



# Personality traits and performance enhancing drugs: The Dark Triad and doping attitudes among competitive athletes<sup>☆</sup>



Adam R. Nicholls<sup>a,\*</sup>, Daniel J. Madigan<sup>b</sup>, Susan H. Backhouse<sup>c</sup>, Andrew R. Levy<sup>d</sup>

<sup>a</sup> University of Hull, United Kingdom

<sup>b</sup> York St. John University, United Kingdom

<sup>c</sup> Leeds Beckett University, United Kingdom

<sup>d</sup> Edge Hill University, United Kingdom

## ARTICLE INFO

### Article history:

Received 25 November 2016

Received in revised form 17 February 2017

Accepted 25 February 2017

### Keywords:

Machiavellianism

Performance enhancing drugs

Psychopathy

Narcissism

## ABSTRACT

The use of performance enhancing drugs, also known as doping, can represent a serious threat to an athlete's psychological and physical health and contravenes the spirit of sport. Scholars identified attitudes towards doping as a crucial factor that indirectly influences doping behaviors. Further, prominent theoretical frameworks that are designed to explain why athletes dope state that personality traits shape doping attitudes. To date, however, scholars are yet to examine the relationship between attitudes towards doping and personality traits such as the Dark Triad. The purpose of this study was to explore the relationship between the Dark Triad and doping attitudes among a sample of competitive athletes. Two hundred and eighty-five athletes completed a measure of the Dark Triad and attitudes towards doping. Machiavellianism, psychopathy, and narcissism all correlated positively with attitudes towards doping. Machiavellianism and psychopathy explained 29% of the variance in attitudes towards doping, whereas narcissism did not independently contribute to the variance in doping attitudes. These results reveal that athletes who score highly on the Dark Triad may be more likely to dope and therefore might need targeted anti-doping education and long-term monitoring to reduce their risk of taking banned substances.

© 2017 Elsevier Ltd. All rights reserved.

## 1. Introduction

A doping violation occurs when an athlete takes a substance (e.g., Anabolic Androgenic Steroids (AAS), diuretics, or amphetamines) or uses a method (e.g., blood doping or gene therapy), which is prohibited by the World Anti-Doping Agency (WADA, 2015). The *White Paper on Sport* (2007) revealed that doping represents a significant threat to sport across all levels, because it undermines open and fair competition. Given the abundance of high-profile doping cases in the media, many people may falsely believe that doping occurs exclusively among elite athletes. There is evidence that grassroots (e.g., ESPAD, 2011) and adolescent athletes (e.g., Gradidge, Coopoo, & Constantinou, 2011) take Performance Enhancing Drugs (PEDs) too. This is extremely concerning due to the side effects of PEDs.

Doping poses a serious threat to the lives of athletes who take PEDs. Indeed, PEDs can cause severe physical (e.g., Johnson, 2012) and mental health illnesses (e.g., Lindqvist et al., 2013), due to the large quantities in which PEDs are consumed to gain a performance enhancing effect (Bird, Goebel, Burke, & Greaves, 2016). For example, AAS, which accounts for 43% of doping offenses in grassroots sport (Brennan, Kanayama, Hudson, & Pope, 2011), is associated with damage to the liver, heart, kidneys, and reproductive systems. Worryingly, these illnesses may be irreversible and can ultimately lead to premature death (Bird et al., 2016). In regards to mental health, there is a two-to-four fold increased risk of suicide among athletes that have previously taken PEDs (Lindqvist et al., 2013). Despite PEDs representing a serious health threat, it appears that many athletes are unaware of the dangers that banned substances pose to their health (Nicholls et al., 2015). Understanding why athletes dope, and being able to better identify those who are more susceptible to doping, will enable governing bodies to expose at risk athletes to more intensive anti-doping education and long-term monitoring.

