ATHLETIC IDENTITY AND MORAL DISENGAGEMENT IN DOPING

Çağdaş CAZ¹, Recep F. KAYHAN², Sait BARDAKÇI³, Ali HASAAN⁴

 ¹ Faculty of Sport Sciences, Yozgat Bozok University, Yozgat, Turkey
 ² School of Physical Education and Sports, Recep Tayyip Erdogan University, Rize, Turkey
 ³ Department of Business and Quantitative Techniques, Cumhuriyet University, Sivas, Turkey
 ⁴ Institute of Research and Advanced Studies, Multan, Pakistan

ABSTRACT

The purpose of the study was to examine the relationship between athletic identity of athletes and their moral disengagement in doping. Also determined was whether athletic identity has an impact on athletes' moral disengagement in doping. Comparisons of athletic identity and moral disengagement scores of the athletes for some variables was included. Athletic Identity Scale and Moral Disengagement in Doping Scale were completed by 364 Turkish athletes. The average age of the sample was 20.99±4.29 years. The average of the answers given to the scale items, Athletic Identify and Moral Disengagement scores were calculated. Path analysis was used and the t-test and ANOVA were applied for intergroup comparisons. The average exclusivity scores of male athletes were significantly higher than that of female athletes. It was determined that professional athletes' social identity and exclusivity average scores are significantly higher and more meaningful than amateur athletes. The path analysis revealed that the social identity perceived by the athletes has a positive and statistically significant effect on moral disengagement in doping. In addition, the exclusivity perceived by athletes has a negative and significant effect on moral disengagement. Athletic identity and moral disengagement in doping differ according to gender, age, sport level and sport age.

Keywords: Athletic identity; Doping; Moral disengagement; Path analysis.

INTRODUCTION

Social identity theory suggests that individuals have both a personal identity and a social identity (Tajfel & Turner, 1986). Personal identity consists of individual attributes, while social identity consists of an individual's organisational membership (religious, educational, social institution) (Fink *et al.*, 2009). When applied to the sport context, an athlete's sport identity is aligned to a person or sports team that results in feelings or segments of close attachment to sport entity (sport, team, athlete) (Trail *et al.*, 2000). In this context, sport marketing researchers have found that sport identity theory provides strategical attachment by aligning with groups that are viewed positively (Bruner *et al.*, 2014). Therefore, past studies acknowledged the positive role of social identity on sport (athletic) identity (De Backer *et al.*, 2011; Bruner & Benson, 2018).

Athletic identity is degree to which an individual identifies with the athlete role (Brewer & Cornelius, 2001; Foster & Huml, 2017). Hogg (2000) mentioned that any identity that is

strongly possessed by a person can be a powerful motivation that influences the way people think, feel, and act. Newton *et al.* (2020) noted that athletic identity and personality complement one another as athletic identity may be considered a relatively stable personality trait that develops through the years (Stambulova, 2012; Costa *et al.*, 2020). In this vein, athletic identity can serve as both a catalyst and an inhibitor. For instance, an athlete with driven personality traits may increase driven behaviours (making positive pre-game decisions) (Newton *et al.*, 2020).

Personality is typically defined as the consistent set of traits, attitudes, emotions, and behaviors (Boyd & Pennebaker, 2017; Garramone *et al.*, 2020). That is why, to describe a person, its distinctive personality traits discussed (Doğan, 2015). In the context of the sport, athlete personality is a very essential as the role of personality in achieving great sport success is essential (Vealey, 2002). For instance, achieving success in sport is most likely determined by the individual's mental toughness (personality trait) to cope with different pressures and the athlete's desire to achieve very good results (Buhaş & Stance, 2017). Coulter *et al.* (2018) mentioned that athletes with mental-tough personalities have more motivational and meaning maker personalities.

The athlete's personality is affected by environmental factors within the social role. For instance, when something positive or negative happens with an athlete, it casts the same effect on the athlete's image (Cortsen, 2013). In this context, athletes' behaviour reflected athletes' identity either positive or negative (Hasaan *et al.*, 2018). Contrarily, athletes often committed an immoral or bad activity that damaged his reputation. Spruit *et al.* (2019) mentioned that both positive (prosocial) and negative (antisocial) moral behaviours occur on the playing field. Although, positive behaviour is widely appreciated but pressure of winning make moral/immoral decision challenging (Rutten *et al.*, 2008).

Drug usage is considered as immoral and negative activity in the field of sport (Pradhan, 2016). Drug usage is considered a negative predictor, meaning that the more use of drug, the less participation in sport activity (Rambaree *et al.*, 2018). The use of legal and illegal performance enhancing drugs exists at all sports levels (Peretti *et al.*, 2004). There is growing evidence that professional and amateur athletes consume banned performance-enhancing substances (Kavussanu & Ring, 2017). Athletes are known to consume untested, potentially harmful or even prohibited substances in their quest to be the strongest and fastest (Strelan & Boeckmann, 2006). Despite advances in sports, risk factors for doping use have not been largely determined, which hinders efforts to prevent its use (Backhouse *et al.*, 2007).

Doping is not only limited to elite sports. It has been established that athletes of all ages and levels use legal and illegal performance enhancers (Lippi *et al.*, 2008). It is assumed that the use of doping is a deliberate act that is planned and requires considerable commitment (Petroczi & Aidman, 2009). The use of doping hurts the image of sports because it is against sports principles and creates irreversible health problems for those who use it (Sumner, 2017). Also, moral disengagement has been positively associated with both doping temptation and doping intentions in several studies (Kavussanu & Ring, 2017). So far, preventing the use of doping has largely focused on punishing those who use doping. However, doping is known to be used by both professional and amateur athletes (Kavussanu *et al.*, 2016). Therefore, it is thought that different approaches should be taken into consideration to prevent the use of doping. Doping researchers have thoroughly examined the psychosocial processes underlying doping use and called for the prevention of doping use. (Petroczi & Aidman, 2008).

