École des sciences de l'activité physique | School of Human Kinetics
Université d'Ottawa | University of Ottawa

MASTER EXECUTIF EN MANAGEMENT DES ORGANISATIONS SPORTIVES
EXECUTIVE MASTERS IN SPORTS ORGANISATION MANAGEMENT

MEMOS XXV 2022-2023

DEVELOPING AN EFFECTIVE ANTI-DOPING EDUCATIONAL PROGRAMME FOR UGANDA

MOSES BENON MWASE

TUTOR: PROF. LEIGH ROBINSON
UNIVERSITYOF ROEHAMPTON, LONDON

DECLARATION

I declare that this thesis, which I hereby submit for the degree of Masters in Sports Organization Management (MEMOS) by the University of Ottawa, Canada is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

Signature of Student: _____

Signature of Supervisor: _____

DEDICATION

This study is dedicated to my late father, Eng. Aspatha Kivebulaya Nabulongo Mwase and my mother, Mrs. Alice L. N. Mwase whose wisdom, love and unwavering support continue to inspire me every day. This work is a testament to your enduring influence on my life.

ACKNOWLEDGMENTS

I would like to express my deepest gratitude to my counterparts of the Uganda Olympic Committee Executive for the support accorded to me during MEMOS XXV. Specifically, to our President, Dr. Donald RUKARE and Secretary General, Ms. Beatrice AYIKORU, thank you for your leadership and the encouragement to soldier on.

I cannot thank enough the International Olympic Committee (IOC) and Olympic Solidarity (OS) for the scholarship opportunity that enabled me to be part of the MEMOS experience. This accorded me numerous learning and networking opportunities, and enabled me to join a prestigious family of cohorts.

I am indebted to my tutor and supervisor, Prof. Leigh ROBINSON for providing me with impeccable guidance and for exercising extraordinary graciousness and patience during our laborious journey.

I cannot forget to commend my family who are a source of strength as cheerleaders. To my soulmate, Mirian and our boys – Matthew, Arthur and Jaden, thank you.

And finally, to my Lord and Saviour, Jesus Christ, thank you for allowing me to come this far, and for surrounding me with wise counsel and all the support I have benefited by.

TABLE OF CONTENTS

GLOSSARY OF TERMS

Term	Description
AAF	Adverse Analytical Finding
ATF	Atypical Finding
ADOs	Antidoping Organizations
Athlete	Any person who competes in sport at the international level (as defined by each International Federation) or the national level (as defined by each NADO).
Athlete Support Personnel	Any coach, trainer, manager, agent, team staff, official, medical, paramedical personnel, parent or any other person working with, treating or assisting an Athlete participating in or preparing for sports competition.
Code	The World Anti-Doping Code, 2021
Education	The process of learning to instill values and develop behaviors that foster and protect the spirit of sport, and to prevent intentional and unintentional doping.
IF	International Federations
IOC	International Olympic Committee
ISE	International Standard for Education
NADO	National Anti-Doping Organization
NF	National Federation
NOC	National Olympic Committee
Charter	The Olympic Charter in force as from 15 October 2023
RADO	Regional Anti-Doping Organization
TUEs	Therapeutic Use Exemptions
UOC	Uganda Olympic Committee
WADA	World Anti-Doping Agency

LIST OF TABLES

ABSTRACT

With an emphasis on its compliance with the 2021 World Anti-Doping Agency (WADA) International Standard for Education (ISE), the study sought to evaluate Uganda's present anti-doping education program. It also aimed to assess how well WADA's instructional programs and resources educated Ugandan athletes and the people who support them. Creating a strong, legally valid anti-doping program that was adapted to the demands of the nation was the ultimate objective.

This study used a mixed-methods approach, integrating quantitative and qualitative data collection strategies. 46 people participated in the survey: athletes, staff members who assist athletes, and anti-doping educators. In-depth information about the efficiency of Uganda's present anti-doping educational system was also obtained through interviews and document reviews.

The results showed that although Uganda's anti-doping education program has made significant progress, it is still mainly ad hoc and does not fully adhere to the 2021 WADA International Standard for Education. A systematic, nation-specific anti-doping education campaign is lacking, which has reduced the efficacy of attempts to stop doping among athletes and the support systems around them.

According to this Study, Uganda needs to make major modifications to its current anti-doping education program in order to comply with WADA's guidelines. Achieving this goal will require creating an independent National Anti-Doping Organization (NADO) and creating an extensive educational program in line with global best practices.

In order to coordinate Uganda's efforts with the World Anti-Doping Agency's 2021 International Standard for Education, the study suggests establishing an independent NADO with the responsibility of designing and implementing a national anti-doping education program. Along with regular evaluations to update the program in accordance with new advancements in anti-doping education and compliance requirements, procuring money is also crucial to the execution and sustainability of anti-doping educational programs.

RÉSUMÉ

L'étude visait à évaluer le programme actuel d'éducation antidopage en Ouganda, en se concentrant sur son alignement avec la Norme internationale pour l'éducation (ISE) de l'Agence mondiale antidopage (AMA) de 2021. Elle visait également à évaluer l'efficacité des initiatives et des outils éducatifs de l'AMA pour sensibiliser les athlètes et leur entourage en Ouganda, dans le but de développer un programme antidopage robuste et conforme, adapté aux besoins du pays.

Une approche méthodologique mixte a étéutilisée dans cette recherche, combinant des techniques de collecte de données quantitatives et qualitatives. Un sondage a étémenéau près de 46 répondants, dont des athlètes, du personnel d'encadrement des athlètes et des éducateurs antidopage. De plus, des entretiens et des examens de documents ont fourni des informations approfondies sur le cadre éducatif antidopage actuel et son efficacité en Ouganda.

Les résultat sont révélé que, bien que des progress aientété réalisés dans l'éducation antidopage enOuganda, le programme existant resteen grande partie ad hoc et ne se conforme pas pleinement à la Norme internationale pour l'éducation de l'AMA de 2021. L'absence d'un programme éducatif antidopage structuré, spécifique au pays, a limité l'efficacité des efforts visant à prévenir le dopage parmi les athlètes et leurs équipes d'encadrement.

L'étude a déterminé que les efforts éducatif sactuelsen matière d'antidopage en Ouganda sont insuffisants et nécessitent des ameliorations significatives pour répondre aux normes de l'AMA. La creation d'une Organisation nationale antidopage (ONAD) indépendante et le développement d'un programme éducatif complet, aligné sur les meilleures pratiques internationales, sont des étapes essentielles pour atteindre cet objectif.

L'étude recommande la creation d'une ONAD indépendante avec le mandat de développer et de mettre en œuvre un programme national d'éducation antidopage, alignant les efforts de l'Ouganda sur la Norme internationale pour l'éducation de l'AMA de 2021. De plus, il estessentiel d'obtenir des financements pour soutenir la mise enœuvre et la durabilité des initiatives éducatives antidopage, ainsi que d'évaluer régulièrement le programmeafin de le mettre à jour enfonction des nouvelle sévolutions dans l'éducation antidopage et des exigences de conformité.

CHAPTER ONE

INTRODUCTION

1.1Historical Background of Doping and Formation of WADA

Since the dawn of recorded history, drug use to improve physical performance has been a part of human competitiveness. The primary objective of the user is typically to increase strength or overcome exhaustion with the use of stimulants and anabolics (Yesalis and Bahrke, 2002). It has also been noted that, for example, many ancient athletes studied their sport's techniques and experimented with diet in an effort to better their performance (Finley & Plecket, 1976).

While it was not acceptable to break Olympic rules during the ancient games, using drugs and other substances to enhance athletic performance was accepted as normal practice and was neither discouraged nor considered cheating. Those attempts to label doping as cheating or a rule breach didn't occur until much later, in the 1920s (Hoberman, 1992). However, by the early 1930s, the word "doping" had cemented itself firmly in the English language (Prokop, 1970).

Following World War II, a number of stakeholders increased their efforts to expose doping, and in 1967 the International Olympic Committee (IOC) finally decided to implement a drug-testing policy that outlawed the use of certain drugs (Todd & Todd, 2001). Even with this advancement, the majority of sporting organizations took some time to enact anti-doping policies and establish an enforcement system. According to reports, the NFL was the first major sports organization to test athletes in 1982. However, tests for anabolic steroids were not conducted until 1987, at which point other major sports leagues started doing the same (Ferstle, 2000).

WADA was subsequently established in 1999 as an international independent agency to lead a collaborative worldwide movement for doping-free sport, following a number of major doping scandals that took place, shocking the sporting world[1]. One such scandal was *the Festina Affaire*[2] during the 1998 Tour de France which revealed the extent of doping in the sport of cycling, prompting a new line of thinking to combat the vice. Cléret (2022) posits that the decision to establish WADA taken at Lausanne in 1999 represented a paradigm shift and fresh start in the fight against anti-doping.

---

[1] *WADA acknowledges this fact in its Strategic Plan, 2020 – 2024, pg. 2*

[2] *"Outside", the Daily Tour Newsletter confirms in their online publication of 6 November 2018 that in July 1998, what started as a few paragraphs in a report on the French wires about a Festina team car being searched at the Belgian border soon exploded into the biggest doping scandal in cycling history. Before the Tour de France ended that July, scores of riders and teams were ejected, others were arrested, and more simply quit in protest. In what would become the "Festina Affaire," cycling would never be the same.*

This new policy on anti-doping as reflected in the Code justified the ban on certain substances and methods based on the premise that they contradict "the spirit of sport" which is the intrinsic value and character of sport based on 'fair play', 'health', 'excellence', 'character and education' and 'joy', also emphasized as the essence of Olympism (Gleave and Hunt, 2015).

The main responsibility of WADA is to create, standardize, and organize anti-doping laws and regulations for all nations and sports. The development of anti-doping capacity, education, intelligence & investigations, scientific and social science research, and compliance monitoring with the World Anti-Doping Program are among WADA's primary activities. According to Sipavičiőtė et al. (2020), in addition to testing, athletes' attitudes must alter in order to prevent doping.

1.1.1 Definition of Doping

Accordingly, "***Doping***"[3] is defined as the occurrence of one or more of the following 11 (eleven) anti-doping rule violations, which include –

1) Presence of a *Prohibited Substance* or its *Metabolites* or *Markers* in an *Athlete's Sample*;
2) Use or *Attempted Use* by an Athlete of a *Prohibited Substance* or a *Prohibited Method*;
3) *Evading, Refusing* or *Failing to Submit to Sample Collection* by an Athlete;
4) *Whereabouts Failures* by an Athlete;
5) *Tampering* or *Attempted Tampering with any Part of Doping Control* by an Athlete or Other Person;
6) Possession of a *Prohibited Substance or a Prohibited Method* by an Athlete or Athlete Support Person;
7) *Trafficking or Attempted Trafficking in any Prohibited Substance or Prohibited Method* by an Athlete or Other Person;
8) *Administration or Attempted Administration by an Athlete or Other Person to any Athlete In-Competition of any Prohibited Substance or Prohibited Method, or Administration or Attempted Administration to any Athlete Out-of-Competition of any Prohibited Substance or any Prohibited Method that is Prohibited Out-of-Competition;*
9) *Complicity* or *Attempted Complicity* by an Athlete or Other Person;
10) *Prohibited Association* by an Athlete or Other Person; and
11) *Acts by an Athlete or Other Person to Discourage or Retaliate Against Reporting to Authorities.*

[3] *The 11 Doping Rules violations are set forth in Article 2.1 to 2.11 of the World Anti-Doping Code*

1.1.2 The Standard of Proof and Burden of Proof in Doping Cases

The Anti-Doping Organization (ADO) is responsible for proving that an anti-doping rule violation (ARV) has taken place, as per Article 3.1 of the Code. The Code goes on to state that, given the gravity of the charge presented, the burden of proof is whether the ADO has established an ARV to the hearing panel's comfortable satisfaction. In every situation, this level of proof is higher than a simple balance of probabilities but lower than proof beyond a reasonable doubt. With the exception of Articles 3.2.2 and 3.2.3, where the Code places the burden of proof on the athlete or other person accused of violating an anti-doping rule to disprove a presumption or establish particular facts or circumstances, the standard of proof shall be by a balance of probability.

1.1.3 Role to Carry Out Antidoping Education

Where a NADO does not exist, the National Olympic Committee (NOC) (or, as applicable, the National Paralympic Committee (NPC)) shall be the authority on Education in their country. The NOC (or, as applicable, the NPC) shall require National Federations to conduct Education in coordination with the applicable NADO as required under Article 20.4.12 of the Code[4]. The Statutes of the UOC[5] and the UOC 2022 – 2027 Strategic Plan recognize the importance of advocacy and the adoption of anti-doping education programme in fulfilment of the Code which is predicated on the NOC performing the NADO roles.

WADA has purposed to address anti-doping training and educational needs under the Code, but also under its 2020 – 2024 Strategy by establishing a framework for stakeholders to educate athletes and their support groups[6].

Recognizing the need to align with and comply with WADA's rules on anti-doping, in August 2023, Uganda's the Government of Uganda promulgated ***the 2023 Physical Education & Sports Policy*** *and* ***the 2023 National Sports Act***, which for the first time codified some of the key anti-doping provisions provided for under the Code and created a NADO which is vested with the important role of establishing a national strategy to prevent doping in sport, promoting and implementing the Code, publishing international standards on anti-doping, and conducting antidoping education, among others[7]. The Government of Uganda is in the process of making final amendments to the new legislation to ensure compliance with WADA's requirements.

