

DOPING PRACTISE AMONG ACHIEVEMENT SPORTS ATHLETES: A THEMATIC ANALYSIS

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Abstract

This qualitative study uses interviews to determine doping practices among accomplished athletes. A total of 42 athletes were recruited using purposive sampling, with twelve weightlifters (29%), seven powerlifters (17%), five long-distance running athletes (12%), and eighteen football players (42%). Thematic analysis was used to analyze the interview results based on the interview questions. The findings indicate that athletes' doping knowledge is insufficient because they have no understanding of doping and anti-doping regulations. However, they are aware of the penalties they will face if caught doping. Athletes can obtain doping substances easily from coaches, pharmacies, and even online from other countries. When asked whether they had ever used doping to enhance their stamina, most of the athletes responded that they had never done so, while others admitted to using it. To summarise, anti-doping agencies and sports organizations responsible for the use of doping in athletes are expected to be able to provide anti-doping education so that athletes can increase their knowledge of doping and its rules to prevent the use of doping in athletes. Drug distribution restrictions and oversight must be tightened so that drug purchases and sales, particularly those requiring a doctor's prescription, can be monitored and athletes cannot easily obtain doping-related drug compounds. Researchers are recommended to conduct further studies on increasing stamina without using drugs by taking a nutritious diet.

Keywords: Athlete, Doping, Drugs, Practice, Stamina.

INTRODUCTION

Sport is essential to maintain human health (Budiawan et al. 2020). By the times, sports as a means of maintaining human health and a competition that can boost national and state pride (Effendi 2016). Through sports, people gain insight into their abilities, strengths, and competencies (Adnan and Indah 2019). An athlete is a person who participates in a competition or sporting match that requires strength, agility, and speed (Sepriani et al. 2021; Sinaga 2016). However, it is not easy for athletes to win every match. Hence, moral and material support is required to produce superior and tenacious athletes capable of achieving the expected outcomes as an athlete's competition becomes more intense (Royana 2013). Concerns experienced by an athlete will result in a crisis of confidence that can impair their concentration during a match (Aminullah, Nurdin 2020). Therefore, this condition encourages some athletes to commit various forms of cheating to overcome the challenges they confront as quickly as possible and to become victorious.

Consuming substances that can increase endurance and self-confidence is a form of cheating in sports competitions, one of which is doping. Endurance refers to a person's capacity to work at a high level for an extended amount of time without becoming exhausted (Sepriani et al. 2024). Athlete doping is a form of cheating contrary to the spirit of sport and harmful to fair competition (Petróczi and Boardley 2022). Regarding

substance consumption, substances that are always prohibited, prohibited in competition, and prohibited in certain sports have been recognized, among which the following stand out: Diuretics and masking agents, Steroids and Cannabinoids, as well as peptide hormones, growth factors, and related substances (Fuentes-Barría, Garrido-Osorio, and Aguilera-Eguía 2023). Sports are not merely an arena for competition, demonstrating strength, defeating others, and achieving victory; they are also a medium for creating humans who act and behave humanely, respect and appreciate others, form noble attitudes and behaviour, avoid greed, and are strong enough to benefit other humans and the environment (Petróczi 2021). If athletes engage in doping, they inevitably reject the essence of sport (Kusuma 2018).

Doping refers to the use of banned substances and methods to improve performance during sports competitions (Kuswahyudi, Dlis, and Tangkudung 2020; Sepriani et al. 2022). In 2021, the World Anti-Doping Code (WADC) defines doping as violating one or more anti-doping rules (WADA 2021). The use of doping is of prohibited method of increasing the performance of an athlete (Chornous et al. 2024). Doping is prohibited in sports because it is detrimental to the health and development of athletes' careers (Sepriani 2014). Doping can impair the function of vital organs like the heart, liver, and kidneys and even result in fatality (Motram and Chester 2018). Nevertheless, the prevalence of doping among athletes continues to rise annually. In 2020, the World Anti-Doping Agency (WADA), the world's anti-doping agency, reported 1,923 violations of doping rules in 2018, which increased from the previous year, which was 1,776 in 2017 and 1,595 in 2016 (WADA 2020a). In Indonesia, the prevalence of doping is on the rise. At the XVI National Sports Week (PON) in 2004, there were five doping cases; at PON XVII in 2008, there were five; at PON XVIII in 2012, there were seven; and at the succeeding PON in West Java in 2016, there were twelve.