A factor that influences whether an athlete will comply with anti-doping rules is his or her attitude towards PEDs. A meta-analysis by Ntoumanis, Ng, Barkoukis, and Backhouse (2014) revealed that a positive or favorable attitude to doping was one of the strongest predictors of doping behaviors. Understanding more about the factors that shape

<sup>☆</sup> Author note. Adam R. Nicholls is with the Department of Sport, Health, and Exercise Science, University of Hull, Hull, HU7 7RX, UK. Daniel J. Madigan is with the School of Sport, York St John University, Lord Mayor's Walk, York, YO31 7EX, UK. Susan H. Backhouse is with the Carnegie Research Institute, Leeds Beckett University, Leeds, LS6 3QS, UK. Andrew R. Levy is with the Department of Psychology, Edge Hill University, Ormskirk, L39 4QP, UK.

\* Corresponding author.

E-mail address: [A.Nicholls@hull.ac.uk](mailto:A.Nicholls@hull.ac.uk) (A.R. Nicholls).

attitudes, such as different personality traits (Donovan, Eggar, Kapernick, & Mendoza, 2002), will enable governing bodies to identify at risk athletes. Indeed, Donovan et al.'s (2002) Sport Drug Control Model (SDCM) is a theoretical framework that was created to shed light on why some athletes take PEDs and identified attitudes as being influential in this decision. The SDCM (Donovan et al., 2002), which includes social cognitions, threat appeals, and instrumental and normative approaches, identified six factors that shape whether an athlete will have a favorable or unfavorable attitude towards PEDs, which in turn influences whether an athlete will take PEDs or not. The six constructs were threat appraisals (i.e., the deterrents associated with taking PEDs such as ill health or being caught and the implication that follow), benefit appraisals (i.e., how one may benefit from enhanced performance, such as being awarded a new contract, higher sponsorship, or more prize money), morality (i.e., whether an athlete thinks doping is right or wrong), legitimacy (i.e., the level of authority from organizations that conduct drug tests), reference group opinion (i.e., how significant others in an athlete's life may view the use of PEDs), and personality traits such as optimism or self-esteem. These six factors may influence intentions to dope, which in turn would affect doping behavior.

Scholars such as Gucciardi, Jalleh, and Donovan (2011) and Jalleh, Donovan, and Jobling (2014) quantitatively examined the SDCM (Donovan et al., 2002). Gucciardi et al. (2011) found that the strongest predictors of doping attitudes were morality (cheating), benefit appraisals, and threat appraisals. The other factors, self-esteem, legitimacy, and reference group opinion were not associated with doping attitudes. Jalleh et al. (2014) reported that legitimacy, reference group opinion, and morality were the only constructs related to doping attitudes. Neither of these studies found that personality constructs, such as self-esteem, was associated with doping attitudes. Despite personality being a key construct within the SDCM (Donovan et al., 2002), researchers are yet to demonstrate the predictive power of personality in relation to doping. This could be due to scholars not assessing the most relevant personality traits (e.g., self-esteem). A cluster of personality traits that might be the most relevant towards doping attitudes is the Dark Triad (Paulhus & Williams, 2002).

### 1.1. The Dark Triad

The Dark Triad (Paulhus & Williams, 2002) contains three related, but distinct personality traits (Azizli et al., 2016). These are Machiavellianism, narcissism, and psychopathy. An individual who scores highly on Machiavellianism manipulates other people, thinks only of him or herself, is deceitful (Hern et al., 2006), and is highly strategic (Jones & Paulhus, 2014). Narcissistic people have an over inflated view of themselves, are vain, and have a strong sense of self-entitlement (Raskin & Hall, 1979). Finally, psychopathic individuals are impulsive, have little or no empathy for others, tolerate danger well, and can be highly aggressive (Barlett, 2016). These three personality traits overlap and have a number of behavioral implications. The Dark Triad is linked to unethical behavior (e.g., Roeser et al., 2016), risk taking (Malesza & Ostszewski, 2016), and identifying individuals who are susceptible to manipulation (Chung & Charles, 2016).