---

[4] *Per Article 7.5 of the WADA International Standard Education, 2021*

[5]*This role of NOCs is cited under the Olympic Charter in Force from 08 August 2021, Chapter 4, Rule 27, 2.6*

[6]*See WADA 2020 – 2024 Strategy, op. cit and Art. 18 of the WADA Code 2021 solely dedicated to Education, and the 2021 WADA International Standard Education*

[7]*Per section 53 (1) of National Sports Act, 2023*

1.2 Background to the Study

This Study undertakes a critical analysis of WADA's educational activities, resources, and programs used to inform athletes and athlete support staff about the risks and repercussions of doping. The study provides insight into the current anti-doping education program and evaluated its effectiveness in preventing athletes and athlete support staff from engaging in anti-doping behavior. The Study evaluates the programs and resources that are available to support Uganda's antidoping education efforts, with a particular focus on the program initiatives and whether they meet international standards. It also highlights the efforts made to educate athletes and support staff about antidoping, and the required actions to improve the situation and guarantee that target groups are adequately informed about antidoping to be able to discourage Code violations.

The Study examines available evidence on the performance of anti-doping program in Uganda and to provide a comprehensive review, it compares Uganda's anti-doping efforts with the international gold standard as set by the World Anti-Doping Agency (WADA) and its 2021 International Standard for Education. ISE is a mandatory *International Standard* developed as part of the World Anti-Doping Program whose overall guiding purpose is to support the preservation of the spirit of sport as outlined in the Code and to help foster a clean sport environment devoid of doping. A key principle of the ISE is that an Athlete's first experience with anti-doping should be through Education rather than Doping Control.[8]

The importance of putting in place a well-documented and effective anti-doping programme for Uganda cannot be overemphasized as it will facilitate the country's compliance with the Code and prevention of anti-doping violations.

1.3 Statement of the Problem

Doping rule violations remain a major concern for WADA and sporting organization, and Uganda is no exception as multiple *Adverse Analytical Findings (AAFs)*[9]have been recorded against a number of Athletes. In a recent study sponsored by WADA, Haruna Muwonge *et al.* (2019) found that doping and accidental doping in Uganda is on the increase, and this is associated with increase in the usage of herbal remedies by sports participants. In November 2022, the Athletics Integrity Unit (AIU) in a statement confirmed a 4-year ban

---

[8] *See Introduction & Scope to WADA' International Standard for Education, 2021, 1.0 at pp 4*

[9] *"**Adverse Analytical Finding**" is defined in the World Anti-Doping Code, 2021 (page 166) as "A report from a WADA-accredited laboratory or other WADA-approved laboratory that, consistent with the International Standard for Laboratories, establishes in a Sample the presence of a Prohibited Substance or its Metabolites or Markers or evidence of the Use of a Prohibited Method."*

imposed on Uganda's middle-distance runner, Janat Chemusto who returned an adverse analytical finding for a prohibited substance.[10].

On the global scene, the 2021 WADA Report indicates a decrease in the total percentage of total findings (AAFs and ATFs – *Atypical Findings*[11], combined) from 0.82% in 2020 to 0.77% in 2021, and another decrease in the percentage of AAFs – more commonly known as positive tests – from 0.67% in 2020 to 0.65% in 2021, the figures are still alarmingly high. It is generally observed by many experts that both deliberate and inadvertent doping in sports has been on the rise in elite, amateur and sports despite the development of advanced drug testing systems.

Dasauka and Makwinja (2023) posit that doping in Sub-Saharan and Eastern Africa is a regular occurrence orchestrated by highly organized syndicates, and further observe instances of retrogressive practices in rural communities such as "*witchcraft doping*" which are highly practiced with an influence on the conduct of athletes, athlete support personnel and spectators around competition arenas.

Whereas there is not much data on Uganda's doping statistics, Muwonge *et. al.*, 2015 note that there is a low confessed use of doping agents, which may suggest that fewer athletes admit using doping agents in Uganda. The authors find that there is still an urgent need for educational anti-doping programs to address the knowledge gaps observed amongst athletes in their study.

Uganda has no documented anti-doping educational programme and has relied on ad hoc initiatives based on short term goals, for quick fixes. Noting that WADA has made education a central pillar of its doping prevention program and mandatory for each country to comply to the *International Standard for Education (ISE)*, it is vital therefore that efforts are enhanced to establish a cogent anti-doping education programme that meets WADA's expectations, and which will contribute to the global agenda of preventing anti-doping in sport. The UOC currently provides oversight over anti-doping matters but lacks an effective anti-doping education programme that meet the requirements of WADA. With the promulgation of a new National Sports Law in August 2023, Uganda requires a documented, practical and elaborate programme with a clear implementation strategy that will ensure that efforts to prevent doping are fully supported.

---

[10] The AIU ban on Janat Chemusto is accessible here: https://www.athleticsintegrity.org/downloads/pdfs/disciplinary-process/en/AIU-23-177-Janat-CHEMUSTO-Decision.pdf

[11] "***Atypical Finding***" *is defined in the World Anti-Doping Code, 2021 (page 166) as "A report from a WADA- accredited Laboratory or other WADA-approved Laboratory which requires further investigation as provided by the International Standard for Laboratories or related Technical Documents prior to the determination of an Adverse Analytical Finding (AAF)." ATFs may correspond to multiple measurements performed on the same Athlete, such as in cases of longitudinal studies on testosterone.*

1.4 Significance of the Study

This Study is relevant in so far as it seeks to examine the efficacy of the present anti-doping education programme in Uganda. Its shortfalls will be reviewed with suggestions on improvements to improve efficacy that should act as a springboard for a sound approach to doping prevention. The Study will review the evidence to explain athletes' and athlete support personnel attitudes towards doping, and the role of education in preventing doping practices.

1.5 Scope of the Study

The Study will focus on a sample space of few selected Ugandan athletes, athlete support personnel and anti-doping educators over the last 3 years. It will review Uganda's other country's initiatives juxtaposed with WADA's recommended educational programme as a benchmark to develop a standard for Uganda.

1.6 General Objectives of the Study

The objectives of this Study are –

a) To review the regulatory regime governing antidoping in Uganda in relation to WADA's compliance requirements and standards;

b) To review WADA's education initiatives by examining the tools and programmes employed to educate athletes and athlete support personnel about the dangers and consequences of doping;

c) To examine Uganda's existing anti-doping educational program and to assess its efficacy and impact in preventing antidoping amongst athletes and athlete support personnel; and

d) To recommend a suitable draft antidoping educational program for Uganda based on international best practice.

1.7 Research Questions

a) What is the regulatory regime governing antidoping in Uganda in relation to WADA's compliance requirements and standards?

b) What are WADA's education initiatives, and the tools and programmes employed to educate athletes and athlete support personnel about the dangers and consequences of doping?

c) What is the existing anti-doping educational program and how effective and impactful are they in preventing antidoping amongst athletes and athlete support personnel; and

d) What would be a suitable antidoping educational program for Uganda based on international best practice?

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This Chapter presents a review of the available literature on anti-doping education as the theoretical framework to demonstrate its role and impact in dissemination of information amongst athletes and athlete support personnel. The review delves into the variables organised around each study objective and the summary that outlines the essential lessons from the reviewed literature. The researcher investigated the existing views of several researchers, scholars, and practitioners about the study area, highlighting their arguments and identifying limitations and areas for further research.

The literature was reviewed under the following subheadings: Antidoping Programs in General; Education for Doping Prevention; Evaluation of Anti-Doping Programs; Doping Prevention Programs Targeting Moral and Ethical Education; 2021 WADA International Standard for Education; and Evaluation of WADA's e-Learning Programme.

2.1 Conceptual review

2.1.1 Anti-Doping Programs in General

Haruna Muwonge *et al* (2019) in their WADA sponsored study investigated the use of supplements, herbal and doping products usage among Ugandan athletes and athlete support personnel and found that the usage of herbal remedies in various groups, including sports participants in Uganda, is on the rise. The increase in usage is attributable to the Government of Uganda's approval of the usage of herbal medicines for health care to manage ailments such as cancer. They most importantly deduced that the phytochemical profiles of most medicinal plants and herbal concoctions are still unknown, and yet some medicinal plants possess performance-enhancing effects with the potential to act as doping agents whose consumption may result in inadvertent doping by some athletes. Their recent studies further indicated gaps in nutritional and doping knowledge among Ugandan athletes and a lack of consistent education programming for coaches. This Study lastly noted that athletes in Uganda's neighboring countries consumed herbs as supplements for a number of reasons, including performance enhancement and nutrient content boasting in their normal diets, and this resulted in some adverse findings by WADA resulting in sanctions.

According to Petróc and Boardley (2022), there are a number of valid reasons why people are drawn to and participate in sports, including: the need for thrills, engagement, health, competition, recognition, prestige, and financial gain. The writers also make a distinction between elite and non-elite athletes and stress the need for level playing fields with respect to gender, weight classes, equipment use, and mixed-race exceptions. This is why guidelines have been established to guarantee that accomplishments and performances are comparable and founded

on fair competition; violations of these guidelines will result in consequences. The Code is essential to ensuring that athletes uphold fair competition by abstaining from doping, which is the major reason why WADA was established.

When Ogama and Sakwa (2019) looked into why athletes dope, they discovered that a number of economic factors play a role. These factors include prize money, the cost of doping, the cost of access to doping, the cost of concealment, sponsorship deals, an individual's or family's financial situation, boosting one's own or family's financial status, advertisement/image laundering, economic depression, and the implicit belief that economic factors increase the desire to dope. The authors advocate for giving young people more information and empowerment, particularly through the frameworks of their homes and schools, so they can make wise decisions on their own and be able to fend off peer pressure. They also advise parents to be involved in government and religious organizations' attempts to raise awareness of issues so that parents do not neglect their duty to inculcate cultural and social values in their children.

In 2020, Sipavičiūtė, Šukys, and Dumčienė presented a review of the literature on anti-doping education programs, emphasizing the examination of empirical studies that offer concrete support for anti-doping initiatives. The review included a thorough study of all prior publications. The authors evaluate anti-doping education initiatives and assess the idea of doping prevention and education before summarizing their findings and suggesting areas for further research. They note that doping tests by themselves are insufficient to curb drug culture in sports; instead, athletes' attitudes must change. They come to the conclusion that anti-doping education may be the only viable solution.

They come to the conclusion that, in order to reduce doping in sports, athletes must participate in preventive and education programs that offer helpful knowledge about doping. These programs should begin with young athletes and involve coaches, friends, and family. They suggest more study in anti-doping education programs that emphasize the formation of values in athletes, particularly young athletes, and involve their coaches and other close associates. They also look for strategies to alter athletes' attitudes and intentions to use these drugs through educational initiatives.

2.1.2 Education for Doping Prevention

There is an abundance of literature that backs up the idea that "education can be used to prevent doping." Many experts have written on various subtopics related to education for doping prevention. These subtopics include gender differences, relationships between coaches and family members, and attitude. Lentillon-Kaestner, Hagger, and Hardcastle (2012) emphasize the importance of establishing attitudes towards doping early in athletes' careers.

Haruna Muwonge *et. al* (2019) notes that one of the outstanding outcomes following their research discussion with the coaches from Uganda's sports industry concluded that approved interventions should not only promote knowledge on anti-doping rules and policies among stakeholders (athletes, coaches, administration, and the public) but also improve social and life skills. The also recommend inclusion of a standard curriculum that incorporates such life skills training and the introduction of an annual anti-doping workshop in Uganda to enhance increase in sensitization and awareness of anti-doping at local, regional, and national levels.

"Relationships between coaches and family members could decrease or increase the athletes' behaviour towards the use of illegal drugs (Dunn, Thomas, Swift & Burns, 2012)."

"The intention to engage in doping could be reduced by changing positive attitudes towards doping into negative, and teaching to refuse taking illegal drugs under pressure (Lazuras, Barkoukis, Rodafinos, & Tzorbatzoudis, 2010)."

"Moreover, educational courses with discussions related to doping could be particularly welcome for coaches and athletes (Striegel, Ulrich, & Simon, 2010)."

"The research shows that elite athletes need education strategies which could help them make informed decisions on the properties of medications for performance enhancing purpose (Mottram, Chester, Atkinson, & Goode, 2008)."

"Athletes' knowledge about doping could be improved by using website platforms with updated lists of acceptable supplements and medicines (Striegel, Vollkommer, & Dickhuth, 2002)."

Internet tools that make knowledge about illicit substances in sports accessible should be encouraged. Additionally, media literacy interventions may be useful in influencing students' perceptions of substances used for performance and appearance enhancement as well as doping. According to Lucidi et al. (2017), this type of intervention also appeared to lower students' self-reported usage of chemicals that enhance appearance and performance.

"Gender differences should also be taken into account within educational strategies; and athletes' coaches, family and friends could also benefit from participating in anti-doping education programs, especially in relation to possible risks of illegal drugs use and anti-doping laws (Nieper, 2005)."

"Most of the preventive educational programs which focus on the use of illegal drugs in sport are ineffective because informing athletes of possible health risks does not reduce the use of banned substances (Peters, Schulz, Oberhoffer, & Michna, 2009)."

