

ADMINISTRATIVE FACTORS PREDICTING DOPING INTENTIONS AMONG AMATEUR BOXERS IN ABEOKUTA METROPOLIS, OGUN STATE, NIGERIA

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ABSTRACT

The use of substances prohibited under the World Anti-Doping Agency (WADA) code is on the rise among athletes. This unsportsmanlike behaviour has crept into Nigerian boxing. This study, therefore, examined Administrative factors (AFs), as predictors of doping intention (DI) among amateur boxers in Abeokuta metropolis, Ogun State. The study was anchored on the theory of reasoned action while a descriptive research design of correlational type was adopted. Purposive and total enumeration sampling techniques were used to select all the 74 registered amateur boxers with Ogun state sports council, Nigeria. Formulated hypotheses were tested at 0.05 level of significance. Data were analysed using descriptive statistics and inferential statistics at 0.05. The study revealed a significant relationship between coaches' competence and doping intention among amateur boxers in the Abeokuta metropolis of Ogun. The study shows further that coaches' competence and infrastructure had a relative contribution to doping among amateur boxers. A joint contribution of administrative factors on doping was also found. Based on the findings of this study it was recommended among others that anti-doping seminars should be staged for amateur boxers and young upcoming athletes to equip them with knowledge of doping and to dissuade them from taking part in such unsportsmanlike conduct.

Keywords: Amateur boxers and doping, Administrative factors and doping, Socio-cultural factors and doping

Introduction

Doping is generally considered to be unsportsmanlike act and believed to also create unfair advantages while destroying the values of sport. In view of the importance to protect the athletes' health and integrity, results of a previous survey indicated that preventing doping in amateur sport is considered the highest priority. Over time significant amounts of

money have been spent on identifying new policies, strategies, and measures to prevent doping and also implementing these measures. However, in spite of the financial aids tailored towards doping prevention, all efforts have seemed inefficient in preventing this menace. Therefore, the identification of processes that lead to doping behavior should be of

interest to both science researchers and sport governing bodies entrusted with doping prevention.

Studies focusing on doping abuse have shown a significant increase in this practice among adolescent athletes and non-athletes alike (Irving et al., 2002). In a bid to improve performance and also to aid recovery, various drugs have been used, both legally and in a clandestine manner against the rules of governing bodies, by a broad array of athletes. . It has been suggested that while athletes use doping substances primarily to improve their performance, non-athletes use them mainly to enhance their physical appearance (Kindlundh et al., 2009). The World Anti-Doping Agency, (WADA) strictly regulates the use of drugs in competitive sport. WADA produced and regularly updates the World Anti-Doping Code that includes a prohibited drug list. This list dictates what is and is not acceptable, from a doping perspective, within the sport. The list has various subsections with some drugs banned both “in” and “out” of competition, (Angell, Chester, Sculthorpe, Whyte, George & Somauroo, 2012). Despite strict rules, development of advanced drug system testing, and punishments being in place in an attempt to limit doping offenses, both deliberate and inadvertent doping in sports is increasing in elite, amateur, and school sports (Plelke, 2015).

It has been observed that sportsmen and women are involved in doping behaviors (Florence, Filomena, Monda, Messina, Santamaria, Messina, Montesano, Monda, and Tafuri, 2016). Recent developments have proved that sportsmen and women of different age categories in Nigeria are no

longer dope-free, especially from ergogenic and psychoactive substances/drugs because of their exposure to other nations. In Nigeria, there were recorded cases of sportsmen and women of different age brackets who were tested positive to doping substances especially in weight lifting, boxing and athletics as reported by Oshodin and Egor (2005) and IOC Medical Commission (2006).

In a bid to deter athletes from using banned performance-enhancing drugs, therefore, athletes have been subjected to impromptu in and out of competition screening tests for these substances over time, and those athletes who test positive are given heavy punishment or fines. However, despite the rigorous testing procedures in the past decades of doping scandals, it has nevertheless prevailed to have shown that the tests are no guarantee of a drug-free race. It is difficult to name an organized competitive sport, an Olympic competition, or even a commonwealth competition in recent years that has gone unmarred by doping accusations. Ewen Call away, in the natural feature article, appropriately termed it “an endless cycle” where anti-doping agencies try to thwart cheating strategy while another emerges (Ewen, 2011 & Muwange et al, 2015).

In spite of numerous studies in the field of doping in sport, there have only been a few attempts of comprehensive studies on the administrative factors influencing doping in sport among amateur athletes. However, an empirical study by Nic-Badea (2016) revealed material/financial gain, desire to achieve high performance and Fame in a short time, team influence, family pressure, improving recovery rate

from injury as factors influencing doping among athletes.

Athletes doped in order to win the competition, gain finances as well as favors, and attain social status in the community Parnabas et al., (2013). Angell, et al., (2012) asserted that improving performance in sports and improving recovery rate from injury as other reasons for doping by athletes. A study by Tangan and Breivik, (2001) as cited by Kaoche, (2019) indicated that athletes use performance-enhancing drugs in order to increase self-confidence, financial gain, and social recognition among themselves. Malik and Meenu, (2016) argue that desire to relax, desire to achieve high performance and success in a short time, the belief that others are doping, influence of peers, motivation, lack of social support, desire to please coaches, parents, and the public as well as media influence athletes to dope.

Previous studies have identified only weak if any, the association between knowledge about doping and its side effects, and doping intentions and/behaviour (Blank et al. 2014; Ntoumanis et al. 2014). It appears that the effectiveness of the health message in trying to prevent doping is questionable (Engelberg et al. 2015). As a result of the acknowledged complexity of the doping, phenomenon scientists suggest that only a firm understanding of factors involved in doping as well as their relationships will potentially result in valid pro-social interventions for doping (Johnson 2012). Therefore, subsequent research that has focused on identifying reasons for doping behaviour, has been inspired mainly, but not exclusively, by research in the field of

health- and social psychology (Lazuras et al. 2015) and focusing on the individual athlete.

The administration is the range of activities connected with organizing and supervising the way that an organization or institution functions. The administration of something is the process of organizing and supervising it. Like in any other industry, in the sport you need to rely on what is proven to improve performance. Sport is played by people, coached by people, and managed by people, so it is imperative to get the people who will carry out sporting programs. The best and most successful sports organizations rely on recruiting, developing, and retaining the best sports professionals, team managers, and sports administrators (Ekuri, 2018). It has been noted that at every major sporting competition athletes are banned or stripped of their medals after they fail a drug test. What we're actually witnessing can be largely influenced by huge team personnel who include nutritionists, psychologists, and medical personnel. Of this support team, the coach undoubtedly wields the most influence. What they do and how they act can, on many levels, determine whether their athletes play by the rules or not.

Although, it's not unheard of for coaches to directly suggest that their athletes engage in doping. In extreme cases, they drug athlete without their knowledge. Coaches can also have a more subtle effect in determining contraband consumption among their athletes. They can indirectly influence an athlete's intentions via the motivational atmosphere they create. A 'win at all costs' attitude may see athletes purposefully taking banned substances. It can also result in

more inadvertent doping, when athletes fail to properly check a supplement only to find later that it is banned.

Bae et al., (2017) found out that the need to perfect performance as required by coaches and financial/material gain influenced Korean athletes participating in the Rio 2016 Olympic Games to have a friendly attitude towards doping. Sanchez, March, and Zabala, (2013) also found out in their research that Spanish cyclists considered sports achievement, external pressure, fame, and conditions of contract by sponsors as reasons for doping by athletes. Mitic and Radovanovic, (2011) highlighted that an individual's moral values and role models of an athlete determine the use of performance-enhancing drugs in sports. Finally, scholars have added that female athletes dope to change their physical appearance because they required a gain in body weight as shameful in the surrounding community (Kaoche, 2019).

Among the people who can influence athletes' decisions in sport, undoubtedly coaches play an important role in shaping athletes' psychological experiences and behaviors (Ntoumanis, Barkoukis, Gucciardi, & Chan, 2017). Evidence suggests that coaches can influence athletes either in favor or against doping (Erickson, McKenna, & Backhouse, 2015). For example, Erickson et al. suggested that the attachment between coaches and athletes can deter athletes from doping. In contrast, (Diacin, Parks, and Allison, 2003) noted that athletes may use doping substances to satisfy their coach. As (Pappa and Kennedy, 2013) indicated, athletes caught doping reported that all coaches are always aware of whether their

athletes are doping and what substances they are using. Furthermore, Erickson et al. reported that in several instances coaches send clear and strong pro-doping messages and encourage doping, such as by arranging for athletes to escape anti-doping controls. Similarly, Engelberg and Moston (2015) suggested that coaches may indirectly and inadvertently support doping through the lack of formal activities or education against doping or by endorsing pro-doping attitudes. Yet, it is unclear in which instances and through which mechanisms the coach influences athletes in favor of or against doping.

Waddington (2000) pointed out that the decision to dope is largely influenced by a complex and extensive network of people who interact with the athlete such as the coach, teammates, and support personnel, that is, the athletes' entourage. Past evidence on socio contextual factors predictors of doping has focused primarily on the role of prevailing social norms in condoning or sanctioning doping behavior (Lazuras, Barkoukis, Rodafinos, & Tsorbatzoudis, 2010; Lucidi et al., 2008). However, from a doping prevention perspective, it is also important to gain a deeper understanding of coaches' and athletes' beliefs about the role of athletes' entourage in the athletes' decision to dope. This information could provide important knowledge on how social norms and interactions regarding doping use are interpreted or potentially misinterpreted by coaches and athletes.

Adequate sports infrastructure is important to sport participation, as many sports cannot be performed without having the appropriate sports facility. Xiong. H (2007). In the government policy objective

of fostering sport participation. What constitutes adequate sports infrastructure differs from sport to sport: different sports have different requirements for the given facility. Obvious examples might be that a pool (or open water) is needed for swimming and a prepared court is required for tennis. Thus, the availability of facilities has an influence on the chosen sport. Space, for example for parks, is also a consideration that challenges municipalities with regard to urban planning. For policymakers, it is important to know which types of sports infrastructure should be built to increase sport participation

Statement of the Problem

The use of substances prohibited under the World Anti-Doping Agency (WADA) code such as blood doping, stimulants (amphetamine and cocaine), narcotics and cannabinoids (heroin and morphine, marijuana), and endogenous anabolic steroids (dihydrotestosterone and androstenediol), is on the rise among athletes and this has become both a societal and a public health problem. Over time, this unsporting behavior has been linked with the Nigerian sports sector especially in boxing ranging from professional athletes down to the young and amateur boxers. It has been observed over time that boxers at the professional level are more into taking performance-enhancing drugs before and during competition and this act has been traced down to the fact that most of this professional boxers have been engaging in this unsporting behavior right from the time they are young (amateur) and they also need to continue in the act to keep themselves up at the professional level. This wide menace has also been traced

down among amateur boxers in the Abeokuta metropolis of Ogun State. It is on this basis this paper wants to find out the contribution of administrative factors such as coaches' competency and training infrastructure as predictors of doping intentions among amateur boxers in Abeokuta metropolis, Ogun State.

Theoretical Framework

The theoretical framework for this study is the Theory of Reasoned Action (TRA) by Fishbein and Ajzen (1975). The theory of Reasoned Action (TRA) is a model that originated in the field of social psychology. This theory as developed by Fishbein and Ajzen (1975) defines the links between beliefs, attitudes, norms, intention, and behaviours of individuals. According to this theory, the intention to perform certain behaviour precedes the actual behaviour. This theory states that a person's intention to perform certain behaviour is the main predictor of whether or not they actually perform that behaviour. Additionally, the normative component (i.e. [social norms](#) surrounding the act) also contributes to whether or not the person will actually perform the behaviour. This intention is itself determined by the person's attitudes and his subjective norms towards the behaviour. According to the Theory of Reasoned Action, the amateur boxers' intention to dope (to take banned performance enhancing substances) is a function of their attitudes and subjective norms. Their subjective norm can be the perception of coaches' ability, and training modalities among others. This theory is therefore relevant to this study in the sense that it will be used to study administrative factors as it predicts the intention of amateur boxers in consumption of

banned substances (doping) to enhance the performance among amateur boxers in Abeokuta metropolis, Ogun state.

Research Hypotheses

The following hypotheses were tested in the course of the study:

1. There will be no significant relative contribution of administrative factors (coaches' competence and training infrastructures) on dopingintension among amateur boxers in Abeokuta, Ogun state
2. There will be no significant joint contribution of administrative factor (coaches' competence and training infrastructures) on dopingintension among amateur boxers in Abeokuta, Ogun state

Methodology

This research adopted the descriptive research design of the correlational type. This was best used in comparing and contrasting the general characteristics of a particular group of people of a large population that involves the use of a

Questionnaire. The population of this study consisted of all amateur competitive boxers who registered and train in all state-owned sports centers in the Abeokuta metropolis of Ogun State. The sample for this study was seventy-four (74) respondents which were selected through purposive and total enumeration sampling procedures.

The research instrument for this study was a self-developed questionnaire was used to collect data. The instrument was divided into two (2) sections. Section A was on demographic data and section B was on variables of the study. Data were collected on a 4-point Likert scale of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD). The instrument was administered with the aid of 5 research assistants.

The analysis of the data utilized Inferential Statistics of Pearson Product Moment Correlation (r) and inferential statistics of Multiple Regression (R) at 0.05 level of significance.

Result

Table 1: Summary of correlation matrix on the relationship between administrative factors and dopingintension

Variables	Mean	SD	Doping	Coaches' competence	Training Infrastructures
Doping	21.29	3.25	1		
Coaches' competence	20.60	2.70	.210*	1	
Training Infrastructures	20.79	2.33	-.109	.264*	1

**Correlation is significant at 0.05 (2-tailed)

Table 1 showed the inter-correlational matrix of the relationship between

administrative factors (coaches' competence and training infrastructures)

and doping intensity among amateur boxers in Abeokuta metropolis, Ogun state. The table revealed that coaches' competence ($r=0.210$ $p<0.05$) had a significant relationship with doping among amateur boxers in Abeokuta metropolis, Ogun state. However, there was no significant relationship between training infrastructures ($r=-0.109$, $p>0.05$) and doping. The table also further indicated

that the coaches' competencies had positive and weak correlation coefficient magnitude with doping while training infrastructures did not have. The null hypothesis that there will be no significant relationship among administrative, socio-cultural factors, and doping intensity among amateur boxers in Abeokuta metropolis, Ogun state was therefore rejected.

Hypothesis 1: There will be no significant relative contribution of administrative factors (coaches' competence and training infrastructures) on doping intensity among amateur boxers in Abeokuta, Ogun state.

Table 2: Regression analysis on the relative contribution of coaches' competence and training infrastructures) on doping intensity among amateur boxers in Abeokuta, Ogun state

Variable	Unstandardized coefficients		standardized coefficients	t	Sig.
	B	Std. Error	Beta (β)		
(Constant)	7.302	3.953		1.847	.069
Coaches' Competence	.257	.144	.196	1.781	.009
Infrastructure	.516	.167	.339	3.081	.003

a. Dependent Variable: doping

Table 2, shows that the coach's competence ($\beta=.196$, $p<.05$) and infrastructure ($\beta=.339$, $p<.05$) had a relative contribution on doping intensity among amateur boxers. Hence, the null hypothesis which stated that there will be no significant relative contribution of administrative factor (coaches'

competence and training infrastructures) on doping intensity among amateur boxers in Abeokuta, Ogun state is rejected. The implication is that coach's competence and infrastructure independently contributed to doping intensity among amateur boxers in Abeokuta, Ogun state.

Hypothesis 2: There will be no significant joint contribution of administrative factors (coaches' competence and training infrastructures) on doping intensity among amateur boxers in Abeokuta, Ogun state.

Table 3: Regression analysis on the joint contribution of administrative factor (coaches' competence and training infrastructures) on doping intension

R=.434 R²=.189 Adj. R²=.166						
Model	Sum of Squares	DF	Mean Square	F	Sig. (p value)	Remark
Regression	174.653	2	87.326			
Residual	751.667	72	10.440	8.365	.001	Sig.
Total	926.320	74				

a. Dependent Variable: doping

b. Predictors: (Constant), Infrastructure, Coaches' Competence

Table 3 reveals that there was a significant joint contribution of administrative factor (coaches' competence and training infrastructures) on doping intension among amateur boxers in Abeokuta, Ogun State ($F_{(2,72)}=8.365$; $R=.434$, $R^2=.189$, $\text{Adj.}R^2=.166$, $p<.05$); with about 18.9% of the variation accounted for by the independent variables. Hence, the null hypothesis which stated that there will be no significant joint contribution of administrative factor (coaches' competence and training infrastructures) on doping intension among amateur boxers in Abeokuta, Ogun state was rejected. This implies that coaches' competence and training infrastructures jointly contributed to doping intension among amateur boxers in Abeokuta, Ogun state.

Discussion

Based on the findings from this study on research hypothesis one revealed that the coach's competence ($\beta=.196$,

$p<.05$) and infrastructure ($\beta=.339$, $p<.05$) had a relative contribution on doping intension among amateur boxers. This, therefore implies that the coach's ability can independently contribute to doping intention among amateur boxers in Abeokuta, Ogun state. This finding is in agreement with the findings of Erickson, McKenna, and Backhouse (2015) that coaches can influence athletes either in favor or against doping as the attachment between coaches and athletes can deter athletes from doping. This finding is also in line with the findings of Pappa and Kennedy (2013) which indicated that athletes caught doping reported that coaches are always aware of whether their athletes are doping and what substances they are using. The finding of this study also shows that training materials independently contributed to dopingintension among amateur boxers in Abeokuta. Findings from this study also revealed that the coach's competence ($\beta=.196$, $p<.05$) and infrastructure ($\beta=.339$,

$p < .05$) had a relative contribution to doping among amateur boxers. This, therefore, implies that the coach's ability can independently contribute to doping intension among amateur boxers in Abeokuta, Ogun state. This finding is in agreement with the findings of Erickson, McKenna, and Backhouse (2015) that coaches can influence athletes either in favor or against doping as the attachment between coaches and athletes can deter athletes from doping.

Analysis from findings on hypothesis three revealed that there was a significant joint contribution of administrative factor (coaches' competence and training infrastructures) on doping intension among amateur boxers in Abeokuta, Ogun state ($F_{(2,72)} = 8.365$; $R = .434$, $R^2 = .189$, $Adj.R^2 = .166$, $p < .05$); with about 18.9% of the variation accounted for by the independent variables. As the null hypothesis states the null hypothesis which stated that there will be no significant joint contribution of an administrative factor on doping intension among amateur boxers in Abeokuta, Ogun state was rejected, which means the coaching ability and the training equipment and facilities will jointly contribute to their doping intension. This is in line with the findings of Engelberg and Moston (2015) that coaches may indirectly and inadvertently support doping intension through the lack of formal activities or education against doping or by endorsing pro-doping attitudes. This is also connected with the findings of Waddington (2000) who pointed out that the decision to dope is largely influenced by a complex and extensive network of people who interact with the athlete such as the coach, teammates, and support personnel. Also, the findings of Blank et al

(2015) stated that among adolescent and young adult athletes, coaches and trainers have been identified as particularly influential for athletes' doping attitudes, experiences, and behaviors, the influence, practice, and the nature of the coach can also influence the doping involvement of amateur athletes.

Conclusion

Based on the findings of this study, it was concluded that coaches' competence had a significant relationship with doping intension while training infrastructure did not have any significant relationship with doping intension among amateur boxers in Abeokuta, Ogun state. Furthermore, administrative factors of coaches' competence and infrastructure had a relative contribution to doping intension among amateur boxers. This means that competence and infrastructure independently had a strong influence on doping among amateur boxers in Abeokuta, Ogun state.

Also, there was the relative significant joint contribution of administrative factors (coaches' competence and training infrastructures) on doping intension among amateur boxers in Abeokuta, Ogun state. This implied that coaches' competence and training infrastructures jointly had a strong influence on recreational sports participation among the respondents.

Recommendations

1. Anti-doping seminars should be staged for high school athletes as this could help acquaint them with knowledge of doping

early enough and also yield positive attitudes towards doping prevention.

2. More focus and approach should be on providing and improving boxers' training equipment and facilities which will, in turn, give them the opportunity for quality training and better performance without seeing the need for doping.
3. Coaches and other Athlete Support Personnel (ASP) should out rightly discourage their boxers motivated from taking any form of performance-enhancing drugs before, during, and after the competition as this could prevent the athletes from falling into the prey of positive detection of doping during a competition which could in-turn lead to outright disqualification from the event.
4. The boxing federation through the respective boxing federations and coaches should make available on regular occasions the lists of banned and prohibited substances to the boxers. This could acquaint them and update their knowledge on what to consume before, during, and after the competition.
5. There should be strict punishment for coaches and other Athlete Support Personnel (ASP) who are found encouraging their athletes to engage in doping as this will deter the coaches from taking part in this unsporting act.

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