At the present time, however, little is known about whether these traits are associated with attitudes towards doping. Even though scholars are yet to explore the relationship between attitudes towards doping and the Dark Triad, these two constructs may be related. Egan, Hughes, and Palmer (2015) reported a positive association between the Dark Triad and moral disengagement. Jalleh et al. (2014) reported that moral disengagement was positively associated with favorable attitudes towards doping. Furthermore, other research revealed that the Dark Triad was negatively associated with honesty (e.g., Djeriouat & Trémolière, 2014), but positively associated with cheating (Baughman, Jonason, Lyons, & Vernon, 2014; Lyons & Brockman, 2017), risk taking (Crysel, Crosier, & Webster, 2013), and being pre-occupied with the

present, and thus discounting future consequences (Birkás & Csathó, 2015). Finally, Azizli et al. (2016) reported a positive association between Machiavellianism, psychopathy, and narcissism and soft drug abuse. Given that doping represents cheating, is a form of substance abuse, may involve discounting future consequences (e.g., health problems or a positive test), and represents dishonest behavior, it is entirely plausible that attitudes towards doping will be associated with the Dark Triad of personality.

In this paper we examined the relationship between attitudes towards doping and the Dark Triad. We hypothesized that Machiavellianism, narcissism, and psychopathy would correlate positively with attitudes towards doping, based on the notion that the Dark Triad is associated with cheating, risk taking, moral disengagement, and dishonesty (Djeriouat & Trémolière, 2014; Egan et al., 2015; Malesza & Ostszewski, 2016). Understanding more about the relationship between the Dark Triad and attitudes towards doping will enhance our ability to apportion variance to personality traits. This may have a significant impact on how at-risk athletes are identified and are supported by sports governing bodies.

## 2. Method

### 2.1. Participants

Two hundred and eighty-five athletes (male  $n = 217$ , female  $n = 68$ ), aged between 18 and 30 years of age ( $M$  age = 20.82,  $SD = 2.59$ ), with a mean playing experience of 9.48 years ( $SD = 4.33$ ) and a mean of 4.45 h per week training ( $SD = 2.65$ ), who resided in the United Kingdom participated in the study. Participants competed as amateur ( $n = 203$ ), semi-professional ( $n = 45$ ), or professional ( $n = 37$ ) athletes.

### 2.2. Measures

#### 2.2.1. Doping attitudes

The 8-item version of the Performance Enhancement Attitude Scale (PEAS; Nicholls, Madigan, & Levy, 2017) assessed the doping attitudes. Due to a poor model fit of the original 17-item PEAS (Petróczy & Aidman, 2009), Nicholls deleted nine items, which resulted in a superior fit. The 8-item PEAS (Nicholls et al., 2017) included questions such as “doping is unavoidable part of the competitive sport,” “doping is necessary to be competitive,” and “doping is not cheating since everyone does it.” All questions were answered on a 6-point Likert-type scale, which was anchored at 1 = ‘strongly disagree’ and 6 = ‘strongly agree’. Scholars (e.g., Nicholls et al., 2017; Vargo et al., 2014) demonstrated that the 8-item version of the PEAS is a reliable measure.

#### 2.2.2. Dark Triad

The Short Dark Triad (SD3; Jones & Paulhus, 2014) is a 27-item questionnaire that measures Machiavellianism (e.g., “It's not wise to tell your secrets” and “whatever it takes, you must get the important people on your side”), narcissism (e.g., “many group activities tend to be dull without me” and “I insist on getting the respect I deserve”), and psychopathy (“payback needs to be quick and nasty” and “I'll say anything to get what I want”). All questions were answered on a 5-point Likert-type scale, which was anchored at 1 = ‘not at all’ and 5 = ‘extremely’. Jones and Paulhus (2014) reported acceptable reliabilities for Machiavellianism ( $\alpha = 0.71$ ), narcissism  $\alpha = 0.74$ ), and psychopathy ( $\alpha = 0.77$ ).

### 2.3. Procedure

Following ethical approval from a departmental university Ethics Committee, we distributed information letters and consent forms to different sports clubs. Athletes who wished to participate in the study signed and returned the consent form to a trained research assistant. After completing the consent form, participants completed a

متن کامل مقاله

دریافت فوری ←

**ISI**Articles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات