



DOPING AMONG MINNOWS IN GHANA: IS ELIGIBILITY THE MAIN ISSUE?

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Abstract:

Despite the use of drugs among amateur athletes linked to inadvertent doping, there is a gap in the literature about other factors that prompted doping behaviour. The present study examined if eligibility to participate in sports competitions is the main cause of doping among young athletes in Ghana. To achieve this, an interpretative qualitative research design approach was adopted. Purposive and snowballing sampling techniques were employed to recruit 10 former basic school student-athletes who admitted to using drugs to participate in school competitions. Semi-structured interviews were the instruments used to collect the data to answer the research questions. Thematic analysis was employed after the data have been transcribed verbatim. The findings of the study revealed that students take performance-enhancing drugs to “become eligible to participate in the competitions”, “to improve stamina”, and “gives them extra energy to perform without getting tired”. Again, it was found that the former student-athletes were unaware of the effects of taking the drugs. The study further exposed some effects of performance-enhancing drugs which included addictiveness and physiological health challenges on the individual. The study recommends that stakeholders should educate minnows on the adverse effects of taking drugs without a doctor's prescription. Again, age should be used when organising competitions for student-athletes at the basic school level rather than weight, height and facial description.

Keywords: inadvertent doping, minnows, performance-enhancing, former athletes

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1. Introduction

Researchers over the years have identified a myriad of risk factors for deliberate and inadvertent doping [1,2]. Risk factors for inadvertent doping include inadequate knowledge of the anti-doping rules [3], deliberate attempts to use supplements to aid performance [4], and belief in the effectiveness of certain substances and doping methods [5]. An in-depth knowledge of anti-doping rules can decrease the risk of inadvertent doping among athletes [5,6]. Inadvertent doping is regarded as the main cause of doping behaviour among the youth. Initially, doping was considered to be dominant among only elite athletes [7]. However, the issue is now common among athletes competing at the amateur and recreational levels [7]. While many athletes dope intentionally to get an unfair advantage, others dope unintentionally due to an inadequate understanding of the anti-doping rule violations or because of accidental consumption of substances [3, 8]. To better understand doping practices among the youth, there is a need to examine what triggers them into using performance-enhancing drugs.

Kirby, Moran and Guerin [9] propounded that individual psychological factors and external pressures on athletes may ignite doping behaviour. This was admitted after the researchers examined the experiences of five elite athletes who admitted to using doping substances to aid performance. Again, the use of performance-enhancing drugs has been fueled by current enactment made by some major sports-governing bodies policies legitimizing some of the doping substances [10]. For instance, the eligibility of females with hyperandrogenism to compete in women's sports is debatable and has raised a lot of attention [10]. Therapeutic Use Exemptions (TUEs) have also been found to define the legitimacy of the use of performance-enhancing drugs [11]. Many athletes believe that obtaining TUEs can enable them to take performance-enhancing drugs without further checks. Therefore, there is a need for World-Anti Doping Agencies and other bodies to provide institutional justification for use of performance enhancing drugs [12].

Since doping can harm the sports industry, athletes must participate in anti-doping education programs and understand anti-doping rules [13]. Several studies have focused on anti-doping education, especially among the youth population [13, 5]. Sipavičiūtė et al. [13] asserted that anti-doping education should target young athletes and include family, friends, and coaches. In comparison to anti-doping programmes that focused on health education and informative knowledge, moral and ethical behaviour-based anti-doping education was thought to be more effective in reducing athletes' doping behaviour. Because coaches have the potential to influence athletes' doping behaviour, sports organizations and policymakers should work together to help coaches operate within anti-doping rules by developing specific doping prevention programs. Hurst et al. [5] assessed the effectiveness of UK Athletics' Clean Sports programme in preventing both unintentional and intentional doping in junior elite athletes. Although the programme was successful as athletes were likely to unintentionally dope in the short and medium term after the programme, the effects of intentional doping were not well established. The study suggested that as doping education is relevant for young athletes

to inform their decisions on taking drugs, it should be done consistently. However, these studies focused on areas where there is evidence of anti-doping programmes that equally target young athletes in developed countries.