Some studies (Kavussanu & Ring, 2017; Zvan et al., 2017; Pielke, 2018; Aguilar-Navarro et al., 2020;) suggested that doping is sport-specific, and the use of doping increases due to the

fact that it enhances athlete performance (Petroczi, 2007). A study with 15 elite athletes revealed that athletes used doping as performance enhancers (Pappa & Kennedy, 2012). Elbe and Pitsch (2018) reported that 22% of team sport athletes, 37% of endurance sport athletes, and 43% of speed and power sport athletes personally knew an athlete, who used banned substances.

Various models were developed to explain the intent of doping use. The drug control model (Nicholls *et al.*, 2015) sees doping as a targeted behaviour in sports. This model emphasises the role of intentions and attitudes in the doping process and sees personal morality as one factor that is supposed to affect doping attitudes (Jalleh *et al.*, 2014). Personal morality acts as a potential deterrent to doping use because doping often requires illegal activity and is considered as cheating by most people (Bilard *et al.*, 2011).

Morality could cause drugs/ doping moral disengagement as Nicholls *et al.* (2015) described that there are four types of athletes: the susceptibles (were willing to cheat), the chancers (scored high on willingness to cheat, but had an average score for threat), the pragmatists (did not engage with any aspects of doping, but were more susceptible than the fair players), and fair players (high levels of sportspersonship, unwilling to cheat). In this scenario, athletes does not see their moral disengagement and behaviour as immoral; by minimising his responsibilities concerning being harmful, one can ignore the consequences of the behaviour and, as a result, accuse the victim (Bandura, 2004). By doing so, one may attempt to show his criminal behaviour as if it was insignificant (Gürpinar, 2015). Moral variables are defined as strong predictors of doping intentions and behaviours, and this is emphasised in two recent reviews of the literature (Ntoumanis *et al.*, 2014). Moral disengagement has attracted attention in recent years (Kavussanu *et al.*, 2016) and moral disengagement affects the understanding of doping (Bandura, 1991).

PURPOSE OF STUDY

Fewer studies have focused on the construct's depth, meaning, and complexity from participant perspectives, resulting in a limited understanding of athletic identity. (Newton *et al.*, 2020). Research on identity has grown exponentially within the field of psychology and related disciplines and has provided valuable insights into the cognitions, emotional responses, and behaviours of individuals. In this scenario, current study aimed to fill the gap in the literature of athletic identity. The current study discussed the role of morality and athletic identity for athletes when engaging in immoral activities (doping and drug abuse). This study is a pioneer in the context that there are no studies revealing the relationship between athletes who aim to serve themselves by getting an unfair advantage from their competitors and their athletic identity, makes the current study important. In light of this information, the study aims to investigate the effects of athletic identity on morality disengagement in doping.

METHODOLOGY

Population and sample

The population of the research is composed of all Turkish athletes at amateur and professional levels. The sample of the research consists of 364 Turkish athletes. A convenience sampling method was used in determining the sample, because easy accessibility, geographical

proximity, availability at a given time, or the willingness to participate were included for the purpose of the study. The average age of the athletes in the sample was determined as 20.99 ± 4.29 and the average number of years participating in sport was determined as 6.65 ± 4.22 .

Data collection tools

Two previously validated psychometric tests were used as data collection tools in the study. These are the Athletic Identity Scale and the Athlete Burnout Scale. Athletic Identity Scale, developed by Brewer and Cornelius (2001), was adapted to Turkish culture by Öztürk & Koca (2013) while the Athlete Burnout Scale, developed by Kavussanu *et al.* (2016), was adapted to Turkish culture by Gürpınar *et al.* (2019).

Athletic Identity Scale

The Athletic Identity Scale is a 7-point Likert type scale consisting of 7-items. The scale has three sub-dimensions called "Social Identity", "Exclusivity" and "Negative Effectiveness". The answer options from negative to positive are Strongly Disagree, Mostly Disagree, Somewhat Disagree, Undecided, Somewhat Agree, Mostly Agree and Strongly Agree. There are no reverse-scored items in the scale. Cronbach Alpha reliability coefficient of the scale is 0.81 and it ranges from 0.59 to 0.79 for its sub-dimensions.

Moral Disengagement in Doping Scale

Moral Disengagement in Doping Scale is a 7-point Likert-type scale consisting of 6 items and a single factor that measures the 6 moral disengagement mechanisms defined by Bandura (1991). These mechanisms are "Euphemistic labeling", "Diffusion of responsibility", "Displacement of responsibility", "Advantageous comparison", "Distortion of consequences" and "Moral justification". The answer options of the scale from negative to positive are Strongly Disagree=1 to Strongly Agree=7. There are no reverse-scored items in the scale. The increase in the average score obtained from the scale means that the athletes mostly use the moral disengagement mechanisms for doping. Cronbach Alpha reliability coefficient of the scale is 0.78.

Data collection and scoring

The scales used for data collection in the study were administered to 364 athletes through an online questionnaire, and the data of the research were obtained. Answers to both scales were scored from the most negative option (1) to the most positive option (7) as stated in the instructions for scoring of the scales. The average scores of all scales and their sub-dimensions were calculated by taking the average of the items they included.

Analysis of data

Firstly, t-test for independent samples and one way ANOVA were used for intergroup comparisons of athletic identity and moral disengagement in doping scores of athletes according to their gender, age, sport level and sport age. Structural Equation Modeling (SEM) was used as the statistical method in the research. SEM is described as a second-generation data analysis technique. As psychometric measures have become more complex, vigorous and robust methods are needed to efficiently synthesise research findings (Lin *et al.*, 2019). SEM

combines the confirmatory factor analysis and multiple regression method that enables to testing hypotheses about multiple relations among observed and latent variables (Williams *et al.*, 2010). Compared to the first-generation statistical methods, such as regression analysis, it is a method that enables systematic and comprehensive handling of a complex research problem in a single analysis process by modeling the relationships between many dependent and independent variables (Anderson & Gerbing, 1988).

Whether the athletes' athletic identity has a significant effect on moral disengagement in doping was examined by using the path analysis. Path analysis enables testing whether the strength of the relationships (paths) between variables in the model are significant or not. In the path analysis model designated in the research, factor structures to be included in the model in line with the two-step approach of Anderson and Gerbing (1988) were tested with confirmatory factor analysis (CFA). The CFA method is used to determine whether the groups of variables that contribute to a certain number of factors determined theoretically are adequately represented by these factors (Özdamar, 2013).

IBM SPSS 23 and AMOS 23 package programs were used in the application of these statistical techniques.

Ethical considerations

Ethics Board Committee of the Institute of Research and Advanced Studies (IRAS) approved this study (SC-RA-020620). All participants provided informed consent forms.

RESULTS

Variables	Frequency	Percentage
Gender		
Female	144	39.6
Male	220	60.4
Age		
Below 19	80	22.0
Between 19-22	212	58.2
Above 22	72	19.8
Athletics level		
Amateur	310	85.2
Professional	54	14.8
Age of athletics		
Under 5 Years	127	34.9
5-8 Years	128	35.2
Over 8 Years	109	29.9

Table 1. FREQUENCY TABLE OF DEMOGRAPHIC VARIABLES

The frequency and percentage distributions of the athletes in the sample according to the variables included in the questionnaire form are as shown in Table 1.

Descriptive statistics about the average scores of athletic identity sub-dimensions and the moral disengagement in doping are provided in Table 2.

Variables	Social id	lentity	Exclusivity Negative :		Negative at	ffectivity	Moral disengage- ment in doping	
Gender	Mean±SD	t	Mean±SD	t	Mean±SD	t	Mean±SD	t
Female Male	5.29±1.33 5.50±1.21	-1.613	5.33±1.37 5.65±1.30	-2.259*	5.95±1.37 6.20±1.10	-1.770	2.35±1.38 2.19±1.17	1.156
Age	Mean±SD	F	Mean±SD	F	Mean±SD	F	Mean±SD	F
<19 Age 19-22 Age >22 Age	5.73±1.00 5.34±1.31 5.31±1.34	3.079*	5.88±1.22 5.42±1.38 5.44±1.29	3.700*	6.48±0.95 6.03±1.29 5.89±1.21	5.500**	2.30±1.22 2.15±1.19 2.51±1.48	2.342
Level	Mean±SD	t	Mean±SD	t	Mean±SD	t	Mean±SD	t
Amateur Professional	5.28±1.29 6.19±0.68	-7.658**	5.41±1.38 6.18±0.86	-5.416**	6.09±1.20 6.14±1.34	-0.252	2.23±0.07 2.43±0.19	-1.077
Sport age	Mean±SD	F	Mean±SD	F	Mean±SD	F	Mean±SD	F
<5 Years 5-8 Years >8 Years	4.77±1.32 5.79±0.94 5.73±1.23	29.818**	5.11±1.46 5.86±1.10 5.61±1.34	11.127**	5.96±1.37 6.26±0.97 6.07±1.28	1.996	2.31±1.20 2.03±1.00 2.45±1.54	3.432*

Table 2. DESCRIPTIVE STATISTICS ON SCALES

*p<0.05; **p<0.01

As seen in Table 2, the average exclusivity scores of male athletes (5.65 ± 1.30) are significantly higher than female athletes $(5.33\pm1.37; p<0.05)$. Social identity average score of professional athletes (6.19 ± 0.68) is higher than amateur athletes (5.28 ± 1.25) . Similarly, the exclusivity average score of professional athletes (6.18 ± 0.86) is higher than amateur athletes (5.41 ± 1.38) and these differences are statistically significant (p<0.05).

Significant differences were found in all three dimensions of athletic identity according to the age of the athletes (p<0.05). As a result of the Tukey multiple comparison test, it was found that the athletes under 19 years of age had significantly higher scores on both social identity, exclusivity and negative affectivity than the other two age groups.

According to another finding, amateur athletes' social identity and exclusivity scores were lower than professional athletes, and these observed differences are statistically significant (p<0.05). Significant differences were found in social identity and exclusivity subscale scores and moral disengagement in doping levels according to the athlete's age (p<0.05). As a result of the multiple comparison tests, the social identity and exclusivity scores of athletes with a sports background of fewer than five years were significantly lower than those of the other two groups.

At the same time, it was observed that the athletes with a sports background of more than eight years had significantly higher moral disengagement in doping than athletes with a sports background of 5 to 8 years (p<0.05)

Whether the athletic identity levels of athletes have a significant effect on their moral disengagement levels was tested by creating a path analysis model. Firstly, the validity of the factor structures of both scales in the model was tested separately with the CFA.

Fit Criteria	Athletic identity	Moral disengagement in doping	Good fit	Acceptable
χ^2/SD	1.727	3.267	≤3	≤5
GFI	0.986	0.983	≥ 0.90	\geq 0.85
IFI	0.992	0.982	≥ 0.95	≥ 0.90
CFI	0.992	0.981	≥ 0.97	\geq 0.95
RMSEA	0.045	0.079	≤ 0.05	\leq 0.08

Table 3. GOODNESS OF FIT INDEXES OF BOTH SCALES

GFI= Goodness of Fit Index IFI= Incremental Fit Index CFI= Comparative Fit Index RMSEA= Root Mean Square Error of Approximation

According to the fit index values in Table 3, both models have a good fit with the data. According to Hair *et al.* (2009), factor loadings of each item in the scale above 0.50 in CFA results is a suitable criterion. Büyüköztürk (2010), contends that it is sufficient to have a minimum of 0.45 factor loading. Accordingly, the standard factor loadings of the items in Table 4 are quite high and have sufficient values. Cronbach Alpha reliability coefficients of the athletic identity scale sub-dimensions are also greater than 0.7 and are sufficient.