Practice is the act of practicing a theory, method, or other thing to achieve a certain goal for the desired interest (Fatimah 2020). Predisposing, enabling, and reinforcing factors can all influence practice. Predisposing factors include knowledge, attitudes, actions, beliefs, values, and traditions. While enabling factors include facilities and infrastructure, in contrast, reinforcing factors include drivers that strengthen the occurrence of these practices (Notoadmodjo 2012). Previous studies found that athletes' knowledge about doping was still low (Effendi 2015; Sepriani et al. 2022). Knowledge has a predictive ability for something (Sepriani 2019). Research related to doping practices in athletes in Indonesia, especially in West Sumatra, has never been done before. Therefore, this research is timely to find out how doping practices occur among athletes in Indonesia, especially in West Sumatra.

METHODS

Study design

This research is qualitative study using the interview method. The interview method was used to investigate how doping practices have occurred among outstanding athletes. The researchers then transcribe the interview data and analyse the respondents' answers to identify themes that cause doping among athletes.

Research Instrument

This study used a doping practice interview guide developed by the researchers. The open-ended interview guide which was adapted from (Aboagye, Appiah, and Yawson 2020) is presented in Table 1. This instrument consists of questions on doping

definition, doping rules, how to get doping, doping use, doping tests, and the dangers of doping, which were then developed into nine questions with probes.

Table 1: Open-ended Interview Guide

Variable	Question
Doping Practices	1. What you know about doping?
	2. Is doping in sport allowed? Why?
	3. How do athletes usually obtain doping substances?
	4. Where do athletes get doping substances from?
	5. Do athletes in your sport need doping? Why
	6. Have you ever used them? Why?
	7. Is the use of doping harmful to the body? Explain
	8. Is the use of doping bad for the athlete's career? Elaborate
	9. How does the use of doping impact the athlete's social environment? Explain

Participants

The sample for this study included 42 athletes from weightlifting, powerlifting, long distance running, and soccer. To ensure confidentiality, each respondent was given a code made up of letters and numbers. W1-W12 were assigned to weightlifters. Powerlifting athletes were assigned codes P1-P7. Long distance runners were given codes A1-A5, while soccer players were given codes S1-S18. This sport was chosen because it is most affected by doping cases (Miles and Huberman 1994). Purposive sampling technique based on the research inclusion criteria was used to identify the athletes for this study:

- a. Active as an athlete at the time when the study was conducted
- b. Actively participate in competitions in their respective sports
- c. Willing to be a research respondent

Procedure

This study used the approach by Miles and Huberman (1994) as shown in Figure 1. The steps taken are as follows (Miles and Huberman 1994):

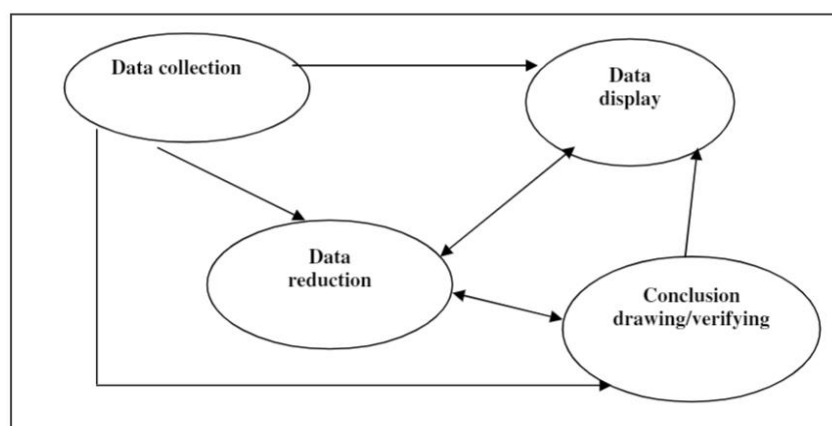


Figure 1: Qualitative data analysis procedures

- a. The researchers explained the research procedures to the respondents and asked for the respondent's consent to participate in all stages of the research.
- b. The researchers gathered data by interviewing the athletes and asking several questions about doping practices.

- c. Researchers performed data reduction. Researchers noted and documented the responses of participants. Researchers classified, directed, and discarded unnecessary data and organized it.
- d. Researchers analyzed the data. Data analysis was carried out using qualitative analysis in the form of thematic analysis.
- e. The researchers drew conclusions from the obtained research results.

Thematic Analysis

Data were analyzed thematically based on the respondents' answers to each interview question. Thematic analysis is a technique for analyzing data with the objective of identifying patterns to determine themes from the data collected by researchers (Heriyanto 2018). According to Braun and Clarke (2006), there are six stages in thematic analysis, including the following (Braun and Clarke 2006):

- a. The researchers grasped and transcribed the data. The researchers reread the data and jotted down the initial idea for the study.
- b. The researchers assigned codes to the data in a systematic manner and compiled relevant data for each code.
- c. The researchers consolidated the codes into potential themes and compiling all relevant information for each potential theme.
- d. The researchers reviewed the themes, specifically by re-examining the themes of all data sets in order to generate thematic maps of the analysis.
- e. The researchers analysed and refined the specifications of each theme.
- f. The researchers drew conclusions by connecting the analysis to the research questions and the existing literature.

Findings

1. Respondent Characteristics

In this study, 42 athletes participated, with 27 (64%) being male athletes and 15 (36%) being female athletes. All athletes who participated in this study have completed a senior high school education. Two respondents (5%) have been athletes for less than one year, six (14%) have been athletes for 1-3 years, and 34 (81%) have been athletes for more than three years. Table 2 presents the background of the respondents.

Table 2: Background of the Respondents

Variable		Frequency	Percentage
Gender	Male	27	64%
	Female	15	36%
Education Level	Senior High School	42	100%
	Bachelor Degree	0	0%
Involvement as an Athlete	<1 year	2	5%
	1-3 years	6	14%
	>3 years	34	81%
Sport field	Weightlifting	7	17%
	Powerlifting	12	29%
	Long distance running	5	12%
	Soccer	18	42%

a. Transcription Findings

To transcribe the data, the researchers carefully reviewed the recordings of all the interviews with the respondents. This section contains only relevant and important transcription. As the interview was done in Bahasa Indonesia, back translation was used and verified by the researchers to ensure accuracy. Only the gist of the transcription will be presented for the purposes of this study.

b. Definition of Doping

The researchers posed one question "What do you know about doping?" to determine doping definition by the respondents. All the respondents gave different answers of which three were chosen as follows:

Doping is a type of dangerous substance; doping is a type of illegal drug whose use is to increase the stamina of athletes.

Respondent P3

Doping is a drug to increase stamina that is prohibited by the world and doping is a banned supplement.

Respondent W2

In addition, respondent S5 stated the following:

Doping is a potent drug that soccer players widely use and doping is a drug that makes the body fresh and not easily tired.

c. Doping Rules

Based on doping rules, the researchers asked the respondents, "Is doping in sports allowed? Why?" Each respondent provided a unique response.

Doping is prohibited because it can harm the body.

Respondent W1

Doping is prohibited because it is a violation in every sport.

Respondent A2

Similar responses were given by some athletes as follows:

It may be used if it does not harm and can increase stamina.

Respondents P2 and P5

d. How to Get Doping?

The researchers posed two questions, "How do athletes usually get doping substances?" and "Where do athletes get doping substances?" Respondents' responses to the first query included

Given by the coach or buy at the pharmacy.

Respondent P8

We can get doping substances from abroad or from people who often use doping.

Respondent W1

Get doping from drug and supplement sellers.

Respondent P4

e. Doping Use

With regards to doping use, the respondents were asked two questions, "Do athletes in your sport need doping?" and "Have you ever used it?"