Studies on doping are more westernized, therefore, studies on doping among athletes in developing countries should be examined to determine the causes and effects among these populations. Again, doping education in sports have been examined in countries where anti-doping agencies exist, however, little is known about places where no such agencies are campaigning against doping in sports. Hence, the current study examined doping practices among young athletes in Ghana. There is an alleged widespread use of doping drugs among athletes participating in school competitions which have led to many becoming drug addicts. Although some studies have examined doping behaviours among athletes and support personnel from the Ghanaian perspective [14], little is known about what prompted such behaviours. The main objective of the study was to determine whether eligibility was the main factor that prompted junior athletes to use drugs in Ghana and their perception of the use of drugs for doping. The sub-objectives were;

- 1) To identify reasons that led the then student-athlete to take drugs during school sports.
- 2) Examine the perception of the participants on the use of performance-enhancing drugs.
- 3) To examine the consequences of taking performance-enhancing drugs.

2. Experimental or Materials and Methods

2.1. Participants

The study took place in a community in Ghana. The purpose was to learn more about how then pupils take drugs and substances to reduce weight to become eligible to participate in school sports competitions. The study was approved by the ethical committee of one of the colleges of the researchers with informed consent signed by the participants. The inclusion criteria of the participants were that they should be 20 years or older and have taken a drug or substance to reduce weight to enable them to participate in school sports. Data were collected from semi-structured interviews with 10 participants in 2021 and 2022. Their age ranged from 19 to 22 and they have used drugs or substances to reduce weight to enable them to participate in school competitions.

Snowballing and purposive sampling approaches were used to recruit the participants. Initial contact with one of the participants assisted to recruit the others.

2.2. Measures

The study adopted an interpretative qualitative research design because the intent was to let participants give an account of how they used drugs or substances to enable them to participate in school sports. To this end, a qualitative phenomenological approach was adopted to examine the views of the 10 former student-athletes who have used drugs in participation. The study's philosophical assumptions were founded on interpretivism,

which holds that reality is perceived through reflexivity and meaning considerations, as well as comprehension of social and experimental characteristics in research [15]. As a result, instead of being hampered by a positivist research philosophy, the researchers were aware of individual meanings and contributions [16]. The researchers were interested in investigating the former student-athletes direct experience with the research topic.

2.3. Procedures

An initial contact with a former student-athlete on the research topic started the whole process. The identified athlete was interviewed for 20 minutes on the reason why he used performance-enhancing drugs during his time as an athlete at the basic level. After the interview, the participant was asked to recommend others who were taking some of the drugs to aid them to participate in the basic competitions. Afterwards, nine (9) others were identified. The interviews lasted between 15 to 20 minutes and were recorded. Before beginning the main questions, each participant was given a preamble explaining the purpose of the study to obtain their consent. The participants were informed that the interviews would be recorded. Following that, they were asked to sign consent forms and given the option of using any nickname of their choice to conceal their identity when writing the results.

2.4 Analysis

Clarke and Braun's [17] thematic analysis was used in the study. This necessitated transcription of the taped interviews, followed by coding. Initially, the researchers read and reread the interview transcripts to identify potential themes. During the second stage of the analysis, the researchers reviewed the codes that were identified in the first phase. Following that, the researchers specifically considered how to maintain the diversity in the initial codes' responses while generating dominant elements and higher-level sub-codes. The three main research questions informed this process. The researchers identified quotes that were consistent with the main themes during the third stage of analysis. Following that, the researchers revised the themes before describing and naming them. Finally, the researchers wrote the findings after finalising the themes.

Member checking, in which transcribed interviews were sent to participants to confirm whether they represented what they wanted to say during the interview, was used to ensure the data's reliability. During this section, participants were supposed to review the transcribed data and confirm that it accurately represented what they wanted to say during the main interview, as well as provide additional views or data [18]. 81% of the participants confirmed that the results accurately reflected their intentions. They suggested a few changes that were added.

3. Results and Discussion

The purpose of the study was to examine drug use among minnows during sports competitions at the basic school level in Ghana. In all, only 10 male former basic school

athletes participated in the study. The former student-athletes played sports like football, volleyball and athletics with some of them participating in more than a single event. The age range was 19 to 22 years. The participants asserted that they used drugs such as marijuana, tramadol, energy drinks, marijuana toffee and furosemide (F) tablets to improve their performance and reduce weight to be eligible to participate in school sports.

To identify reasons for the use of the performance-enhancing drugs, the common theme that emerged was to become eligible to participate in the competitions. A participant proclaimed:

“So, when you are going to check your weight there is a limit that you shouldn’t weigh beyond, if your weight goes beyond then you are not eligible to participate in the games. So, because we were eager to participate in the games at all costs, then we have no option than to take those things to enable us to participate”.

From another participant eligibility to participant is associated with weight reduction. To support this claim, P2 maintained that:

“I heard it from my friends, for instance, a drug like “F”, for instance, if you want a reduction in your weight. Or lime the one they used to wash buckets, that one also enables you to urinate a lot so it can equally reduce your weight”.

This statement is equally linked to eligibility to participate in school competitions.

On the issue of becoming eligible to participate in the games, the findings showed that many of the student-athletes take drugs with the intent to reduce weight. This was necessitated as the organisers of the competitions looked at certain attributes that allow students to participate in the organised competitions which include weight and facial characteristics. Therefore, students were eager to reduce their weight to enable them to participate. This supports the assertion that the issue of eligibility in sports doping has been fueled by current enactment made by some major sports-governing bodies policies [10]. In the instance above the organisers of the basic school, competitions become the sport’s governing bodies.

Another theme that emerged under this research question was to improve stamina. The former athletes take performance enhancing drugs to enable them to improve their work rate on the field. P5 confirmed this by saying;

“To increase my stamina so I can outplay my opponents. Yes, some way. I was able to play for longer minutes and then I was having a lot of stamina so, I was able to outplay my opponents”.

The second objective was to examine the perception of the participants on the use of performance-enhancing drugs. The participants perceived that it gives them extra energy to perform without getting tired. Some of the responses supporting this assertion:

“At times when I ask some friends who take in those kinds of stuff, they usually tell me it makes them hard, they don't feel tired when they are playing, so, if you understand me it gives them extra energy to perform without fatigue but for me, because I have not taken such drugs I don't know how it feels at. So, ba cannot tell you whether what they are saying is true or false. I have also, seen some athletes who play normally without drugs. Therefore, what I would like to say is that you don't have to take the drug for it to become part of you, you need to be yourself to enable you to participate well”.

Another significant perception of the former student-athletes was that they were unaware of the effects of taking the drugs. This implies that it was a form of inadvertent doping. One participant claimed:

“I took the drug without knowing its impacts, the main idea was that I wanted to play and therefore, I was not aware of any adverse consequences”. This was further supported by P6 *“my general perception is that I have to stop using the drugs because when you take it, it energizes your strength but after you finish playing the game the pains will still come back again”.*

This is a clear case of inadvertent doping as the participants claimed they have inadequate information about taking the drugs. The findings support the assertions that risk factors for inadvertent doping include inadequate knowledge of the anti-doping rules [3]. However, it contradicts a deliberate attempt to use supplements to aid performance [4], and belief in the effectiveness of certain substances and doping methods [5]. It is noteworthy that the participants in the study were not introduced to anti-doping education and therefore, could have reacted otherwise if they were aware of the impacts of taking performance-enhancing drugs and substances. Therefore, the importance of anti-doping education is relevant and should target young athletes and include family, friends, and coaches [13]. Young adult athletes were interviewed about doping education in a study conducted by [19]. The majority of the athletes who took part in this study reported a lack of doping education. Considering this, such programmes should be focused on health education and informative knowledge, moral and ethical behaviour-based anti-doping education and should be more effective in reducing athletes' doping behaviour.

Lastly, the following themes emerged to examine the consequences of taking performance-enhancing drugs. Addictiveness came out as the main theme of this objective. To support this P5 acclaim:

“No, I was not aware. It has affected me negatively. Sometimes when I'm there and I'm not playing I feel like going to do that (smoke)”. Another participant claimed *“Because, anytime I wanted to play, I have to take so, I have become addicted to it. What I will say is that I will advise others not to take drugs or take other energy drinks to influence their play all that they have to do is train hard so they can play hard”.*

Another consequence of a performance-enhancing drug is the effect on physiological health as the drugs affect a part of the body in one way or the other. P1 confirmed:

"Sometimes, because you will not be eating, you will feel some pains in your stomach and constant urinating. Yeah, I was aware. No. I don't think is good because too much drug can hurt your life".

P10 declared:

"Yeah, it has an effect. At times, after taking it and you are running you will feel that you are not too okay because of the heartbeat".

P3 stated:

"I have to stop using the drugs because when you take it, it energizes your strength but after that, the pains will still come back again".

Several studies have been conducted to explain the negative consequences of doping behaviour aside from insanity and other negative consequences, the cardiovascular effects of doping substances are becoming increasingly common. Addiction can lead to the use of drugs or the inability of athletes to abandon certain practices. Due to the importance of mental health in sports for optimal performance and athlete well-being, there is evidence that alcohol addiction, as well as the addictive behaviours of many elite players, plays a critical role in sports sciences [20]. This behaviour may begin as a result of inadvertent doping during the athlete's early career. This problem can be motivated by a variety of factors, including psychological dependence, stress relief, negative emotion reduction, tolerance, and withdrawal [21]. As a result, proper anti-doping education should be provided to young athletes so that they are aware of the negative consequences of using unprescribed drugs.

There are physiological consequences of doping as well. The physiological effects of doping in sports are both physical and psychological (depression and anxiety), and they can have an impact on male reproduction. Furthermore, the illicit use of prohibited drugs (i.e., doping) has reached epidemic proportions, and their actions, which are unfortunately frequently undervalued by both amateur and professional athletes, are regarded to disturb the male hypothalamic-pituitary-gonadal axis at various levels and through various mechanisms, culminating in hypogonadism and infertility [22].

4. Conclusion

In conclusion, despite inadvertent doping as a major cause of doping among minnows, children deliberately take drugs to assist them to reduce weight to become eligible to participate in sports competitions. Considering this, there is a need to establish anti-

doping agencies that will campaign on doping in sports among student-athletes, especially at the basic levels in developing countries where there is little knowledge on the effects of taking drugs to improve performance or aid in reducing weight. This can reduce the number of people who use drugs to participate in sporting activities in the future.

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Ethics Approval Statement

Ethics approval was granted by the college of the corresponding author.

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Appendix: Informed Consent

a. Purpose of the Research Project

The purpose of this research was to determine whether eligibility was the main factor that prompted junior athletes to use drugs in Ghana and their perception of the use of drugs for doping.

b. Procedure

You will be interviewed for approximately 20 minutes. The interviews will be conducted via face to face at places of your convenience. Responses from the interview will be recorded and transcribed to Microsoft word.

c. Risks and Benefits

There are no foreseeable risks for you by participating in the interviewing process. You will have the benefit of participating in the research and sharing your views about sports doping in Ghana. Participating in this research voluntarily. You may contact the researchers later to access the summary of the research results.

d. Extent of Anonymity/Confidentiality

Your identity will remain anonymous during the research process. Personal pronouns will be used instead of real names to protect the anonymity and privacy of the participants. The recorded interviews will be transcribed verbatim for the research process. Under no circumstance will the recorded interview be made available to anyone. The recordings will be disposed of once the research process has ended.

If you have any questions or concerns, do not hesitate to contact the primary researchers Mr Nathanael Adu on email: adun327@gmail.com Mr. Emmanuel Aboagye email: aboagyeemmanuel13@yahoo.com and Stephen Kyenkyehene Addae on email: nanaaddaekyenkyehene@gmail.com

d. Freedom to Withdraw

Participants can freely withdraw from the study at any time and at any cost. Participants can also decide not to answer any of the questions at any time. The researchers also have the right to discontinue the interview process with a participant at any given point in time without any explanation.

e. Subjects Responsibility

By signing below, I agree to voluntarily participate in this study and to perform the following responsibilities:

- 1) To be open and honest.
- 2) To answer each question to the best of my ability and knowledge.

Signature:.....

Date:.....

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