototype perceptions offers a new approach to investigating the driving forces behind doping. In turn, targeted anti-doping interventions aimed at preventing doping may be enhanced and the number of athletes at risk of potential health problems in the future reduced.

Previous research into PES use in sport has focused on attitudes towards and reasons for using PES rather than on the characteristics that represent PES users. Counteracting this trend, Burnett and Kleiman (1994) investigated whether differences exist between the psychosocial characteristics of adolescent anabolic androgenic steroid (AAS) users and non-users. By interviewing AAS users and non-users, they found that although AAS users appeared more forceful and impulsive but less cooperative than non-athletes, they were relatively similar to non-AAS using adolescent athletes. Similarly, Wichstrom and Pedersen (2001) found no difference in sport or appearance related characteristics of AAS users compared with non-users. In contrast, Chantal, Soubranne and Brunel (2009) found AAS users were seen to be less self-determined, have fewer concerns for opponents and display less commitment to sport in comparison to non-users. This differs from the committed and dedicated social images that misusers of AAS use to describe themselves (Probert & Leberman, 2009). However, Chantal et al. (2009) suggested that a negative halo effect may have resulted in participants rating AAS misusers highly on undesirable characteristics because they were made aware of their drug taking behaviour. Nevertheless, an individual's prototype perceptions of the type of person who engages in a behaviour influence their willingness to perform the same behaviour (Gerrard, Gibbons, Houlihan, Stock, & Pomery, 2008). Therefore, an individual's prototype perceptions theoretically influence willingness to use PES irrespective of whether they truly reflect a PES user. Subsequently, how favourable/unfavourable an individual's prototype perceptions are of a PES user and non-user affect willingness to dope. In addition, favourable/unfavourable perceptions of a PES user and non-user then influence an individual's future possible selves (i.e., what they expect to become, hope to become and want to avoid becoming; Norman & Aron, 2003; Quinlan, Jaccard, & Blanton, 2006), which act as a motivator for behaviour.

### 1. Prototype/willingness model

The prototype/willingness model considers decision making across two pathways: the reasoned action pathway and the social reaction pathway (Figure 1). The reasoned path focuses on behavioural intentions and consists of elements from the theory of reasoned action (TRA; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) and the theory of planned behaviour (TPB; Ajzen, 1985, 1991). The TPB is an extension of the TRA where intentions to perform a specific behaviour are seen to be the key determinant of behaviour (Dodge & Jaccard, 2008). The TPB represents the association between attitudes and behaviour whilst taking into account the influence of subjective norms (what an individual perceives significant others think they ought to do) and perceived behavioural control (the amount of control an individual perceives they have over a given behaviour). Previously, the TPB has been used in the health domain to predict substance use over and above other health behaviour models (Armitage & Conner, 2000). The TPB has also been used to investigate doping use in sport. A number of authors utilising the TPB (Lucidi, Zelli, Mallia, Grano, Russo, & Violani, 2008; Wiefferink, Detmar, Coumans, Vogels, & Paulussen, 2008) have demonstrated the ability of doping attitudes and subjective norms to predict doping behaviour. This conclusion is partly supported by Petróczi (2007) showing that doping attitudes and beliefs, even when combined with sport orientation, leave a significant proportion of unexplained variance in doping behaviour. These findings suggest that other factors play an influential role in decisions about doping.

In contrast, the social reaction path, which focuses on behavioural willingness, suggests that certain situations facilitate risky behaviours (Gerrard, Gibbons, Stock, Vande Lune, & Cleveland, 2005). Behavioural willingness reflects an individual's openness to opportunity (Thornton, Gibbons, & Gerrard, 2002), and is influenced by attitudes, subjective norms, prototype perceptions and past behaviour. Furthermore, behavioural willingness acknowledges that an individual may perceive a given behaviour to be unfavourable and have no intention of engaging in it, but would consider performing the behaviour under certain (risk-conducive) circumstances. For example, an adolescent may have no intention to drink alcohol, but may be willing to drink alcohol when they attend an unsupervised party where alcohol is readily available. Behavioural willingness may therefore explain why some athletes dope when they previously declared no intention of using PES. At present, there is limited research examining willingness to dope and the research which does exist (Bloodworth & McNamee, 2010; Bloodworth, Petróczi, Bailey, Pearce, & McNamee, 2010) has not assessed the factors conceptualised in the social reaction pathway of the prototype willingness model. Therefore, before willingness

Download English Version:

<https://daneshyari.com/en/article/889560>

Download Persian Version:

<https://daneshyari.com/article/889560>

[Daneshyari.com](https://daneshyari.com)