Table 4. FACTOR LOADINGS AND DESCRIPTIVE STATISTICS FOR ATHLETIC IDENTITY SCALE IDENTITY SCALE

Items	Social identity	Exclusivity	Negative affectivity	Mean±SD
1. I consider myself an athlete.	0.76			5.52±1.49
2. I have many goals related to sport.	0.81			5.60±1.64
3. Most of my friends are athletes.	0.56			5.13±1.61
4. Sport is the most important part of my life.		0.93		5.84±1.34
 I spend more time thinking about sport than anything else. 		0.79		5.21±1.53
 I feel bad about myself when I do poorly in sport. 			0.80	5.97±1.52
 I would be very depressed if I were injured and could not compete in a sport. 			0.61	6.23±1.30
Cronbach α	0.72	0.85	0.75	

According to Hair *et al.* (2009) and Büyüköztürk (2010), standard factor loadings of items in moral disengagement in doping scale in Table 5 are quite high and sufficient values. Also, Cronbach Alpha reliability coefficient of the scale was calculated as 0.80.

If the mean values of the moral disengagement in doping items are taken into consideration, it is seen that the moral disengagement mechanism that the athletes resort to the most is the "Diffusion of Responsibility" mechanism. This is followed by the "Displacement of Responsibility" mechanism. For the moral disengagement mechanism, the athletes applied the "moral justification" mechanism the least (Table 5).

Table 5. FACTOR LOADINGS AND DESCRIPTIVE STATISTICS FOR MORAL DISENGAGEMENT IN DOPING SCALE

Moral			Factor
mechanism	Items	Mean±SD	loading
Euphemistic labeling	 Doping is just a way to "maximise your potential". 	2.55±2.02	0.45
Diffusion of responsibility	2. A player should not be blamed for doping if everyone on the team is doing it.	2.62±2.13	0.45
Displacement of responsibility	3. Players cannot be blamed for doping if their teammates pressure them to do it.	2.56±2.01	0.52
Advantageous comparison	4. Compared to the illegal things people do in everyday life, doping in sport is not very serious.	2.37±1.75	0.62
Distortion of consequences	5. I spend more time thinking about the sport than anything else.	1.78±1.41	0.82
Moral justification	6. Doping is alright because it helps your team.	1.65±1.29	0.87



As seen in Table 6, it can be said that the path model has a good fit with the data. As a result of the path analysis, regression coefficients obtained for the model are given in Table 7. Athletes' perception of social identity has a positive and statistically significant effect on moral disengagement in doping (p<0.05). In addition, their perception of exclusivity has a negative and significant effect on moral disengagement in doping (p<0.05). Negative affectivity level of athletes does not have a significant effect on moral disengagement in doping levels (p>0.05) (Table 7).

Fit criteria	Values	Good fit	Acceptable
χ^2 /SD	1.792	≤ 3	≤ 5
GFI	0.959	≥ 0.90	\geq 0.85
IFI	0.974	≥ 0.95	≥ 0.90
CFI	0.973	≥ 0.97	≥ 0.95
RMSEA	0.047	≤ 0.05	≤ 0.08

Table 6. GOODNESS OF FIT INDEXES FOR PATH MODEL

GFI= Goodness of Fit Index IFI= Incremental Fit Index CFI= Comparative Fit Index RMSEA= Root Mean Square Error of Approximation

Relationships	Estimate	SE	CR	р
Moral disengagement in doping ← Social identity	0.399	0.198	2.022	0.043
Moral disengagement in doping \leftarrow Exclusivity	-0.292	0.139	-2.101	0.036
Moral disengagement in doping \leftarrow Negative affectivity	-0.068	0.087	-0.781	0.435

Table 7. REGRESSION COEFFICIENTS FOR PATH MODEL

SE= Standard Error CR= Critical Ratio

DISCUSSION

This study investigated the effects of athletic identity on athlete's moral disengagement in doping. The results and findings of the study can make an important contribution to the field of sports psychology.

In the study, it was found that exclusivity scores of male athletes were significantly higher than female athletes, and there was no significant difference in the other sub-dimensions of athlete identity according to the gender of the athletes. When the relevant studies are examined in the literature, it was determined that there are statistically significant differences in the identity of athletes perceived by male and female athletes (Sindik *et al.*, 2017). Another study on Turkish athletes revealed that male athletes have stronger athletic identity than female athletes (Görgülü *et al.*, 2018). These results obtained in the literature show that male athletes adopt athletic identity more than female athletes.

However, there are also contradicting findings in the literature. Some studies showed that the athletic identity does not differ according to the gender of the athletes (Can & Kaçay, 2016; Maberry, 2018). It is believed that the differentiation of the results in the literature is because of the social structure and culture of the athletes and especially the organisational culture in sports clubs that have different characteristics. Previous studies suggested that consumers' opinions tend to vary according to the cultural setting (Yoo & Donthu, 2002; Hasaan *et al.*, 2018). In this regard, sport studies in different settings (different culture; different genders; different ages; different sport) produces contradictory results.

The study revealed that athletes' level of moral disengagement in doping does not differ significantly according to the athletes' gender. This finding shows that male and female athletes have a similar tendency to experience moral disengagement in doping. There are many reasons

in the literature regarding the reasons for athletes' use of doping. Athletes see doping as a way to enhance performance (Kavussanu *et al.*, 2016) and indispensable at the top level of competition (Kiss *et al.*, 2019). According to the findings of this study, the opinions of male and female athletes presented in the literature are similar. This is in line with past studies, as Elbe and Pitsch (2018) found no significant gender differences in doping behaviour among Danish athletes. Also, Sajber *et al.* (2013) and Sekulic *et al.* (2016) described that usually gender difference in doping tendencies only found in the case of athletes who identify existence of doping in sport positively and factors of hesitation against doping.

According to another finding of the research, professional athletes' social identity and exclusivity mean scores are significantly higher than amateur athletes. However, in future studies the results might be different as mentioned before that different settings could bring different results, but in this case, the features of professionalism are considered to be effective. Compared to amateur athletes, professional athletes approach sports as a profession, and the development of their professional identity also makes their athletic identity strong. Also, professional athletes adopted various techniques to make their image better (Parmentier & Fischer, 2012; Hasaan *et al.*, 2018), which make their identity prominent than armatures. The study also concluded that the level of moral disengagement in doping of professional and amateur athletes was similar and did not differ significantly.

There are findings in the literature indicating that the athletic identity perceived by athletes does not differ, depending on the age of the athletes (Can & Kaçay, 2016; Görgülü *et al.*, 2018). While, Acheampong and Malek (2019) concluded that athletes' identity is at peak during 20-24 years and declines with age. That is in line with the current study's finding as significant differences were found in all three dimensions of Turkish athletes' athletic identity according to the age of athletes. It was observed that young athletes had a stronger athletic identity than middle and advanced aged athletes. According to another finding of the current study, the level of moral disengagement in doping of the athletes did not differ significantly according to age groups. Accordingly, it can be said that as the age of the athletes progresses, the tendency toward moral disengagement in doping does not change.

The past studies have emphasised that the group at risk in doping use is between the ages of 18-25 (Whitaker & Backhouse, 2017). Studies in the literature show that doping has an important effect on success (Petroczi & Strauss, 2015). It is considered that the reasons for the use of doping in athletes in the younger age group are more prominent, as the athletes in this age group are hungry for success so that they focus on winning and want to increase their performance. However, this situation in young athletes does not make a significant difference on moral disengagement in doping.

The study results revealed significant differences in the social identity and exclusivity subscale scores of the athletes and moral disengagement in doping levels according to the age of athletics. Athletic identity levels are lower in athletes with the underage group compared to more experienced athletes. Contrary to this finding, Can and Kaçay (2016) concluded that there was not a significant difference in the perception of identity-based on the sports age variable.

Although the tendency of athletes participating in the study toward moral disengagement in doping is generally low, it is seen that the athletes adopt the mechanism of dissolution of responsibility the most and the moral justification mechanism the least. Given that the mechanism of dissolution of responsibility is the most sought-after mechanism, it can be said that athletes resort to the complicity with their team in using doping to achieve success by using the mental power of being a team and tend to escape from individual responsibility. The minimum adoption of the moral justification mechanism by athletes may be due to the fact that doping increases individual performance rather than contributing to the team. Based on a study conducted with two different working groups, Kavussanu et al. (2016) stated that the athletes use the moral justification mechanism the least, while the most used ones are the euphemistic labelling advantageous comparison mechanisms. In their study, Gürpınar *et al.* (2019) found that the most common moral disengagement mechanisms adopted by athletes in doping use are euphemistic labelling and diffusion of responsibility, while fewer adopted the moral justification mechanism.

The social identity perceived by the athletes had a positive and statistically significant effect on moral disengagement in doping in the current study. It can be said that the development of the social identity perceptions of the athletes triggers the tendency toward moral disengagement in doping. Although it is generally accepted that strengthening the athletic identity has positive psychological and behavioural results for the athlete, there are also studies in the literature stating that a strong athletic identity may bring some negativities (Öztürk & Koca, 2013). Based on the approach that the concept of self has a flexible, dynamic and influenced structure, one research has shown that the athletic identity has weakened with situations, such as having a failed season and coming to the end of his sports career (Brewer & Cornelius, 2010). It is thought that having a strong social identity as an athlete may put the athlete under social pressure to achieve success, which may lead the athlete to moral disengagement in the use of doping.

The level of exclusivity perceived by athletes had a negative and significant effect on moral disengagement in doping. According to this finding, it can be said that as the level of perception of athletes restricted to sports increases, moral disengagement in doping decreases. In the life of an athlete with a strong sense of being only limited to sports, sports becomes the most important goal, and success remains in the background. This situation is thought to prevent the expectation of success on the athlete and prevent the tendency of the athlete to turn towards the use of doping. In this case, the athlete will not feel compelled to resort to any moral disengagement mechanism that would justify doping usage.

CONCLUSION

There is no study investigating the relationship between moral disengagement in doping and athletic identity found in the literature. For this reason, the results of the present study provide important information for sports psychology literature within the scope of sports sciences. According to the study results, the strong social identity of the athletes increases their tendency toward moral disengagement mechanisms in doping. The more important the sport's role is in the lives of the athletes, the more their intent toward moral disengagement in doping decreases. In this context, rather than gaining an athletic identity in their environment, making athletics a lifestyle and making sports the most important part of their lives will effectively reduce their doping orientation and lower their moral disengagement. There is a dearth of research on athletic identities and their implication on the moral values of athletes. Therefore, this study is a contribution to the literature on athlete identity; it is useful in the context of building moral values among athletes to avoid doping by athletes. This study is unique as it discusses the possibility of an athletic identity tool against doping and could be useful for academics and practitioners.

RECOMMENDATIONS

The study has some limitations. Firstly, the sample of the study consists of only 364 Turkish athletes. In the future, more comprehensive studies for athletes from different countries and cultures can be done and the effects of athletic identity on doping use and moral disengagement tendency can be discussed in more detail. In addition, the findings of the study can be questioned within the context of different sports. The study was carried out by applying only quantitative methods. Future research should be carried out by also following qualitative methods to analyse the findings in more depth. Athletic identity is an important concept that is frequently studied in the field of sports psychology. The positive and negative effects on athlete psychology are still being investigated. Also, future studies could investigate the effects of strong athletic identity on different psychological and moral variables.

Conflict of interest

The authors declared no potential conflict of interest.

REFERENCES

- ACHEAMPONG, E.Y. & MALEK, B. (2019). African footballers' life cycles according to the analysis of transfer value along their career path: a case study of Ghanaian players. *Sport in Society*, 22(12): 2024-2044.
- AGUILAR-NAVARRO, M.; SALINERO, J.J.; MUÑOZ-GUERRA, J.; DEL MAR PLATA, M. & DEL COSO, J. (2020): Sport-specific use of doping substances: Analysis of world anti-doping agency doping control tests between 2014 and 2017, *Substance Use and Misuse*, 55(8): 1361-1369.
- ANDERSON, J.C. & GERBING, D.W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3): 411-423.
- BACKHOUSE, S.H.; ATKIN, A.; MCKENNA, J. & ROBINSON, S. (2007). Attitudes, Behaviours, Knowledge and Education-drugs in Sport: Past, present and future [International literature review]. Montreal, Canada: World Anti-Doping Agency.
- BANDURA, A. (1991). Social cognitive theory of moral thought and action. In W.M. Kurtines & J.L. Gewirtz (Eds.), *Handbook of Moral Behavior and Development* (pp. 45-103). Hillsdale, NJ: Erlbaum.
- BANDURA, A. (2004). Health promotion by social cognitive means. *Health Education and Behavior*, 31(2): 143-164.
- BILARD, J.; NINOT, G. & HAUW, D. (2011). Motives for illicit use of doping substances among athletes calling a national antidoping phone-help service: An exploratory study. *Substance Use and Misuse*, 46(4): 359-367.
- BOYD, R. & PENNEBAKER, J. (2017). Language-based personality: A new approach to personality in a digital world. *Current Opinion in Behavioral Sciences*, 18(May): 63-68.
- BREWER, B.W. & CORNELIUS, A.E. (2001). Norms and factorial invariance of the Athletic Identity Measurement Scale. *Academic Athletic Journal*, 15: 103-113.
- BREWER, B.W. & CORNELIUS, A.E. (2010). Self-protective changes in athletic identity following anterior cruciate ligament reconstruction. *Psychology of Sport and Exercise*, 11(1): 1-5.
- BRUNER, M.W. & BENSON, A.J. (2018). Evaluating the psychometric properties of the Social Identity Questionnaire for Sport (SIQS). *Psychology of Sport and Exercise*, 35(March): 181-188.

- BRUNER, M.; DUNLOP, W. & BEAUCHAMP, M. (2014). A social identity perspective on group process in sport and exercise. In M. Beauchamp & M. Eys (Eds), *Group Dynamics in Exercise and Sport Psychology* (pp. 38-52). Abingdon, Oxfordshire, UK: Routledge Oxon.
- BUHAŞ, S. & STANCE, L. (2017). The relationship between personality and physical activity. *GeoSport* for Society, 7(2): 72-77.
- BÜYÜKÖZTÜRK, Ş. (2010). Sosyal Bilimler İçin Veri Analizi El Kitabı [trans.: Handbook of Data Analysis in Social Sciences]. Ankara, Turkey: Pegem Yayıncılık [trans. Pegem Publications].
- CAN, Y. & KAÇAY, Z. (2016). Investigation of the relationship between athlete identity perception, courage and self-confidence. *Journal of Human Sciences*, 13(3): 6176-6184.
- CORTSEN, K. (2013). Annika sörenstam: A hybrid personal sports brand. Sport, Business and Management, 3(1): 37-62.
- COSTA, S.; SANTI, G.; DI FRONSO, S.; MONTESANO, C.; Dİ GRUTTOLA, F.; CİOFİ, E.G.; MORGİLLİ, L. & BERTOLLO, M. (2020). Athletes and adversities: athletic identity and emotional regulation in time of COVID-19. Sport Science for Health, 16(4): 609-618.
- COULTER, T.J.; MALLETT, C.J. & SINGER, J.A. (2018). A three-domain personality analysis of a mentally tough athlete. *European Journal of Personality*, 32(1): 6-29.
- DE BACKER, M.; BOEN, F.; CEUX, T.; DE CUYPER, B.; HØIGAARD, R.; CALLENS, F.; FRANSEN, K. & VAN DE BROEK, G. (2011). Do perceived justice and need support of the coach predict team identification and cohesion? Testing their relative importance among top volleyball and handball players in Belgium and Norway. *Psychology of Sport and Exercise*, 12(September): 192-201.
- DOĞAN, O. (2015). Spor Psikolojisi: Ders Kitabı. Genişletilmiş üçüncü baskı. Detay yayıncılık [trans.: Sports Psychology: Textbook (Extended 3rd ed.]. Ankara, Turkey: Detay Publishing
- ELBE, A.M. & PITSCH, W. (2018). Doping prevalence among Danish elite athletes. *Performance Enhancement and Health*, 6(1): 28-32.
- FINK, J.S.; PARKER, H.M.; BRETT, M. & HIGGINS, J. (2009). Off-field behavior of athletes and team identification: Using social identity theory and balance theory to explain fan reactions. *Journal of Sport Management*, 23(2): 142-155.
- FOSTER, S. & HUML, M.R. (2017). The relationship between athletic identity and academic major chosen by student-athletes. *International Journal of Exercise Science*, 10(6): 915-925.
- GARRAMONE, F.; BAIANO, C.; RUSSO, A.; D'IORÍO, A.; TEDESCHÍ, G.; TROJANO, L. & SANTANGELO, G. (2020). Personality profile and depression in migraine: A meta-analysis. *Neurological Sciences*, 41(3): 543-554.
- GÖRGÜLÜ, R.; ADILOĞULLARI, G.E.; TOSUN, Ö.M. & ADILOĞULLARI, I. (2018). The Investigation of prosocial and antisocial behaviour and athlete identity according to some variables. *Journal of Sports and Performance Researches*, 9(3): 147-161.
- GÜRPINAR, B. (2015), Sporda ahlaktan uzaklaşma ölçeği kısa formunun Türk kültürüne uyarlanması: geçerlik ve güvenirlik çalışması [*trans*.: Adaptation of the Moral Disengagement in Sport Scale-Short into Turkish Culture: A validity and reliability study in a Turkish sample]. *Ankara Üniversitesi Spor Bilimleri Fakültesi Dergisi* [trans.: *Journal of Physical Education and Sport Sciences*], 13(1): 57-64.
- GÜRPINAR, B.; NALBANT, M. & KAVUSSANU, M. (2019). Dopingde ahlaktan uzaklaşma ölçeğinin Türk kültürüne uyarlanması: geçerlik ve güvenirlik çalışması [*trans:* Adaptation of the Moral Disengagement in Doping Scale into Turkish Culture: A validity and reliability study]. Spormetre [trans: Journal of Physical Education and Sport Sciences], 17(4): 81-90.
- HAIR, J.F.; BLACK, W.C.; ANDERSON, R.E. & VE BABIN, B.J. (2009). *Multivariate Data Analysis*, 7th ed. Englewood Cliffs, NJ: Prentice Hall.

- HASAAN, A.; KEREM, K.; BISCAIA, R. & AGYEMANG, K. (2018). A conceptual framework to understand the creation of athlete brand and its implications. *International Journal of Sport, Management and Marketing*, 18(3): 169-198.
- HOGG, M.A. (2000). Subjective uncertainty reduction through self-categorisation: A motivational theory of social identity processes. *European Review of Social Psychology*, 11(1): 223-255.
- JALLEH, G.; DONOVAN, R.J. & JOBLING, I. (2014). Predicting attitude towards performance enhancing substance use: A comprehensive test of the Sport Drug Control Model with elite Australian athletes. *Journal of Science and Medicine in Sport*, 17(6): 574-579.
- KAVUSSANU, M. (2016). Moral disengagement and doping. In V. Barkoukis, L. Lazuras, H. Tsorbatzoudis (Eds.), *The Psychology of Doping in Sport* (pp. 151-164). London, UK and New York, NY: Routledge.
- KAVUSSANU, M.; HATZIGEORGIADIS, A.; ELBE, A.M. & RING, C. (2016). The moral disengagement in doping scale. *Psychology of Sport and Exercise*, 24(February): 188-198.
- KAVUSSANU, M. & RING, C. (2017). Moral identity predicts doping likelihood via moral disengagement and anticipated guilt. *Journal of Sport and Exercise Psychology*, 39(4): 293-301.
- KISS, V.; TAYLOR, E., LÁSZLÓ, T. & BENCZENLEITNER, O. (2019). Attitudes towards doping: A comparison of athletes, non-athletes and sport experts. *Studia Universitatis Babeş-Bolyai Educatio Artis Gymnasticae Journal*, 64(1): 55-60.
- LIN, H.M.; LEE, M.H.; LIANG, J.C.; CHANG, H.Y.; HUANG, P. & TSAI, C.C. (2019). A review of using partial least square structural equation modeling in e-learning research. *British Journal of Educational Technology*, 51(4): 1354-1372.
- LIPPI, G.; FRANCHINI, M. & GUIDI, G.C. (2008). Doping in competition or doping in sport? *British Medical Bulletin*, 86(1): 95-107.
- MABERRY, S. (2018) Goal orientation, sport identities, and risky sexual behavior. *Journal for the Study* of Sports and Athletes in Education, 12(2): 113-132.
- KIM, M.; JONES, P. & RODRİGUEZ, A. (2008). Influence of work status on organisational commitment and sport identity of university athletic department workers. *Journal of Issues in Intercollegiate Athletics*, 1: 74-86.
- NEWTON, J.; GİLL, D.L. & REİFSTECK, E. (2020). Athletic Identity: Complexity of the "Iceberg". Journal of Athlete Development and Experience, 2(2): 69-82.
- NICHOLLS, A.R.; PERRY, J.L.; LEVY, A.R.; MEIR, R.; JONES, L.; BAGHURST, T.; SANCTUARY, C. & THOMPSON, M.A. (2015). Coach perceptions of performance enhancement in adolescence: The sport drug control model for adolescent athletes. *Performance Enhancement and Health*, 3(2): 93-101.
- NTOUMANIS, N.; NG, J.Y.Y.; BARKOUKIS, V. & BACKHOUSE, S. (2014). Personal and psychosocial predictors of doping use in physical activity settings: A meta-analysis. *Sports Medicine*, 44(11): 1603-1624.
- ÖZDAMAR, K. (2013). Paket Programlar İle İstatistiksel Veri Analizi, Cilt 2, 9 [trans. Statistical data analysis with package programs, Volume 2]. Ankara, Turkey: Nisan Kitapevi Baskı.
- ÖZTÜRK, P. & KOCA, C. (2013). Sporcu kimliği ölçeğinin Türkçe formunun psikometrik özelliklerinin incelenmesi [*trans.* Examining psychometric properties of the Turkish version of Athletic Identity Measurement Scale]. *Hacettepe Spor Bilimleri Dergisi* [trans. *Hacettepe Journal of Sport Sciences*], 24(1): 1-10.
- PAPPA, E. & KENNEDY, E. (2012). "It was my thought ... he made it a reality": Normalisation and responsibility in athletes' accounts of performance enhancing drug use. *International Review for the Sociology of Sport*, 48(April): 277-294.

- PARMENTIER, M.A. & FISCHER, E. (2012). How athletes build their brands. *International Journal of* Sport Management and Marketing, 11(2): 106-124.
- PERETTI-WATEL, P.; GUAGLIARDO, V.; VERGER, P.; MIGNON, P.; PRUVOST, J. & OBADIA, Y. (2004). Attitudes toward doping and recreational drug use among French elite student athletes. *Sociology of Sport J*: 21(1): 1-17.
- PETROCZI, A. (2007). Attitudes and doping: a structural equation analysis of the relationship between athletes' attitudes, sport orientation and doping behavior. *Substance Abuse Treatment, Prevention, and Policy*, 2(November): 34 (15 pp.).
- PETROCZI, A. & AIDMAN, E. (2008). Psychological drivers in doping: The life-cycle model of performance enhancement. *Subst Abuse Treat Prev Policy*, 3(March): 7 (12 pp.).
- PETROCZI, A. & AIDMAN, E. (2009). Measuring explicit attitude toward doping: Review of the psychometric properties of the Performance Enhancement Attitude Scale. *Psychology of Sport and Exercise*, 10(3): 390-396.
- PETROCZI, A. & STRAUSS, B. (2015). Understanding the psychology behind performanceenhancement by doping. *Psychology of Sport and Exercise*, 16(2): 137-139.
- PIELKE, R. (2018). Assessing doping prevalence is possible. So what are we waiting for? *Sports Medicine*, 48(1): 207-209.
- PRADHAN, S. (2016). When can they juice? A theoretical review and association of system justification and sports fan identity to doping by athletes. *International Journal of Sport Management, Recreation and Tourism,* 26(December): 1-25.
- RAMBAREE, K.; MOUSAVI, F. & AHMADI, F. (2018). Sports participation and drug use among young people in Mauritius. *International Journal of Adolescence and Youth*, 23(2): 188-197.
- RUTTEN, E.A., DEKOVIC, M., STAMS, G.J.J.M., SCHUENGEL, C., HOEKSEMA, J.B. & BIESTA, G.J.J. (2008). On and off-field antisocial and prosocial behavior in adolescent soccer players: A multilevel study. *Journal of Adolescence*, 31(3): 371-387.
- SAJBER, D.; RODEK, J.; ESCALANTE, Y., OLUJIC, D. & SEKULIC, D. (2013). Sport nutrition and doping factors in swimming: Parallel analysis among athletes and coaches. *Collegium Antropologicum*, 37(Supplement 2): 179-186.
- SEKULIC, D.; TAHIRAJ, E.; ZVAN, M.; ZENIC, N.; ULJEVIC, O. & LESNIK, B. (2016). Doping attitudes and covariates of potential doping behaviour in high-level team-sport athletes: Gender specific analysis. *Journal of Sports Science and Medicine*, 15(4): 606-615.
- SINDIK, J.; FURJAN-MANDIĆ, G.; ZENIĆ, N.; ČERKEZ ZOVKO, I.; STANKOVIĆ, V.; SAVIĆ, Z.; DJOKIĆ, Z. & KONDRIČ, M. (2017). Comparison of psychological skills, athlete's identity, and habits of physical exercise of students of faculties of sport in four Balkan countries. *Journal of* Sports Science and Medicine, 6(1): 13-28.
- SPRUIT, A.; KAVUSSANU, M.; SMIT, T. & IJENTEMA, M. (2019). The relationship between moral climate of sports and the moral behavior of young athletes: A multilevel meta-analysis. *Journal of Youth and Adolescence*, 48(2): 228-242.
- STAMBULOVA, N. (2012). Working with athletes in career transitions. In S. Hanton & S.D. Mellalieu (Eds.), *Professional Practice in Sport Psychology*. Routledge, London
- STRELAN, P. & BOECKMANN, R.J.W. (2006). Why drug testing in elite sport does not work: perceptual deterrence theory and the role of personal moral beliefs. *Journal of Applied Social Psychology*, 36(12): 2909-2934.
- SUMNER, C. (2017). The spirit of sport: The case for criminalisation of doping in the UK. *International Sports Law Journal*, 16(3-4): 217-227.
- TAJFEL, H. & TURNER, J.C. (1986). Social identity theory of intergroup behavior. In W. Austin & S. Worchel (Eds.), *Psychology of Intergroup Relations*, 2nd ed. (pp. 33-47). Chicago, IL: Nelson-Hall.

- TRAIL, G.T.; ANDERSON, D.F. & FİNK, J.S. (2000). A theoretical model of sport spectator consumption behavior. *International Journal of Sport Management*, 1(3): 154-180.
- VEALEY, R.S. (2002). Personality and sport behavior. In T.S. Horn (Ed.), *Advances in Sport Psychology* (pp. 43-74). Champaign, IL: Human Kinetics.
- WILLIAMS, L.J.; HARTMAN, N. & CAVAZOTTE, F. (2010). Method variance and marker variables: A review and comprehensive CFA marker technique. *Organizational Research Methods*, 13(3): 477-514.
- WHITAKER, L. & BACKHOUSE, S. (2017). Doping in sport: An analysis of sanctioned UK rugby union players between 2009 and 2015, *Journal of Sports Sciences*, 35(16): 1607-1613.
- YOO, B. & DONTHU, N. (2002). Testing cross-cultural invariance of the brand equity creation process. Journal of Product and Brand Management, 11(6): 380-398.
- ZVAN, M.; ZENIC, N.; SEKULIC, D.; CUBELA, M. & LESNIK, B. (2017). Gender-and sport-specific associations between religiousness and doping behavior in high-level team sports. *Journal of Religion and Health*, 56(4): 1348-1360.

Corresponding author: Dr Cağdaş Caz; Email: cazcagdas@gmail.com

(Subject editor: Prof Maya van Gent)