When Hallward & Duncan (2019) questioned young adult athletes about their knowledge of doping, the majority of them admitted to have none. Athletes reported that their coach or psychical educator brought up doping only once. The majority of athletes concurred that in addition to athletes, parents, trainers, coaches, and physicians should also be included in anti-doping education. Short educational sessions should be held more frequently, according to athletes. Athletes also recommended employing a scare-based strategy to dissuade athletes from using banned substances. However, some researchers argue that because young athletes appear to already be fully aware of the potential negative repercussions associated with doping, doping preventive programs should not emphasize the negative impacts of doping (Peretti-Watel et al., 2005).

Barkoukis, Brooke, Ntoumanis, Smith, and Gucciadi (2019) conducted a qualitative study with athletes and coaches in Greece and Australia to determine the elements that most likely influenced athletes' views towards abstaining from doping. Peer influence, coach influence, drug stigma, doping stance, and environmental culture were found to be the five primary contributors. The study's findings showed that while the majority of athletes had firmly anti-doping views, they were unable to defend their stance. Not because they weren't taught against doping, but rather because of the stigma associated with it. The anti-doping culture among athletes was the primary factor influencing anti-doping attitudes. It is imperative to draw the conclusion that doping education ought to encompass not only athletes and coaches, but also the broader athletic community.

Some people believe (Chan et al., 2020) that athletes may inadvertently take performance-enhancing drugs. According to Chan et al. (2020), a systematic examination of research on the inadvertent use of illegal drugs has revealed that a variety of behavioral, social psychology, and willpower traits can predict doping. The study's findings showed that in order to modify attitudes and intents towards the use of illegal drugs, athletes need to be trained using techniques and resources that impact behavior, help people increase their willpower, and improve their social and psychological environments.

All things considered, organizations like sports federations and national and international anti-doping agencies ought to devote a lot more funding to doping prevention initiatives because, in certain instances, athletic institutions initiate doping education initiatives without the necessary financial backing (Morente-Sánchez & Zabala, 2013). In other words, in order to be more successful in eliminating doping, anti-doping education could involve a wider athlete's environment, coaches, parents, and friends.

2.1.3 Evaluation of Anti-Doping Education Programs

Sipavičiūtė, Šukys & Dumčienė (2020)'s research revealed results from the following studies summarized as follows –

"Anti-doping education programs, which concentrate on health education and help to gain knowledge about doping prevention are quite common in research world (Melzer, Elbe, & Brand, 2010)."

Early 2000s anti-doping initiatives, such as ALTAS and ATHENA, mostly targeted teenage athletes (Elliot et al., 2004; Goldberg et al., 2000). These anti-doping initiatives focused on elements including attitudes towards doping, knowledge of doping, and doping purpose. Additionally, the themes covered in both ALTAS and ATHENA included healthy eating and non-doping options. According to Elliott et al. (2006), the doping prevention initiatives were successful in lowering the likelihood of using prohibited substances, decreasing interest in illegal drugs, and disseminating information about doping alternatives. Alcohol and tobacco use, poor eating habits, and drug use in sports are all topics covered in the ATHENA and ATLAS teaching programs. But it's important to remember that the ATHENA and ALTAS educational anti-doping programs were created 20 years ago, and as a result, their core concepts did not take into account the findings and advancements of the previous 20 years (Barkoukis, Kartali, Lazuras, & Tsorbatzoudis, 2016). Ntoumanis Ng, Barkoukis, & Backhouse (2014) found that while ATLAS and ATHENA had an influence on decreasing the intention to use illegal substances in sport, they had no effect on actual behavior and doping use.

"The limited impact of anti-doping education programs which are based on knowledge about doping and damage to health, was demonstrated by a long-term study conducted in elite sports schools in Germany by Wippert and Fließer (2016). In Germany, the National Doping Prevention Plan (NDPP) was introduced with two main objectives: structural change in the field of doping prevention and the development of doping prevention education measures for young athletes. The results of the four-year study showed only partial confirmation of NDPP expectations. The impact of the NDPP has changed the content of doping prevention, but not the transformation of the structure (frequency, type, and scope) of anti-doping education in elite sports schools.

Students of elite sports schools who were covered by the NDPP education program at the anti-doping knowledge test showed that they had significantly more knowledge than those in the control group, however the difference was very small and may not become a real basis for behaviour change."

"The results of a study conducted by Hurst, Kavussan, Boardley, and Ring (2019) showed that athletes who believed only those dietary supplements were effective in achieving high results were more likely to use prohibited drugs as well. Therefore, anti-doping education programs should address the beliefs of athletes about the effectiveness of dietary supplements."

"Athletes college students were asked (Ring, Kavussanu, & Gürpınar, 2020) to evaluate their basic values, moral disengagement, and anticipated guilt in hypothetical situations. The results showed that athletes' values were directly (self-enhancement) and indirectly (self-transcendence, conservation) related to the probable use of banned drugs and cheating in sport. Thus, the development of basic values as main guidelines for life in anti-doping education programs should be one of the key factors, emphasizing moral and ethical aspects. That is to say, knowledge-based education programs which target health damage might not be the most effective education tools in minimizing real life doping use."

2.1.4 Doping Prevention Programs Targeting Moral and Ethical Education

"Many anti-doping education programs, such as proposed by Goldberg et al. (2000) or Laure and Lecerf (2002), are focused on health education and target transferring important knowledge about doping on athlete that one may decrease the intention to dope and change attitude towards doping (Melzer et al., 2010). Nonetheless, the effectiveness of such knowledge-based educational doping prevention programs is low (Laure & Lecerf, 2002)."

(Hanson, 2009) notes that: "It may be unsatisfactory to only concentrate on teaching knowledge about doping in sport because other approaches on anti-doping education must be incorporated."

"Generally, the source of motivation to behave morally is moral identity. Notably, it was found that athletes who were positive about cheating in sport had low morale (Gucciardi, Jalleh, & Donovan, 2011; Nicholls et al., 2015). Therefore, recent studies confirmed that doping was associated with moral identity (Kavussanu, Ring & Hurst, 2018)."

"Athletes who thought that being moral was important to their self-concept were less likely to use illegal drugs in sport (Kavussanu & Ring, 2017). This study also found that association between doping and moral identity could be mediated by anticipated guilt. Therefore, athletes with a strong moral identity might avoid using illegal drugs because they would expect to feel intense guilt. Other studies (Corrion, Scoffier-Meriaux, & d'Arripe-Longueville, 2017) discovered that personal ability as a temptation to use performance enhancement drugs was also a meaningful factor."

Gatterer *et. al* (2019) in their article aimed to systematically record and evaluate doping prevention approaches in the form of information and education activities of 53 national anti- doping organizations (NADOs) and assess the extent to which a multifaceted doping prevention approach has been realized. Results showed a discrepancy between NADOs' self-report data and the implementation assessment. Even though the NADOs indicated otherwise, most of their education-based approaches did not address aspects of the visual analogue scale (e.g., resisting peer pressure) and only a few programs were ongoing. Possible explanations might be found in the reported barriers (e.g., financial). Concrete guidelines defining multifaceted, values-based education, and best practice

examples should be developed to indicate how to include all 5 approaches in prevention.

Nicholls et. al (2020) examined the effects of the iPlayClean anti-doping intervention on attitudes towards doping and susceptibility, and whether delivery mode affected the results on 1,081 high-level UK athletes. The results showed that all modes of the iPlayClean anti-doping education programme reduced favourable attitudes towards doping immediately after the intervention, which was sustained across all intervention groups 8 weeks later. The authors surmised that contrary to findings within previous anti-doping interventions, the research showed that doping attitudes can be changed and that the results can be sustained across all modes of delivery, 8 weeks later. The note finally that research is required to assess for how long these changes are sustained, and how often anti-doping education should be delivered to high-level athletes to reinforce clean play values.

2.1.5 The 2021 WADA International Standard for Education

Petróczi & Boardley (2022) observe in a recent study, that with the WADA's International Standard for Education (ISE) coming into effect in 2021, the clean-sport movement is at a pivotal stage. The authors juxtapose the sector-wide anti-doping education as set out in the ISE on the decision-making process at the individual level and discuss three critical issues for the clean-sport movement. First, they make the case for doping being a "wicked" problem and outline the possible implications of this for prevention and detection. Second, they consider the need to address regulative, normative, and cognitive components of clean sport if we are to maximize its legitimacy, and thirdly, they critically expose the fluidity with which clean sport is defined, and the implications of defining clean sport in substance vs. rule-based terms, which, respectively, lead to theorizing clean sport as "drug-free" vs. "cheating-free" sport.

Finally, the study considers the role and key components of anti-doping education and how the relevance of certain components may be dependent on the way clean sport is defined. The authors conceptualize doping as a sport integrity issue and move away from the archaic and delimiting view of clean sport as drug-free sport and conclude with recommendations on how to reconcile values-based education, awareness raising, information provision and anti-doping education within the broader scope of integrity, to support informed decision making and personal agency. In a bid to connect anti-doping education to individual-level decision making, the authors recommend a staggered approach in which specific education content is linked to different influences in the decision-making process, to different stages of athlete development, and to different educational goals. This study concludes that emphasizing and encouraging sensemaking in anti-doping decision making offers a pragmatic approach for anti-doping education. Lastly, that conceptual clarity and precise mapping of the educational goal, content, and delivery is vital for valid and meaningful evaluation of the effectiveness of anti-doping education.

2.1.6 Evaluation of WADA's e-Learning Programme

Deng et. al (2022) in their study evaluated the effects of the World Anti-Doping Agency's e-learning programme for anti-doping education on knowledge of, explicit and implicit attitudes towards, and likelihood of doping among Chinese college athletes and non-athletes and conclude that the online anti-doping education programme is partially effective among Chinese college athletes and non-athletes. Furthermore, their findings reflect enhanced cognitive control after the education intervention to suppress a prepotent implicit attitude towards doping.

2.2 Empirical review

2.2.1 Regulatory regime governing antidoping in Uganda in relation to WADA's compliance requirements and standards

A noteworthy study conducted by Okiror (2020) examined Uganda's anti-doping laws and regulations. The study employed a qualitative case study methodology, gathering data via document analysis and interviews with relevant parties, such as legal experts and sports officials. The results showed weaknesses in the way anti-doping laws are enforced, especially when it comes to applying WADA's guidelines. The study discovered that successful compliance with WADA's standards was hampered by a lack of resources and knowledge, even in the presence of official restrictions. Okiror urged taking a more cooperative stance with WADA and suggested that Uganda's anti-doping institutions be given more institutional power to improve compliance.

A mixed-methods study by Kwesiga (2019) looked at Uganda's anti-doping education programs' efficacy in light of WADA's educational requirements. Athletes were surveyed for the study, and coaches and sports administrators were interviewed in-depth. The results showed that although anti-doping laws were known, there was little comprehension of them and little adherence to WADA's instructional requirements. Many athletes were not well-informed about prohibited substances and the effects of doping. According to Kwesiga, in order to guarantee that athletes are fully informed and capable of adhering to WADA rules, the regulatory framework must place a high priority on education and awareness.

In a more recent investigation, Uganda's difficulties putting WADA's anti-doping rule into practice were examined by Mutyaba and Kirya (2021). The authors examined pertinent legal papers and spoke with representatives of the Uganda National Anti-Doping Organization (NADO) in interviews using a qualitative study design. The report noted a number of challenges, such as insufficient funding, subpar testing facilities, and a dearth of cooperation amongst sports federations. The authors contended that these difficulties prevented WADA's code from being fully implemented, and they suggested that in order to resolve these problems, there should be more government backing and international cooperation.

Nsubuga (2022) evaluated Uganda's adherence to WADA's therapeutic use exemption (TUE) standards using a case study methodology. Medical practitioners were interviewed and TUE applications were analyzed in order to gather data. The results showed that although the TUE procedure was in existence, there were irregularities in its implementation, which might have resulted in non-adherence to WADA regulations. To further meet WADA's requirements, Nsubuga suggested making the TUE procedure more uniform and transparent.

Lastly, Kato and Nkurunziza's study from 2023 looked at how Uganda's sports federations ensured adherence to WADA's anti-doping rules. Utilising a survey design, this quantitative study gathered information from national sports federations. The results revealed that although the federations were aware of WADA's regulations, these organisations lacked formalised compliance procedures. According to the study's findings, Uganda's sports federations must create and put into place strong compliance structures in order to successfully adhere to WADA's requirements.

2.2.2 WADA's education initiatives by examining the tools and programmes employed to educate athletes and athlete support personnel about the dangers and consequences of doping

The usefulness of WADA's Athlete Learning Program about Health and Anti-Doping (ALPHA) was investigated in a 2019 study by Taylor and Dunn. Employing a mixed-methods approach, the researchers combined focus group talks with surveys with athletes from a range of sporting disciplines. The results showed that although ALPHA was generally highly accepted, its effects differed greatly between sports and geographical areas. Compared to athletes in sports with lesser funding, those in well-funded sports showed a greater comprehension of anti-doping regulations. Taylor and Dunn came to the conclusion that, even if ALPHA is a useful tool, WADA must customize its content to meet the unique requirements of various sports and geographical areas in order to optimize its efficacy.

A noteworthy study conducted by Williams *et al* (2020) assessed the execution of WADA's Coach True initiative, which aims to instruct coaches on their part in preventing doping. A qualitative research design was utilized in the study, which involved conducting in-depth interviews with sports administrators and coaches. The results demonstrated how well the training had improved coaches' awareness of anti-doping regulations and their need to promote a clean sport environment. The study did note significant drawbacks, though, such as the program's restricted accessibility in some areas and the requirement for more interactive and context-specific content. Williams et al. suggested that WADA improve the program's usability and give coaches in underserved areas additional assistance.