The following are the responses to the first question:

There is no need because to improve performance athletes can do it by increasing training.

Respondent S7

Possibly necessary, but in the form of dietary supplements or vitamins that promote physical fitness.

Respondent A1

With regards to the second question, the following responses were obtained:

Never, because anyone caught using it will be banned from the competition.

Respondent S6

No, it is prohibited during the game.

Respondent W7

One athlete gave a different answer.

Yes, because supplements are necessary to increase stamina.

Respondent P2

f. The Dangers of Doping

The researchers asked the respondents three questions with probes on the dangers of doping, "Is doping harmful to the body? Explain. Is doping harmful to an athlete's career? How does the use of doping affect the social environment of the athlete? Explain". The athletes who participated in this study responded differently to each question.

With regards to the question, "*Is doping harmful to the body?*" two respondents provided the following feedback:

Yes, it can damage the body.

Respondent A3

Yes, it is extremely dangerous because it can cause a heart attack and even death.

Respondent P5

When asked, "*Does the use of doping have a bad impact on the athlete's career? Explain*", three respondents provided different answers:

Yes, because if you are found to be using doping, you will get sanctions in the form of a ban on competition.

Respondent A1

Yes, if caught, you will be avoided by friends and can no longer participate in that sport.

Respondent P10

Yes, when we are caught using doping we will not be allowed to participate in the match.

Respondent W4

In the third query, "How does the use of doping affect the social environment of the athlete? Explain", the athletes who responded to this question answered such as the following:

Athletes will be ostracized.

Respondent S10

Very bad because it will influence other athletes to use doping.

Respondent A5

2. Thematic Analysis on Doping Practices

This study aimed to examine doping practices among athletes in achievement sports. The research was conducted using an interview guide involving 42 athletes who provided different answers to each question on doping practices. The themes related to the research objectives were identified using thematic analysis. The gist of the transcription was carefully coded and categorized into relevant themes (refer Table 3).

Table 3: Doping practices

Theme	Code
Definition of doping	<ul style="list-style-type: none"> • Harmful substances • Types of drugs that can increase the stamina of athletes
Anti-Doping Rules	<ul style="list-style-type: none"> • Doping is a sporting violation • Doping is allowed if it is not harmful
How to get doping	<ul style="list-style-type: none"> • Given by the coach • Bought at a pharmacy • Bought online
Doping Use	<ul style="list-style-type: none"> • Not needed because it is prohibited • Needed to increase stamina
The dangers of doping	<ul style="list-style-type: none"> • Harmful to health • Bad for career

DISCUSSION

This study was conducted to determine the prevalence of doping among athletes who participated in achievement sports in the West Sumatra province, Indonesia based on an interview guide adapted from (Aboagye et al. 2020). In total, 42 achievement sports athletes were involved in this study comprising of powerlifting with twelve athletes (29%), weightlifting with seven athletes (17%), long distance running with five athletes (12%), and soccer with eighteen athletes (42%). These sports were selected because, according to the World Anti-Doping Agency, they are among the ten sports with the highest prevalence of doping in 2020 (WADA 2020b).

Athletes who became respondents in this study consisted of 27 people (64%) of the male gender and 15 people (36%) of the female gender. A total of two people (5%) athletes have been athletes for less than one year, six people (14%) have been athletes for 1-3 years, and as many as thirty-four people (81%) have been athletes for more than three years. Athletes who have long been involved as athletes will

undoubtedly have more experience than athletes who are still new, both in their discipline experience and experience in participating in competitions.

According to the interview findings, respondents provided varying responses to each query. For example, concerning the definition of doping in general, athletes define doping as the use of performance-enhancing drugs during competition. According to various definitions of doping, doping is the use of prohibited substances or methods to improve athletic performance (Mazanov et al. 2014; Sepriani et al. 2022; WADA 2021). According to the prohibited list issued by WADA, doping is not only a substance or compound but also a prohibited method. Doping-prohibited methods include manipulation of blood and blood components, chemical and physical manipulation, including altering the integrity and validity of samples, and the use of intravenous infusions or injections exceeding 100 ml per 12 hours, as well as the use of gene doping (Bezuglov et al. 2021; Heuberger and Cohen 2019; Mottram and Chester 2018). Respondents indicate that, in general, athletes comprehend doping as the use of prohibited substances or drugs but that related prohibited practices are poorly understood. Blood manipulation and infusions to increase an athlete's endurance are frequent examples of prohibited methods (Bezuglov et al. 2021).

The researchers asked the respondents about doping rules. According to most respondents, doping should be avoided because it is harmful to the body and is prohibited by law. However, some respondents stated that it could be used if it was not harmful. Athletes who view doping as allowable will undoubtedly trigger widespread practice of doping. The researcher believes that Ajzen's theory of planned behaviour can be used to explain this phenomenon, According to Ajzen's theory of planned behaviour, an individual's behaviour is determined by his or her desire to perform or refrain from performing the behaviour, which is determined by two variables, attitudes and subjective norms (Natawibawa 2018). Doping will be encouraged if the athlete has a subjective norm that doping is permissible as long as it is not dangerous. So, the need for anti-doping education has been proven to be the best way to prevent athletes from being tempted by doping, thereby maintaining athlete health and maintaining ethics in sports (Rodrigues, Reis, and Martinez 2023).

According to the findings, athletes can either purchase doping on their own or receive it from someone else. Athletes can obtain doping from their coach or by purchasing it from a pharmacy. This phenomenon is certainly not in line with the regulations that the coach is the person who should help athletes compete well without cheating. The coach is one of the people who exerts the most influence in the life of the athlete and has a fundamental role in the prevention of doping (García-Grimau, Casado, and De la Vega 2021). Ironically, the medical team is the most active athlete support personnel in preventing doping use, whereas the coach is not active in preventing doping use (Patterson, Backhouse, and Jones 2023). Due to their lack of expertise in doping and ignorance of the established anti-doping regulations, coaches are allegedly complicit in athletes' usage of performance-enhancing drugs (Mazanov et al. 2014). Therefore, it is envisaged that anti-doping education must be given to coaches as well as participants in each sport. As education is the key to doping-free sports (Woolf 2020).

The results of the research indicate that most athletes do not need doping. However, some athletes believe that doping is necessary to increase their stamina. Athletes commonly use doping for various reasons, including recovering rapidly from injury,

increasing recovery speed after training, increasing muscle mass and strength, reducing fat tissue, and enhancing endurance (Vlad et al. 2018).

Athletes are generally aware of the dangers of doping, as these substances can damage the body and impair the function of the heart, liver, and kidneys. Every doping substance that enters the body will be distributed to vital organs such as the liver and kidneys, making doping potentially detrimental to the organs of athletes (Kinahan, Budgett, and Mazzone 2017). Moreover, athletes are aware that doping will affect their careers and social environments. Athletes who dope will always desire to use doping again, so they feel insecure when competing if they do not use these compounds (Johnson 2011; Yıldız 2019). This condition can undoubtedly contribute to a decline in athlete performance.

CONCLUSIONS

Based on the present study concerning doping practices in athletes, it can be inferred that the understanding of achievement sports athletes regarding doping and anti-doping regulations remains limited. Moreover, athletes have easy access to doping substances, which can be acquired through many means, such as procuring them from coaches or trainers, purchasing them at pharmacies, or obtaining them online. The utilization of performance-enhancing substances among athletes is motivated by their desire to improve their endurance capacities. Nevertheless, it is widely acknowledged among athletes that the utilization of performance-enhancing substances, also known as doping, can have detrimental effects on their bodies, professional career, and social life.

Recommendations

The researchers recommend that anti-doping agencies and sports organizations responsible for the use of doping in athletes be able to provide anti-doping education so that athletes can increase their knowledge of doping and doping rules, thereby preventing the use of doping in athletes. Restrictions and monitoring of drug distribution must be tightened so that the buying and selling of drugs, specifically those that require a doctor's prescription, can be monitored, and athletes cannot easily obtain doping-related drug compounds. It is recommended that future researchers examine how to increase stamina without the use of substances that include doping, such as proper nutrition intake.

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