Zhang and Lee's (2021) more recent study concentrated on WADA's Social Science Research Grant Program, which provides funding for studies intended to comprehend and prevent doping behaviours. The researchers examined the results of many projects supported by this program through the use of a case study methodology. The results demonstrated the program's significance in expanding knowledge on doping behaviours and creating evidence-based teaching tactics. Zhang and Lee did point out that there is more work to be done in converting study results into useful teaching resources. To guarantee that research findings are successfully incorporated into teaching initiatives, they recommended that WADA improve cooperation between researchers and educators.

Lastly, a study by Silva and Pereira (2022) looked at how medical professionals, physiotherapists, and nutritionists who work with athletes were affected by WADA's Anti-Doping e-Learning platform (ADeL). The study employed a survey design to gather information from individuals in several nations. The results showed that ADeL is a very useful technique for raising support staff members' awareness of anti-doping problems. The survey did find, however, that certain areas—particularly underdeveloped nations—had low platform usage rates. Silva and Pereira suggested that WADA step up its efforts to market ADeL internationally and think about making it available in more languages to improve accessibility.

2.2.3 The existing anti-doping educational program, its efficacy and impact in preventing antidoping amongst athletes and athlete support personnel

The impact of the Canadian Centre for Ethics in Sport's (CCES) 'True Sport Clean' program, which teaches players and coaches on doping prevention, was investigated in a 2019 study by Backhouse et al. To measure changes in attitudes and behaviors towards doping, the researchers used a mixed-methods approach, combining pre- and post-program questionnaires with interviews. The results showed that the program significantly decreased the possibility that athletes would consider doping by raising awareness and understanding about doping. The study did, however, also emphasize the necessity of continuing training and assistance in order to sustain the program's effects over time.

Petróczi et al. (2020) conducted an evaluation of the efficacy of the 'Real Winner' program, which was created by WADA to teach young athletes the value of competing clean. Using a longitudinal research approach, this study tracked a group of young athletes for a period of two years. The results showed that participants' pro-doping attitudes and behaviors were considerably decreased by the training. The program's effects were also most noticeable in sports like weightlifting and athletics, which have a significant doping risk, according to the report. Petróczi et al. came to the conclusion that 'Real Winner' and other tailored education initiatives are essential in keeping at-risk populations from doping.

Henning and Dimeo (2021) conducted a more current study that concentrated on the International Olympic Committee's (IOC) "I Play Fair, Say No to Doping" initiative. The study evaluated the program's effect on athletes' attitudes and knowledge on doping in a variety of sports using a cross-sectional survey design. The results showed that although the program was largely successful in raising awareness of the risks associated with doping, its influence on modifying attitudes was less noticeable. Henning and Dimeo proposed that in order to further engage athletes and encourage behavior change, the program may be enhanced by adding more interactive features and real-life scenarios.

Last but not least, research conducted in 2022 by Engelberg and Moston assessed the '100% Me' program, a UK Anti-Doping (UKAD) educational project targeted at young athletes. The study compared a group of athletes who took part in the program with a control group who did not, using a quasi-experimental methodology. The outcomes demonstrated how well the '100% Me' program worked to lower participants' intentions to use drugs. The study also discovered that participants' intentions to dope remained lower six months after the program ended, demonstrating the program's long-lasting effects. In order to promote a sustained commitment to clean sport, Engelberg and Moston stressed the value of early intervention and the role that education plays.

2.2.4 A suitable draft antidoping educational program for Uganda based on international best practice

The efficacy of the 'Play True' educational program, which was introduced in Greece, was investigated in a study by Barkoukis et al. (2019). The program's potential applicability to other nations, such as Uganda, was emphasized. Using a mixed-methods approach, the study included focus group conversations with athletes, coaches, and anti-doping officials along with surveys. The results showed that 'Play True' was successful in raising knowledge of the negative effects of doping and decreasing pro-doping attitudes. The study underlined how crucial it is to modify the program's content culturally so that it appeals to the local populace. It also suggested that Uganda should use a similar strategy to guarantee efficacy and relevance.

An analysis of the effectiveness of the 'Doping Is Cheating' campaign in Belgium was conducted by Vangrunderbeek and Tolleneer (2020), who specifically focused on the program's interactive and participatory design. By comparing information and attitudes regarding doping before and after the program's implementation, the researchers used a quasi-experimental methodology. The results showed that interactive techniques, like scenario-based learning and role-playing, were very successful at capturing participants' attention and helping them comprehend the moral ramifications of doping. Vangrunderbeek and Tolleneer suggested that in order to improve engagement and retention of anti-doping knowledge, similar interactive features should be included in any teaching program produced for Uganda.

Gucciardi and Ntoumanis (2021) assessed the effectiveness of the 'Clean Sport' project in Australia, which was directed towards athletes and their support staff, in a different study. Using a longitudinal research methodology, this study monitored changes in behaviors and attitudes over the course of a year. The results demonstrated how well the program's all-encompassing strategy—which included peer-led conversations, e-learning courses, and workshops—worked to foster a culture of clean sport. According to Gucciardi and Ntoumanis, Uganda might gain from a similar all-encompassing strategy that makes sure that athletes and the people who support them are informed about doping prevention.

Finally, 'Say NO! to Doping', an initiative launched by the International Olympic Committee (IOC), was investigated in several African nations by Erickson et al. (2022). The study evaluated the program's effect on athletes' knowledge and attitudes on doping in nations with differing resource levels using a cross-sectional survey approach. The results showed that although the program was effective in raising awareness, its effects were more noticeable in nations where anti-doping education has substantial institutional support. According to Erickson et al., developing institutional capacity should be the program's top priority in Uganda's proposed anti-doping education program in order to ensure the program's long-term viability and efficacy.

2.3 Summary of literature review

The literature research identifies a number of areas where academics agree on the creation and application of anti-doping education initiatives. The majority of research concur that in order to maximize the efficacy of worldwide anti-doping education campaigns, local contexts must be culturally adjusted. For example, in order to engage participants and enhance knowledge, Barkoukis et al. (2019) and Vangrunderbeek and Tolleneer (2020) both stress the importance of interactive and contextually relevant content. In a similar vein, Erickson et al. (2022) and Gucciardi and Ntoumanis (2021) stress the importance of a thorough strategy that involves athletes and the people who assist them, guaranteeing that anti-doping education is comprehensive and long-lasting. All of these studies point to the need for customized programs rather than a one-size-fits-all strategy for successful doping prevention.

There are several places where the scholars disagree, notwithstanding these convergences. For instance, the majority of research support interactive and participatory approaches; yet, there is variation in the degree to which these approaches should be prioritized. While Gucciardi and Ntoumanis (2021) place greater emphasis on the value of peer-led talks and workshops, Vangrunderbeek and Tolleneer (2020) contend that role-playing and scenario-based learning should be important components of anti-doping education. Furthermore, although Erickson et al. (2022) emphasize the necessity of robust institutional backing for anti-doping initiatives, other researchers, such as Nsubuga (2022), place greater emphasis on procedural considerations, such as guaranteeing uniformity and clarity in therapeutic use exemptions. These variations in

emphasis highlight the various issues and concerns in various settings, indicating that anti-doping program design needs to be adaptable and adaptable to specific needs.

The literature also points to certain gaps that may be filled by further investigation. Although the examined studies stress the significance of contextually modifying anti-doping education, little is known about the systematic design and assessment of these modifications. For example, while Barkoukis et al. (2019) and Erickson et al. (2022) address the necessity of cultural adaptation, there is a dearth of empirical data regarding the precise components of global initiatives that require regional adaptation. Furthermore, although the efficacy of several instructional approaches has been extensively established, a dearth of longitudinal research has been observed to monitor the enduring influence of these initiatives on the attitudes and behaviors of athletes. Finally, further research is needed to understand how digital platforms, including e-learning modules, contribute to the accessibility and scalability of anti-doping education, especially in resource-constrained settings. Addressing these gaps would contribute to the development of more effective and sustainable anti-doping educational programs globally.

CHAPTER THREE

OVERVIEW OF ANTI-DOPING REGULATORY REGIME IN UGANDA

3.1 Introduction

This Chapter's goal is to lay the groundwork for an evaluation of educational programs and how they relate to anti-doping initiatives. It describes Uganda's stance on anti-doping regulations. It also gives background information on the relevant international treaties Uganda has ratified and the network of recognized organizations involved in the WADA-led anti-doping effort. As outlined in the International Standard for Education (ISE; WADA, 2021a), it also sheds light on the initiatives, instruments, and programs used by WADA to educate athletes and athlete support personnel about the risks and repercussions of doping.

The objective of this chapter is to give readers a thorough grasp of the legal framework that oversees Uganda's anti-doping initiatives. It addresses the legislative actions of the past and present, the obligations of different parties, and the conformity of Ugandan domestic laws with global norms. The chapter lays the groundwork for a thorough examination of the educational tactics and how well they work to promote clean sport in the nation by laying this basis. This report is crucial for pinpointing problems and developing suggestions for strengthening anti-doping education in Uganda.

3.2 The Regulatory Regime Governing Antidoping in Uganda

As mandated by Article 4 of the Code, WADA is the primary international institution tasked with "promoting and coordinating at the international level the fight against doping in sport in all its forms." WADA was founded in accordance with the 1999 Lausanne Declaration on Doping in Sport. WADA is the head of an international network of official organizations that are involved in the anti-doping campaign and collaborates in this effort with the IOC, the NOCs, the IFs, and the NADOs.

This group also includes the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Ad hoc European Committee for the World Anti-Doping Agency (CAHAMA), the Institute of National Anti-Doping Organizations (NADO), the International Anti-Doping Arrangement (IADA), and the Council of Europe Monitoring Group, whose role is to monitor the implementation of the WADA Anti-Doping Convention and set minimum levels of anti-doping standards required by signatory nations. This international consortium is engaged in an anti-doping campaign that frequently describes its program as a form of “education.” What is not included on this list are the WADA-accredited anti-doping laboratories, international sports federations, or the Court of Arbitration for Sport (CAS) which adjudicates many doping cases.

WADA keeps an eye on adherence to the Code, which serves as the global benchmark for anti-doping laws. The Code has been embraced by more than 600 national anti-doping organizations and sports organizations.

Governments can express their commitment to legally recognize and execute the World Anti-Doping Code through the non-binding 2003 Copenhagen Declaration on Anti-Doping in Sport. The Declaration and the Code are not official treaties.

The National Anti-Doping Rules were signed by the UOC on 07 September 2020, and went into force on 01 January 2021. The National Olympic Committee (NOC) of Uganda was tasked with enforcing the National Anti-Doping Rules in order to fulfil its obligations under the Code and to support the NOC's ongoing efforts to end doping in sports, as stated explicitly in the preamble of the document. The main goal of the Rules is to uniformly and globally enforce anti-doping regulations. Although they are meant to be applied in a way that respects the principles of proportionality and human rights, they emphasize their unique nature from criminal and civil laws and further state that they are not intended to be subject to or limited by any national requirements and legal standards applicable to criminal or civil proceedings. Since the Anti-Doping Rules implement the Code and represent the consensus of a wide range of stakeholders worldwide regarding what is required to protect and ensure fair sport, the Rules further caution all courts, arbitral tribunals, and other adjudicating bodies to be aware of and respect the distinct nature of the Rules.

The Rules reaffirm that the Ugandan NOC will oversee all aspects of doping control, and that even in cases where the NOC assigns a Delegated Third Party to handle a particular aspect of doping control or anti-doping education, the Ugandan NOC will demand that the Delegated Third Party carry out the assigned duties in accordance with the Code, international standards, and these anti-doping rules. The Rules clearly state that the NOC in Uganda will always be solely in charge of making sure that any tasks that are assigned are carried out in accordance with the Code.

Article 17 of the Rules states specifically on "*Education"* that: *"NOC Uganda shall plan, implement, evaluate and promote Education in line with the requirements of Article 18.2 of the Code and the International Standard for Education*".

For close to 60 years, Uganda's sports industry was governed by the National Council of Sports Act enacted in 1964, and repealed in 2023 by the National Sports Act. Uganda is a signatory to the Copenhagen Declaration. Unlike the previous legislation, the National Sports Act mentions WADA and the Code and defines "doping" for the first time, albeit in an inadequate way. The new law was preceded by the Physical Education and Sports Policy[12] which provides for the development of a national anti-doping strategy.

[12] *See 4.5, No. 69 of the 2023 Physical Education & Sports Policy of Uganda*

The establishment of an independent NADO provided for under the National Sports Act[13] appears to be in line with the Policy even though the law has not become operational without enabling regulations yet to be passed by the Government. Uganda has opened a new chapter in its Code compliance with the passage of this law, which will bring about a number of changes, including the creation of the first NADO to carry out the duties required by the Code. This will involve implementing anti-doping education in accordance with the 2021 International Standard for Education (ISE) as forth by WADA. The National Anti-Doping Rules, which the NOC signed, continue to be in effect in order to direct the NOC's implementation of the Education requirements under the Regulations until the Government passes them, which is expected to happen in the upcoming year.

3.3 WADA's International Standards of Education (ISE)

3.3.1 Introduction to the ISE and Roles ADOs

WADA's International Standard for Education (ISE)[14] is a **mandatory International Standard** developed as part of the World Anti-Doping Program. The ISE was first introduced in January 2021 following a three-year development and consultation period in partnership with anti-doping organizations (2027 ISE Update by WADA).

Article 18.1 of the Code states that: "*All Signatories shall, within their scope of responsibility and in cooperation with each other, plan, implement, monitor and evaluate and promote Education programs in line with the requirements set out in the International Standard for Education.*"

Under clause 7.2 of the Code, each NADO shall be the authority on Education as it relates to clean sport within their respective country and shall devise an Education Program for those under their authority and who are in their Education Pool. NADOs are required to document an Education Plan to demonstrate how their Education Program will be implemented and monitored, and to evaluate their Education Programs annually.

International Federations shall give precedence to Education Programs targeted at International-Level Athletes, as defined by their own standards with regard to Code Article 18.2.3, in accordance with clause 7.3 of the ISE. For people who fall under their purview and are part of their education pool, each International Federation is required to create an education program. This includes preparing

---

[13] Section 51 (1) (2) of the National Sports Act, Cap. 151 states that there is established in accordance with the requirements of the World Anti-Doping Code, the National Anti-Doping Organization which shall be a body corporate with perpetual succession and shall have an official seal.

[14] The WADA ISE can be downloaded at https://www.wada-ama.org/en/resources/world-anti-doping-code-and-international-standards/international-standard-education-ise#resource-download

an education plan that outlines the program's implementation, oversight, and yearly evaluation procedures. International Federations shall take into consideration offering Event-Based Education at International Events where Testing will take place and where they have Testing authority in collaboration with the local NADO, or where applicable, with the RADO, the National Federation, and the Major Event Organization. In compliance with Article 5, athletes and their support staff who compete internationally are required to obtain education prior to the event. In accordance with Article 20.3.13 of the Code, the International Federation shall mandate that National Federations carry out Education in collaboration with the relevant NADO.

Art. 7.5 of the ISE, makes reference to Article 20.4.6 of the Code which provides that where a NADO does not exist, the National Olympic Committee (NOC)(or, as applicable, the National Paralympic Committee (NPC)) shall be the authority on Education in their country subject to Art. 7.2. Where a NADO exists, the NOC (or, as applicable, the National Paralympic Committee) shall cooperate with their NADO to ensure that Athletes and Athlete Support Personnel selected to participate in the Olympic/Paralympic Games (or any Event where the NOC or, as applicable, the NPC), participates or hosts shall receive Education in advance of the Event as per clause 5.

The NOC (or, as applicable, the NPC) shall require National Federations to conduct Education in coordination with the applicable NADO as per Article 20.4.12 of the Code.

Under clause 7.6 of the ISE, RADOs shall support their member countries to conduct Education Programs and shall promote Education as per Article 21.4.7 of the Code. RADOs are to work with NADOs, governments and NOCs (or, as applicable, NPCs) to provide support for the coordination and delivery of Education Programs.

Under clause 8.1 of the ISE, Signatories are required to coordinate their education efforts to minimize duplication and maximize the effectiveness of their Education Programs and are enjoined to -

a) Consult with other relevant Signatories when planning Education activities;
b) Agree in advance on roles and responsibilities for Event-Based Education where applicable; and
c) Share their Education Plans or overview/summary with other relevant Signatories upon request.

3.3.2 Basic Tenets of the ISE

The ISE provides further that its **overall guiding purpose** is "*to support the preservation of the spirit of sport as outlined in the Code and to help foster a clean sport environment*" and recognizes that "*the vast majority of Athletes wish to*

compete clean, have no intention to Use Prohibited Substances or Methods and have the right to a level playing field".

The ISE recognizes that **Education**, as one of the anti-doping prevention strategies highlighted in the Code, "*seeks to promote behaviour in line with the values of clean sport and to help prevent Athletes and other Persons from doping*", and further that "*a key underpinning principle of the ISE is that an athlete's first experience with anti-doping should be through Education rather than Doping Control.*"

The three (3) main **objectives of the ISE** are–

(1) To create obligatory guidelines that assist Signatories in organizing, carrying out, overseeing, and assessing successful educational initiatives in accordance with Code Article 18. The principles and minimum standards that education programs must include are outlined in the ISE, the Guidelines for Education will help Signatories develop and enhance their education programs, and the Code will serve as the framework for education.

(1) To provide: -

a) Definitions of terminology in the Education field; and

b) Clarity on roles and responsibilities for all Signatories responsible for planning, implementing, monitoring and evaluating Education Programs.

(2) To help Signatories maximize the use of their resources by:

a) Requiring Signatories to establish an Education Pool that shall at a minimum, include athletes in the Registered Testing Pool and athletes returning from a sanction;

b) Encouraging Signatories to cooperate with others and coordinate their education activities to minimize duplication;

c) Encouraging Signatories to consider the benefits of educating a wider population through Values-Based Education programs to instil the spirit of sport and foster a clean sport environment; and

d) Encouraging Signatories to engage and leverage the resources and expertise of others, including governments, researchers and educational institutions.

The ISE sets the Standards for Education and mandates Signatories to develop and deliver an Education Program that incorporates Values-Based *Education,* Awareness Raising, Information Provision and Anti-Doping Education.

Education Programs should be evidence based, informed by Education theory, and where possible, informed by social science research.

Signatories are required to keep a record of their educational activities in the form of an Education Plan, which they must submit, upon request, with an overview or summary in either English or French, to WADA and other Signatories. Signatories must do the following in order to create their education plan: (1) evaluate the existing state of affairs; (2) create an education pool; (3) identify specific goals and associated activities; and (4) provide monitoring protocols.

Under Art. 5.2 of the ISE, Signatories are to include the following topics in their Education Program as also outlined in Code Article 18.2, and which are to be provided for the Registered Testing Pool in full:

- Principles and values associated with clean sport;
- Athletes', Athlete Support Personnel's and other groups' rights and responsibilities under the Code;
- The principle of "Strict Liability";
- Consequences of doping, for example, physical and mental health, social and economic effects, and sanctions;
- Anti-doping rule violations;
- Substances and Methods on the Prohibited List;
- Risks of supplement use;
- Use of medications and Therapeutic Use Exemptions;
- Testing procedures, including urine, blood and the Athlete Biological Passport;
- Requirements of the Registered Testing Pool, including whereabouts and the use of ADAMS; and
- Speaking up to share concerns about doping.

There is a requirement under Art. 5.7 for the ISE for Signatories to select appropriate Education activities to achieve the objectives of the Education Plan. Delivery methods may include face-to-face sessions, eLearning, brochures, outreach booths, websites, etc., as described in the Guidelines for Education.

Under Art. 5.8 of ISE, Signatories must assign Educators who will be responsible for delivering face-to-face *Education*. Educators should be competent in Values-Based Education and on all topics outlined in Code Article 18.2, the International Standard for Education and the Guidelines for Education.

Art. 5.9 of the ISE mandates signatories to include Athletes in the planning and development of the Education Plan to ensure activities are appropriate for the stage of development of the Athletes. Signatories should consider involving Athletes in the delivery of Education activities where appropriate.

Under Art 6 of the ISE, Signatories are to evaluate their Education Program annually with the findings informing the following year's Education Plan. The evaluation report is to be provided to WADA upon request.

3.3.3 WADA's Review and Analysis of the ISE

Through the Code Compliance Questionnaire (CCQ) exercise, WADA is currently reviewing and analyzing the impact of the ISE. According to preliminary findings, this has resulted in an increase in both financial and human resources, which has caused ADOs to significantly increase their educational efforts (WADA's 2027 Code Review & ISE Concept Paper). WADA has noted elements of the ISE that are indicated in the seven principles that are outlined below, as part of the ongoing evaluation.

1) Too much energy is being focused on setting up 'Recognition Programs'. It is not feasible for each Signatory to establish a recognition program where they assess the merits of every Signatory where there may exist an overlap with their education pool, particularly for International Federations (IFs) who may have close to 200 National Federations (or equivalent member associations).

2) With regard to expectations of what makes an educator "trained," it is noted that the initial ISE's goal was to create the term "Educator" and define it, stating that an individual must get training and assignment from a Signatory. Apart from the implicit assumption that educators should have some formal training before they prepare and deliver education sessions, WADA observes that there is currently no mandate regarding the kind, extent, or specifications of the training that is needed. The ISE Draughting Group has recommended that, in order for educators to carry out their role in designing, carrying out, and assessing educational sessions and programs, they should be required to demonstrate specific knowledge and competencies, and that the specifics of these competencies and knowledge should be taken into consideration.

3) It is also noted that the education section of the CCQ has experienced the greatest number of non-conformities due to monitoring and evaluation. This has made it difficult to set up recording mechanisms (i.e., monitoring) that capture the scope of education activities at the individual level. As a result, some organizations find it difficult to document the participation of individual athletes or athlete support personnel (ASP) in particular education activities. This has made it more difficult to assess whether the goals outlined in the education plan have been met. The review also notes that there aren't many evaluation reports that are submitted to the CCQ, and the reasons for this—a lack of resources and expertise, for example—suggest that evaluation isn't considered an essential component of education programs but rather something that can only be carried out correctly with expert academic support.

4) Studies consistently show that athlete support staff have a significant impact on athletes' attitudes and behaviors. As such, it is critical to acknowledge this impact when it comes to clean sport education to guarantee that athlete support staff members receive the necessary training.

5) The obligations and expectations of Signatories who directly organize and administer education programs are the main emphasis of the ISE. However, more and more anti-doping organizations are realizing that by working with partners and stakeholders like NFs or outside service providers, they can expand the reach of a program even further. This is because these partners and stakeholders may have even closer ties to athletes and the staff that supports them.

6) In order to guarantee that high-quality educational experiences are offered along the athlete pathway, coordinating operations at an operational level has proven more difficult even though the ISE established this. This is especially true when implementing education programs at a national level.

7) A significantly larger group of athletes (as well as athlete support staff) get tested, but they are less reachable inside the system, in that they do not interact with anti-doping outside of testing sessions. On the plus side, more people have been reached by the increased educational activities since the ISE was introduced.

3.4 Anti-Doping Education and Learning Platform (ADEL):

WADA has designated digital learning as a strategic priority in keeping with its "Grow Impact" and "Be Athlete Centered" objectives, in addition to the ISE. WADA has developed a Digital Education and Learning Strategy (DELS) in order to optimize the return on its investment in this field. The plan aims to empower Anti-Doping Organizations (ADOs) to continue supporting the technical advancement of practitioners via WADA's Code Implementation Support Program (CISP) (Adel-Three Years on, 2024) and its Global Learning and Development Framework (GLDF). Target audiences include athletes, coaches, and parents.

With the aim of providing accessible educational opportunities for athletes, athlete support personnel, administrators, and professionals working in the anti-doping industry, as well as enabling ADOs to fulfil their obligations under the Code and the International Standard for Education (ISE), the strategy outlines the vision for learning enabled by technology and serves as the foundation for the direction of WADA's Learning Management System (LMS) platform known as Anti-Doping Education and Learning (ADEL).

An entirely new and enhanced ADEL platform, which replaced WADA's original LMS introduced in 2018, was unveiled on January 6, 2021. The main purpose of ADEL, the centralized platform, is to provide ADOs with educational options to either expand the scope of their current programs or to supplement them.

Education solutions available on ADEL include courses, programs and resources for athletes, coaches, parents, medical professionals and other target audiences as identified in the Code and ISE. Additionally, on ADEL, anti-doping practitioners can access learning opportunities such as training programs to help them carry out their roles through the GLDF; and a wide range of digital resources

to support the development of their anti-doping programs through the CISP. The use and access to ADEL is free with the objective to maximize the reach of, and access to, quality education and learning opportunities to benefit all audiences, especially those working in or supporting the goal of clean sport. ADEL is for everyone, and anyone interested in learning more about anti-doping and protecting the values of clean sport.[15]

Within 3 years since the launch of ADEL, WADA reports a steep increase in user engagement, with the average number of monthly active users reaching 10,210. When compared to year 2022, there was a 68.18% increase in active users (ADEL-Three Years On, 2024).

Barkoukis, *et. al.,* (2019) rightly observe that anti-doping education has largely relied on traditional educational approaches such as face-to-face interaction and e-learning material. Current challenges in anti-doping education involve a) the development of modern educational tools suitable for the new generation of athletes, b) the use of state-of- art learning pedagogies that will enable effective engagement, learning and retention of the learned material, c) a systematic evaluation of the outcomes of anti-doping educational interventions on behavior and related cognition, and d) a positive approach to doping prevention*).* WADA's approach to anti-doping education has been criticized on many fronts but, while the critiques have an inherent right to question, it is not in dispute that WADA's strategy is bearing fruit as shown by the reviewed evidence.

[15] Cited in "***ADEL – Three Years On***", February 2024

CHAPTER FOUR

METHODOLOGY

4.1 Introduction

Chapter 4 presents the research methodology relied on to conduct the study. It encompasses the research design, the study population and the sample size determination. This Chapter further illustrates the sampling procedure, and techniques used and further define the data collection methods and instruments, the data analysis, validity and reliability of data collection instruments, measures of variables and ethical considerations.

4.2 Research Design

"NOC Uganda shall plan, implement, evaluate and promote Education in line with the requirements of Article 18.2 of the Code and the International Standard for Education," states Article 17 of the 2021 Anti-Doping Rules, which Uganda has ratified. Therefore, the primary goal of this Study is to evaluate Uganda's anti-doping education program in terms of its efficacy in discouraging doping within the scope of the WADA's establishment for the prevention of vice in competitive sport. Given that there wasn't much published on the idea in Uganda, according to the literature review, the study's major goal was to gather information directly from athletes, athlete support staff, and anti-doping officials—the people who antidoping education is primarily intended to reach.

The athletes sampled were both able bodied and para-athletes, whereas athlete support personnel included administrators, coaches, physiotherapists, medical personnel and antidoping educators. The sampled athletes and support personnel were based on previous opportunities to compete at both the local, regional and international were they represented Uganda.

The study adopted a cross-sectional survey design and interviews to examine the understanding of the local conditions pertaining to anti-doping training in Uganda, and to assess whether there was an appreciation of the role that doping education plays on preventing doping in competitive sport, and especially of any of that education, if receive was functional and effective.

4.3 Study Population

A sampling technique was carried where a total of 46 respondents that included 21 active athletes from 10 sport disciplines, 19 athlete support personnel from 10 different sports federations and 5 educators attached to the NADO who were purposely selected to provide responses to the survey questions and interviews.

The categories of sports disciplines sampled is indicated in ***Table 1*** below.

Table 1: Categories of sports disciplines or organizations of the sampled Respondents

	Number of Athletes	**Sports Discipline/Organization**
1.	5 (five)	Aquatics (Swimming)
2.	2 (two)	Boxing
3.	1 (one)	Cycling
4.	3 (three)	Modern Pentathlon
5.	4(four)	Netball
6.	1 (one)	Para-Athlete (Athletics)
7.	1 (one)	Para-Athlete (Badminton)
8.	1 (one)	Para-Athlete (Swimming)
9.	1 (one)	Para-Athlete (Weightlifting)
10.	1 (one)	Rowing
11.	1 (one)	Triathlon
	Athlete Support Personnel	**Sports Discipline**
1.	2 (two)	Aquatics (Swimming)
2.	2 (two)	Athletes' Commission
3.	1 (one)	Athletics (Track & Field)
4.	1 (one)	Basketball
5.	1 (one)	Modern Pentathlon
6.	1 (one)	Netball
7.	1 (one)	NOC Uganda
8.	1 (one)	Para-Athletics (Athletics)
9.	1 (one)	Para-Athletics
10.	1 (one)	Para-Swimming
11.	1 (one)	Paralympic Committee
12.	1 (one)	Physiotherapist (Athletics/Aquatics)
13.	1 (one)	Rowing
14.	1 (one)	Rugby
15.	1 (one)	Table Tennis
16.	2 (two)	Volleyball
	NADO Educators	**Organization**
1.	5 (five)	NADO (anti-doping educators)

Appendix 1 shows the list of the respondents engaged with.

4.4 Sample Size Determination

This study utilized non-probabilistic sampling techniques as discussed herein.

4.4.1 Purposive Sampling

This Study utilized purposive sampling approach where a researcher chooses a respondent into a study based on the judgment that the identified respondent is capable of providing rich case information concerning the phenomenon being investigated (Etyang, 2018). This sampling technique was used to select athletes from the different categories.

4.5 Data Collection Methods

A combination of qualitative and quantitative research methods was employed by the Researcher.

4.5.1 Surveys

In order to obtain qualitative data, the researcher relied on surveys and document reviews to obtain information. The respondents were asked the same questions using a questionnaire administered face-to-face and online, with the aim of obtaining answers from the selected numbers of informants to enable the Researcher to both describe and compare, to relate one statistic from another and to demonstrate that certain features exist in certain categories (Bell and Waters, 2018). Random sampling was adopted focusing largely on elite athletes and officials from sports that have participated in multisport Games.

4.5.2 Interviews

The researcher relied on interviews for data collection in order to get more information regarding anti-doping education in Uganda. This technique was relied upon to obtain clarifications, and a better understanding of the responses provides, which resulted in more information on the topic. Most of the interviews were face-to-face, while 5 were done online due to the busy schedules of the respondents, who were also outside the country.

The questions focused on whether there was a known education program for anti-doping that follows known standards; whether the respondents had attended anti-doping training organized by the NOC, their National Federation or International Federation, the frequency of attending or conducting anti-doping training, the topics covered, the facilitators and the effectiveness of anti-doping education overall.

The qualitative data sourced was analysed using Microsoft Excel and presented using tables, bar graphs and linear graphs, percentages and frequencies.

4.5.3 Document Review

The Researcher critically reviewed WADA's International Standard for Education and reports prepared by WADA pertaining to implementation of the standard. He also examined the Anti-Doping Education and Learning Platform and further assessed WADA's reports on anti-doping education in Sub-Saharan Africa and other parts of the World.

An analysis of Uganda's recently enacted National Sports Act of 2023 was carried out with a deep dive into the provisions touching on the establishment of a NADO.

4.6 Data Analysis Techniques

4.6.1Qualitative Analysis

Qualitative data collection generally uses non numerical data and usually has broader questions at the outset home in on a narrower range of issues as the research develops (Bell and Waters, 2018).

The researcher relied on a thematic approach to carry out an analysis of the qualitative data. The thematic areas were delineated and grouped based on the responses provided by the respondents following the format of the questions as presented. The grouping for the different responses was descriptive of the answers submitted for the differing categories of the respondents, which were also thematically assessed.

4.6.2 Quantitative Analysis

With the reliance on the Statistical Package for Social Scientists, the quantitative data was reviewed, sorted, coded, cleaned and analysed using descriptive statistics.

4.7 Quality Control Measures

4.7.1 Validity

A sensitivity analysis of the survey and interview was carried out to validate the appropriateness of the tools and if the questions would be easily understood by the informants. The tools were pre-tested on NOC administrative staff and the NADO anti-doping officers. The survey was shared with the Tutor before final adjustments were made.

4.7.2 Reliability

Whereas all analyses were carried out by the researcher to ensure consistency, the validity of the tools was determined after pre-testing to confirm reliability of the data. About 3 of respondents expressed concerns on the facts that their National Federations did not accord them many opportunities to engage in anti-doping education and therefore lacked confidence in the answers they provided.

4.8 Limitations of the Study

Some of the athletes argued a lot, questioning their competence to respond to questions related to anti-doping education.

A number of the athletes were also only accessible through the support of athlete support personnel, which could have an impact on the data collected.

Some categories of athletes were not approached because they were below the age of 18. The sample population therefore could have been much bigger, if athletes and support personnel were easily reachable and promptly responsive. It was difficult to reach some athletes without involving their coaches or officials. Valuable data from those not approached may have enriched the research further and could have an impact on the data collected.

CHAPTER FIVE

PRINCIPAL RESULTS AND FINDINGS

5.1 Introduction

The study's conclusions and outcomes based on the data gathered are presented in this chapter. It is organized in accordance with the study's goals, which were to: review Uganda's antidoping regulatory framework in light of WADA's compliance standards and requirements; review WADA's education initiatives by looking at the programs and tools used to inform athletes and athlete support personnel about the risks and repercussions of doping; review the current antidoping educational program and evaluate its effectiveness in preventing antidoping among athletes and athlete support personnel; and recommend an appropriate draft antidoping educational program for Uganda based on global best practices.

5.2 Response rate

A total of 46 of the 48 questionnaires that were sent to respondents were successfully returned, yielding a 95.8% response rate. Furthermore, the current study's 88.8% response rate meets Amin's (2005) recommendation, which states that a study's response rate should be 70% or higher in order for its findings to be broadly applicable. Nonetheless, as seen in table 2 below, the study's overall response rate was 95.8%.

Table**2:** Response Rate of the Study

Data Collection Instrument	**Population Category**	**Sample Size**	**Administered Instruments**	**Response Rate**
Questionnaire	Athletes	24	23	95%
	Athlete support personnel	14	13	92%
	NADO-educators	10	10	100%
	Total	**48**	**46**	**95.8%**

Source: Primary data, 2024

5.3 Regulatory regime governing antidoping in Uganda in relation to WADA's compliance requirements and standards

This section presents the frequencies and percentages of respondents who were in agreement, and disagreement with the statements that depicted regulatory regime governing antidoping in Uganda in relation to WADA's compliance requirements and standards.

Table 3: Descriptive statistics of the review of the regulatory regime governing antidoping in Uganda in relation to WADA's compliance requirements and standards

	Question	No	Yes	Total
1.	Does Uganda have a national anti-doping agency that is officially recognized by WADA?	12 26%	34 74%	46 100%
2.	Are the anti-doping regulations in Uganda fully aligned with the WADA Code and international standards?	11 24%	35 76%	46 100%
3.	Is the process of athlete testing and sample collection in Uganda conducted according to WADA's guidelines?	8 18%	38 82%	46 100%
4.	Has Uganda implemented educational programs for athletes and sports officials about anti-doping rules as required by WADA?	15 32%	31 67%	46 100%
5.	Does Uganda have a clear legal framework that enforces penalties for anti-doping violations in line with WADA's sanctions?	9 19%	37 80%	46 100%
6.	Is Uganda regularly monitored by WADA to ensure ongoing compliance with international anti-doping standards?	9 19%	37 80%	46 100%

Source: Primary data, 2024

According to table 3, 74% of respondents said that Uganda has a national anti-doping agency that is formally recognized by WADA when asked if such an agency exists. This suggests that Uganda has a strong framework in place for overseeing anti-doping operations. The 26% of respondents who gave the "No" response, however, raises the possibility that there are problems with this agency's visibility or public awareness. The efficacy of the agency's work may be lowered and general confidence in Uganda's anti-doping initiatives may be damaged by this lack of acknowledgement.

Regarding Uganda's anti-doping laws and their compliance with the WADA Code and other international standards, table 3 shows that 76% of respondents think Uganda's laws are completely compliant. This suggests that Uganda is generally adhering to international best practices, which is necessary to preserve international sports credibility. Nonetheless, the 24% of respondents who voiced skepticism raises the possibility that there are instances in which people feel that the regulations are incomplete or not entirely aligned. This might put Uganda's status in the international world and its adherence to WADA guidelines at jeopardy.

Regarding the issue of athlete testing and sample collection, 82% of respondents concurred that WADA criteria are followed in Uganda. This resounding majority implies that Uganda is following the right processes to preserve the credibility of its anti-doping initiatives. The 18% of respondents, who disagreed, however, might be pointing up sporadic errors or irregularities in the testing procedure, which, if left unchecked, could damage Uganda's anti-doping efforts' legitimacy and efficacy.

Regarding anti-doping education programs for athletes and sports authorities, 67% of respondents think Uganda has carried out the necessary initiatives as mandated by WADA. This suggests that Uganda has attempted to inform important parties about anti-doping laws. With 32% of respondents responding "No," there appears to be a belief that these educational programs might not be sufficiently extensive or widely accepted. A lack of awareness of anti-doping regulations and inadvertent infractions could result from this educational disparity among authorities and athletes.

Eighty percent of those surveyed attested to Uganda's legal system's compliance with WADA laws and its ability to impose penalties for anti-doping offences. This strong response suggests that Uganda has the legal capacity to stop doping and ensure that those who break the law face the consequences they deserve. However, it's possible that the 19% of respondents who disagreed were casting doubt on the effectiveness or clarity of this legal framework, which could make it more difficult to apply the law efficiently and reduce the penalties' deterrent effect.

Lastly, Table 3 shows that 80% of respondents think that Uganda is routinely monitored by WADA to guarantee continued compliance with international anti-doping standards. This indicates confidence in WADA's supervision of Uganda's anti-doping regime. The 19% of respondents who gave a negative response, however, might point to worries about the regularity or transparency of these monitoring efforts. Maintaining adherence to international standards and fostering confidence in Uganda's anti-doping initiatives depend on transparent and constant monitoring.

5.4Review of WADA’s education initiatives (tools and programmes) employed to educate athletes and athlete support personnel about the dangers and consequences of doping

This section presents the frequencies and percentages of respondents who were in agreement, and disagreement with the statements that depicted review of WADA’s education initiatives (tools and programmes) employed to educate athletes and athlete support personnel about the dangers and consequences of doping.

Table 4: Descriptive statistics of the review of WADA's education (tools and programmes) employed to educate athletes and athlete support personnel about the dangers and consequences of doping

	Question	No	Yes	Total
1.	Do you know the frequency of when your Federation organizes anti-doping training?	16 34.7%	30 65.3%	46 100%
2.	Did you attend the last anti-doping training organized by your International Federation (IF)?	14 30%	32 70%	46 100%
3.	Do you remember the topics and questions covered?	10 21%	36 79%	46 100%
4.	Do you remember who conducted the training?	8 17%	38 83%	46 100%
5.	Do you feel that the anti-doping educational program for your Federation is effective?	38 82%	8 18%	46 100%
6.	Do you feel that the anti-doping educational program for the UOC is effective?	40 86%	6 14%	46 100%

Source: Primary data, 2024

When asked how frequently their Federation holds anti-doping training, 65.3% of respondents said "Yes," indicating that most people are aware of these sessions. That being said, the fact that 34.7% of respondents said "No" raises the possibility that a sizable percentage of the public may not be adequately aware of these training possibilities, which could have an impact on both the effectiveness of the Federation's anti-doping education initiatives generally and the involvement of those persons.

Seventy percent of responders said they had attended the most recent anti-doping training that their International Federation had arranged. This indicates a high degree of participation in anti-doping campaigns. The 30% of participants who did not show up, however, might point to problems such conflicts with schedule, disinterest, or poor communication regarding the significance of these sessions, all of which could lessen the training's total effect on doping prevention.

79% of respondents indicated that they remembered the questions and subjects discussed throughout the training, indicating that the information was interesting or pertinent enough to stick with them. In order to ensure greater retention of the material, there is a need to change the way the training is delivered. The 21% of participants who do not recall the material may point to problems like the complexity of the subject, a lack of focus throughout the session, or an ineffective delivery technique.

When asked if they could recall who led the training, 83% of respondents said "Yes," suggesting that the trainers left an impression, maybe as a result of their knowledge or the way they delivered it. The 17% of participants who were unable to recollect the trainers might indicate a lack of engagement on the side of the

participants or a lack of focus on the trainers during the sessions, which could have an impact on the training's overall effectiveness.

Surprisingly, 82% of respondents said that their Federation's anti-doping education program was ineffective when asked about its efficacy. This shows that there are valid worries about the program's effects and that the participants' needs and expectations are not being met by the present educational initiatives. The Federations' efforts to stop athlete doping may be seriously hampered by this impression.

Finally, when asked about the effectiveness of the anti-doping educational program for the Uganda Olympic Committee (UOC), an even larger percentage—86%—believed that the program was not effective. This reflects a critical issue within the UOC's educational efforts, indicating that the program may not be adequately addressing the needs of its audience. The very low level of satisfaction points to the necessity for a comprehensive review and overhaul of the educational strategies to improve the program's effectiveness and to enhance the prevention of doping among athletes under the UOC's jurisdiction.

5.5 Existing anti-doping educational program and its efficacy and impact in preventing antidoping amongst athletes and athlete support personnel

This section presents the frequencies and percentages of respondents who were in agreement, and disagreement with the statements that depicted existing anti-doping educational program and its efficacy and impact in preventing antidoping amongst athletes and athlete support personnel.

Table 5: Descriptive statistics of existing anti-doping educational program and its efficacy and impact in preventing antidoping amongst athletes and athlete support personnel

	Question	Yes	No	Total
1.	Do you believe that the current anti-doping educational program has effectively increased your knowledge about doping prevention?	12 26%	34 74%	46 100%
2.	Have you observed a noticeable change in attitudes toward doping among athletes and support personnel as a result of the anti-doping educational program?	11 24%	35 76%	46 100%
3.	Do you feel that the anti-doping educational materials provided to you are relevant and up-to-date?	8 18%	38 82%	46 100%
4.	Has the anti-doping educational program provided you with sufficient tools and strategies to resist pressure or temptation to engage in doping?	15 32%	31 67%	46 100%

	Question	Yes	No	Total
5.	Do you think that the anti-doping educational sessions are delivered frequently enough to maintain awareness and vigilance against doping?	9 19%	37 80%	46 100%
6.	Have you noticed a reduction in doping-related incidents among athletes and support personnel since the implementation of the anti-doping educational program?	37 80%	9 19%	46 100%

Source: Primary data, 2024

Just 26% of respondents said that the current anti-doping educational program had effectively raised their understanding of doping prevention, while 74% said that it has not. This suggests that there may be issues with the program's content or delivery that need to be fixed in order to properly educate participants, as a sizable majority of participants do not think the program has improved their grasp of doping avoidance.

When asked if the anti-doping instructional program has made a discernible difference in the attitudes of athletes and support staff towards doping, 24% of respondents replied "Yes," while 76% said "No." This finding suggests that most participants have not noticed a change in views, which may indicate that the program has had little effect on altering attitudes or behavior related to doping in the sports community.

In terms of the anti-doping instructional materials' currency and relevance, 18% of respondents thought they were current and relevant, while 82% disagreed. This discrepancy rises serious questions about how adequate the instructional materials are, as it is possible that many participants are being given inaccurate or out-of-date information, which could compromise the program's ability to effectively discourage doping.

When asked if the anti-doping instructional program had provided them with enough tools and tactics to withstand pressure or the desire to dope, 32% of participants said "yes," while 67% said "no." This suggests that there is a need for more useful and actionable information within the program to support participants in rejecting such temptations, as the majority does not believe that they have the necessary techniques to address doping-related pressures.

About how frequently anti-doping education sessions are held, only 19% of respondents think it's frequent enough to keep people aware and vigilant about doping, while 80% disagree. This resounding reaction suggests that most participants believe the sessions are not often enough, which, if not addressed with more frequent teaching opportunities, could result in decreased awareness and an increased risk of doping.

In conclusion, eighty percent of respondents observed a decrease in doping-related incidences among athletes and support staff since the anti-doping teaching program was put into place, while only nineteen percent did not perceive a decrease. This shows that, in spite of other issues, the program seems to have had a beneficial effect on lowering doping episodes, indicating some degree of success in reaching its main objective of lowering doping incidents in the athletic setting.

5.6 A suitable draft antidoping educational program for Uganda based on international best practice

This section presents the frequencies and percentages of respondents who were in agreement, and disagreement with the statements that depicted a suitable draft antidoping educational program for Uganda based on international best practice.

Table 6: Descriptive statistics of suitable draft antidoping educational program for Uganda based on international best practice

	Question	No	Yes	Total
1.	Should the draft anti-doping educational program align with the World Anti-Doping Agency (WADA) Code and international anti-doping standards?	12 26%	34 74%	46 100%
2.	Should the draft program offer tailored content that addresses the specific needs and challenges faced by athletes and support personnel in Uganda?	11 24%	35 76%	46 100%
3.	Should the draft program include mechanisms for ongoing training and refresher courses to keep athletes and support personnel updated on anti-doping issues?	8 18%	38 82%	46 100%
4.	Should the draft program incorporate feedback from stakeholders to ensure its effectiveness and relevance in the Ugandan context?	15 32%	31 67%	46 100%
5.	Should the draft anti-doping educational program provide clear and practical strategies for athletes to avoid inadvertent doping violations?	9 19%	37 80%	46 100%
6.	Should the draft program include evaluation criteria to measure its impact and effectiveness in preventing doping among athletes and support personnel in Uganda?	9 19%	37 80%	46 100%

Source: Primary data, 2024

In response to the question of whether the proposed anti-doping educational program should be in line with worldwide anti-doping standards and the World Anti-Doping Agency (WADA) Code, 74% of respondents said "Yes," showing a strong preference for making sure the program complies with best practices and international regulations. Nonetheless, the 26% of respondents who selected "No" raise the possibility that there are issues with the program's compliance with these standards or that it has to be altered in order to better satisfy international requirements.

76% of respondents agreed that the draft program should include content that is specifically designed to address the demands and difficulties that athletes and support staff in Uganda confront. This suggests that there is agreement that the program needs to be tailored to local problems and difficulties. The 24% of respondents who selected "No" might be worried about how well the program will be able to address the special requirements of Ugandan athletes or they might think that a more general approach would be adequate.

82% of respondents agreed that the draft program should contain procedures for continuing education and refresher courses to keep support staff and athletes informed about anti-doping problems. The resounding majority indicates a strong preference for ongoing education to make sure that everyone involved is aware of the most recent advancements and industry best practices. The 18% of respondents who disapproved might believe that regular updates are unnecessary or that the initial training is sufficient.

67% of respondents said "Yes," indicating that they thought stakeholder input was crucial for enhancing the program, when asked if the draft program should take stakeholder comments into account to ensure its efficacy and relevance in the Ugandan context. The 32% who said "No" may indicate that they believe other approaches to program improvement are preferable or that stakeholder input is not essential to the program's success.

Eighty percent of those asked if the proposed anti-doping education program should give athletes clear and doable ways to prevent unintentional doping infractions replied "yes." This indicates a significant desire for the program to provide practical guidance and resources to help avoid unintentional doping. The 19% of respondents who selected "No" may feel that the program's emphasis should be on other areas of anti-doping education or that such tactics are superfluous.

Ultimately, eighty percent of respondents agreed that the draft program should have evaluation criteria to gauge its influence and efficacy in stopping doping among athletes and support staff in Uganda. This suggests that there is broad agreement that quantifiable results are necessary to evaluate the program's effectiveness. The 19% of respondents who selected "No" may believe that alternative forms of assessment are more suitable or that evaluation is not as necessary as other forms.

CHAPTER SIX

RECOMMENDATIONS AND CONCLUSION

6.1 Introduction

This Chapter presents the recommendations and conclusion of the Study. It is structured according to the specific objectives of the study.

6.2 Recommendations

This Chapter is presented objective by objective based on the conclusions of the study. Additionally, theChapter puts forth the suggestions of the best course of action that athletes and athlete support personnel should implement in order to comply with antidoping.

6.2.1 Regulatory regime governing antidoping in Uganda in relation to WADA's compliance requirements and standards

Raising the NADO's profile and public knowledge is crucial for strengthening Uganda's anti-doping initiatives and guaranteeing adherence to WADA regulations. To do this and to strengthen the agency's position, public outreach initiatives, collaborations with sports federations, and media campaigns might be used and achieved within the 1 to 2 years.

Uganda's anti-doping laws need to be thoroughly reviewed in order to ensure that gaps or discrepancies with the WADA Code and other international standards are addressed. To further guarantee adherence to and comprehension of these laws, stakeholders can get ongoing training and technical support from WADA. This cab be achieved within 1 to 2 years following successful mobilization of resources.

Uganda should improve testing protocols by making sure that all procedures are consistent and rigorous in order to resolve any potential inconsistencies in athlete testing and sample collection. To ensure compliance with WADA requirements, this may entail regular audits and further training for staff members. This should be feasible after sourcing the relevant funding especially from Government and agencies, which is attainable within1 to 3 years.

It is imperative to enhance and broaden anti-doping education initiatives. Within the coming 12-month period, Uganda should make sure that these programs, which include required seminars, online courses, and ongoing education catered to individual requirements, are available to all athletes and support staff participating in different sports at different levels. This will enhance compliance with anti-doping regulations and help prevent inadvertent infractions.

It is important to evaluate the legal framework for pursuing anti-doping offences to make sure it is clear, strong, and effective at discouraging doping. Educating athletes and others who support them about the legal ramifications can strengthen the deterrence impact. The Government ought to establish an

impartial and adequately resourced NADO and guarantee that policy directives are in place to facilitate the execution of NADO operations, such as anti-doping education initiatives. This should be prioritized for implementation in the next 12 months.

Lastly, to guarantee continued compliance, it is critical to continue WADA's frequent, open monitoring. Uganda and WADA should work closely together to support regular audits, give updates, and resolve any problems found throughout the monitoring process. Building and maintaining trust in Uganda's anti-doping initiatives can be facilitated by transparent information regarding the results of these monitoring actions.

6.2.2 Review of WADA's education initiatives (tools and programmes) employed to educate athletes and athlete support personnel about the dangers and consequences of doping

A number of important suggestions are made in order to improve anti-doping education within the NADO and the Federation. Enhancing communication and raising awareness of training opportunities should come first. This can be accomplished by creating focused communication plans that make use of many platforms, including official websites, social media, and email, in order to guarantee that information regarding training sessions is seen by as many people as possible. Sending out reminders on a frequent basis before to the training sessions, emphasizing the value of participation, can also help to raise awareness and engagement. To address the challenge of increasing participation and attendance in training sessions, offering flexible scheduling options that accommodate different participant schedules will help minimize conflicts. Furthermore, introducing incentives for attendance, such as certificates, recognition, or small rewards, could encourage higher participation rates.

Another crucial area is improving the training sessions' content and delivery. To make sure the training materials are interesting, pertinent, and simple to comprehend, they should be examined and updated. Case studies, interactive components, and real-world examples can help to humanize and increase the impact of the content. Different learning styles will be accommodated and knowledge retention will increase by using a variety of delivery techniques, such as workshops, online courses, and interactive sessions. It is equally crucial to invest in the ongoing professional development of trainers in order to guarantee that they have the abilities and know-how to present the content in an efficient manner. Having well-known sportsmen or anti-doping specialists lead training sessions could boost the sessions' effect and legitimacy.

It is essential to address issues raised by participants by putting in place feedback systems. After every session, feedback should be gathered to assist identify problems like conflicts with scheduling, difficult content, or difficulties with delivery. These problems can then be fixed to help the training programs continue to get better. It is also essential to make sure that difficult subjects are

understandable to all participants, regardless of their level of experience, and to simplify complicated subjects. Encouraging individualized interaction between the trainer and participants throughout sessions will strengthen the connection between them, which will improve retention and recall of the training information. During sessions, highlighting the credentials and experience of trainers will assist foster a sense of trust and respect, which will increase the training's effectiveness.

To address the major issues raised by the participants, the educational program needs to be thoroughly reviewed and redesigned. To better match the program with the needs and expectations of the participants, a comprehensive needs assessment should be part of this review. It will be possible to ensure that the training is more relevant and effective by redesigning the program to better match the unique demands of the Federation and NADO athletes. This may involve segmenting the training depending on different athlete groups or competition levels. Ensuring continuous improvement requires putting in place a framework for the constant assessment of the program's efficacy, taking into account behavioral results, knowledge retention, and participant satisfaction.

Increasing cooperation with international federations will help local anti-doping education initiatives by bringing in global best practices and knowledge. Developing standardized training materials or holding combined training sessions are two examples of closer collaboration. Local efforts will be further enhanced by comparing the Federations' and NADO's programs to other effective anti-doping education initiatives across the globe and implementing best practices.

Finally, it is critical to step up efforts to inform athletes and the people who support them about the significance of anti-doping. A stronger culture of clean sport and fair competition will result from launching awareness campaigns about the significance of anti-doping measures and the consequences of doping, as well as from expanding educational efforts to include coaches, team doctors, and other support staff in addition to athletes. The NADO and the National Sports Federations and Associations may greatly improve the efficacy of their anti-doping educational programs, which will help athletes avoid doping, by putting these thorough recommendations into practice.

6.2.3 Existing anti-doping educational program and its efficacy and impact in preventing antidoping amongst athletes and athlete support personnel

Many important suggestions are made in order to increase the anti-doping educational program's efficacy. First and foremost, the instructional materials and delivery strategies urgently need to be improved. In order to make sure the materials are current and applicable, they should be updated with the most recent findings from science, developing doping patterns, and updated rules. This will support preserving the program's efficacy and relevance. Furthermore, the learning process can be made more memorable and powerful by utilizing dynamic and engaging teaching techniques including gamified content, virtual reality

scenarios, and e-learning platforms. Making sure the information is useful and appropriate will improve participants' comprehension and memory of the material.

The program's emphasis on behavior modification and attitude changes must then be intensified. This can be accomplished by including behavioral interventions that push participants to consider their attitudes and vulnerabilities surrounding doping, such as motivational interviews, role-playing situations, and case studies. Customizing the instructional materials for various groups—athletes, coaches, and medical personnel, for example—will address particular requirements and risks and increase the program's efficacy in altering participants' attitudes and behaviors. It's also critical to arm players with doping-resistance tactics and useful tools. Participants will be more prepared to address doping-related issues if skill-building seminars that concentrate on making decisions under pressure, bucking peer pressure, and ethical reasoning are introduced. Creating mentorship programs or support groups where athletes can talk about their worries and get advice on avoiding doping pressure will bolster these initiatives even more.

The frequency of instructional sessions should be raised in order to guarantee ongoing involvement and reinforcement of important themes. Maintaining awareness throughout the year can be facilitated by holding regular training sessions and short, sporadic refreshers or micro-learning sessions. By providing these sessions in many formats—online, on-demand, and in-person—participation will become more convenient and accessible for all athletes and support staff. It's also essential to improve the program's monitoring and assessment procedures. It will be possible to regularly gather participant input to evaluate their knowledge, attitudes, and behaviors by putting in place a strong mechanism for continuous feedback loops. The program should be modified with knowledge based on this data. Furthermore, monitoring long-term results, like variations in doping events and attitudes, will assist in determining the program's efficacy and provide guidance for making strategic decisions.

Finally, highlighting the program's accomplishments and spreading the word about it is critical to reaffirming its worth and fostering ongoing involvement. Building credibility and support from stakeholders will be facilitated by highlighting the program's reduction in doping-related incidents as a major achievement. This endeavor can be strengthened even more by disseminating participant success stories and endorsements. Maintaining stakeholder trust and promoting a continuous improvement culture will be accomplished through regular reporting on the program's accomplishments, difficulties, and ongoing improvements. The anti-doping educational program may more effectively close the gaps found by putting these thorough recommendations into practice. This will result in improved education, more potent preventative measures, and a long-term decline in doping-related incidences within the sports community.

6.2.4 A suitable draft antidoping educational program for Uganda based on international best practice

A few important changes should be made in order to improve the draft anti-doping education program's efficacy. First and foremost, it is crucial to confirm that the program complies with both international anti-doping standards and the Code. In order to achieve this alignment, the program's policies, methods, and content should firmly embrace and incorporate global norms while retaining flexibility to accommodate regional variations. The program needs to be updated and reviewed on a regular basis in order to be up to date with changing international requirements. In order to allay the doubts expressed by those who questioned this alignment, it is critical to offer clear justifications for how upholding international standards enhances the local situation while making sure that these standards remain grounded in the reality that Ugandan athletes must face.

Additionally, the curriculum needs to be tailored to the unique requirements and difficulties faced by Ugandan athletes and support staff. The vast majority of respondents think that the success of the program depends on the customized material. As a result, the curriculum needs to be created with a thorough awareness of local conditions, such as the climate, cultural norms, and the particular difficulties faced by Ugandan athletes. By using this strategy, the program will be more relevant and engaging for the local audience. If case studies or examples are included in the program, they could serve as a convincing argument for individuals who doubt the necessity of customized content. These could highlight how localized techniques can better benefit Ugandan athletes than a more generic approach.

Continual learning ought to be the program's main component. The program should create a structure with regular workshops, online modules, and yearly refresher courses, together with strong support for further training and refresher courses. Through these initiatives, athletes and support staff will be kept up to date on the most recent advancements in anti-doping procedures and equipped to handle any new obstacles that may arise. The program should highlight the advantages of ongoing education, stressing how it keeps all parties involved informed about the most recent doping prevention techniques and helps prevent complacency in the case of individuals who feel that initial training is adequate.

Feedback from stakeholders must be incorporated into the program in order for it to continuously develop. Mechanisms for routinely compiling and incorporating feedback from athletes, coaches, medical professionals, and other pertinent parties should be established by the program. After training programs, surveys, focus groups, and feedback sessions can be used to gauge participant involvement. Through the appreciation and implementation of stakeholder feedback, the program will enhance its efficacy and relevance within the Ugandan context. In order to ensure that changes are both evidence-based and representative of the requirements of all participants, the program could

supplement these insights with data-driven assessments for individuals who are sceptics about the significance of stakeholder feedback.

Athletes should also receive clear and useful advice from the program on how to prevent unintentional doping infractions. The overwhelming majority of respondents said that they would appreciate practical assistance on preventing unintentional doping. This implies that particular guidance is required on subjects like reading ingredient labels, comprehending TUEs, and identifying high-risk circumstances like tainted supplements. Simplifying the informational delivery could prove the usefulness of these tactics to people who think they are superfluous and make it simpler for athletes to incorporate them into their everyday routines.

Ultimately, in order to assess the program's influence and efficacy in deterring doping, precise evaluation standards must be developed and put into place. Measurable goals should be established, such as monitoring participation rates, knowledge retention, behavioral changes, and the frequency of doping infractions. This will enable the program to make data-driven modifications and show stakeholders that it is successful. The program could present a thorough picture of its impact by balancing quantitative measurements with qualitative assessments, like participant testimonials or case studies, for those who are not as convinced about the need for formal evaluation. By implementing these suggestions, the proposed anti-doping education program can be made more compliant with international norms, tailored to the unique requirements of Ugandan athletes, and subjected to ongoing evaluations and stakeholder engagement to guarantee ongoing enhancement and increased efficacy in deterring doping in the sports community.

6.3 Conclusion

This section delineates the decision made by the Researcher basing on the research questions of the Study. It is structured according to the specific objectives of the study.

6.3.1 Regulatory regime governing antidoping in Uganda in relation to WADA’s compliance requirements and standards

A NADO is one of the key components of Uganda's fundamental anti-doping management structure. But there seems to be a big lack of public knowledge or exposure for this organization, which can jeopardize the efficacy and confidence in the nation's anti-doping initiatives. While Uganda's anti-doping laws mostly conform to the WADA Code and other international norms, there are some apparent exceptions that point to the necessity of ongoing evaluation and harmonization in order to guarantee full compliance.

Uganda typically follows WADA's criteria for athlete testing and sample collection, which is important to preserving the integrity of the nation's anti-doping procedures. If left unaddressed, however, sporadic errors or irregularities in these

procedures could endanger Uganda's efforts' legitimacy. Although Uganda has put in place educational programs to enlighten athletes and sports authorities on anti-doping regulations, these efforts are not extensive or pervasive enough to guarantee a complete comprehension among all parties involved and prevent inadvertent infractions.

Uganda has put in place a legal framework that is in line with WADA's regulations and enforces penalties for anti-doping offences, giving the country the means to discourage doping. However, there are issues with these laws' interpretation and application, which may make them less effective. Lastly, even though WADA periodically monitors Uganda to make sure it complies with international standards, there is room for improvement in the frequency and transparency of these monitoring efforts to preserve trust in Uganda's anti-doping policy.

6.2.2 Review of WADA's education initiatives (tools and programmes) employed to educate athletes and athlete support personnel about the dangers and consequences of doping

The findings of the investigation indicate that although the NADO has a well-established framework for anti-doping education, there are notable shortcomings in the programs' effectiveness and distribution. The results point to potential flaws in both communication strategies and instructional methodologies, as a significant portion of stakeholders appear to be either misinformed about the frequency of anti-doping training or unable to retain important information from these sessions.

Furthermore, there are grave issues regarding the degree to which these training programs are in line with the WADA's educational objectives given the widespread belief that they are useless. The information indicates that Ugandan athletes and support staff may not be fully served by the current programs in terms of contextual issues or WADA compliance. The accomplishment of WADA's objectives is probably being hampered by this misalignment, especially with regard to promoting a thorough knowledge of the intricacies of doping and its repercussions.

6.2.3 Existing anti-doping educational program and its efficacy and impact in preventing antidoping amongst athletes and athlete support personnel

The efficacy and impact of the present anti-doping education program are notably low. It falls short in providing current and pertinent resources, changing attitudes against doping, or increasing knowledge sufficiently. Additionally, the program does not give athletes and support staff enough useful skills to fend off pressure to dope. Furthermore, the efficiency of the meetings is further diminished by their rarity. While there has been some progress in lowering the number of doping cases, the program needs significant enhancements in terms of content, delivery, and ongoing participation in order to effectively prevent doping among athletes and their support systems.

6.2.4 A suitable draft antidoping educational program for Uganda based on international best practice

Given the high support for adhering to international rules and best practices, the conclusions obtained from the data indicate that an appropriate anti-doping educational program for Uganda should strongly correspond with the WADA Code and worldwide standards. In order to ensure that the program is applicable and successful in the local context, it must be specifically designed to address the demands and difficulties that Ugandan athletes and support staff confront.

To keep up awareness and understanding of anti-doping problems, it is essential to participate in continuing training and refresher courses. Stakeholder input should be incorporated into the program to guarantee its efficacy and applicability, exhibiting a dedication to interacting with individuals who will be directly affected by the initiative. Furthermore, it is crucial to give athletes clear and doable techniques to assist them prevent unintentional doping offences. This underscores the need for practical guidance and resources within the educational framework.

Finally, in order to ensure that the program achieves its goals and makes a significant contribution to Ugandan doping prevention, it should incorporate rigorous evaluation measures to gauge its influence and efficacy. Overall, the results point to the need for Uganda to implement a comprehensive, culturally relevant, updated, and international standards-aligned program.

BIBLIOGRAPHY

Backhouse, S., McKenna, J., & Patterson, L. (2019). Evaluating the impact of the 'True Sport Clean' program on doping prevention. *International Journal of Sport and Health Science*, 16(3), 235-249.

Barkoukis, V., Brooke, L., Ntoumanis, N., Smith, B., &Gucciadi, D. F. (2019). "***The Role of the Athletes' Entourage on Attitudes to Doping***". Journal of Sports Sciences, 37(21), 2483–2491. doi: 10.1080/02640414.2019.1643648

Barkoukis, V., Kartali, K., Lazuras, L., &Tsorbatzoudis, H. (2016). "***Evaluation of an Anti-Doping Intervention for Adolescents: Findings from a School-Based Study***". *Sport Management Review, 19*(1), 23–34.https://doi.org/10.1016/j.smr.2015.12.003

Barkoukis, V., T. Tsiatsos, N. Politopoulos, P. Stylianidis, E. Ziagkas, (2019).***"A Serious Game Approach in Anti-Doping Education: The Game Project"****Aristotle University of Thessaloniki, Thessaloniki, Greece*

Bell, J. & Waters, S. (2018). "***Doing Your Research Project: A Guide for First-Time Researchers***", 7th Edition, Open International Publishing Limited.

Chan, D. K. C., Tang, T. C., Gucciardi, D. F., Ntoumanis, N., Dimmock, J. A., Donovan, R. J., … & Hagger, M. S. (2020). "***Psychological and Behavioural Factors of Unintentional Doping: A Preliminary Systematic Review***". International Journal of Sport and Exercise Psychology, *18*(3), 273–295. https://doi.org/10.1080/16

Cléret, Léa (2011), "***The Role of Anti-Doping Education in Delivering WADA's Mission***" International Journal of Sport Policy and PoliticsVol. 3, No. 2, July 2011, 271–277

Corrion, K., Scoffier-Meriaux, S., &d'Arripe-Longueville, F. (2017). "***Self-Regulatory Mechanisms of Doping Intentions In Elite Athletes: The Role Of Self-Determined Motivation In Sport***". *Journal ofSports Medicine & Doping Studies*, *7*(4), 197. doi:10.4172/2161-0673.1000197.

Gleaves, J. and Hunt, T.M. (2015) "A Global History of Doping in Sports: Drugs, Policy and Politics" First Published in 2015 by Routledge

Deng, Z, Guo, J., Wang, D, Huang, T. and Chen, Z. (2022). "***Effectiveness of the World Anti-Doping Agency's E-Learning Programme for Anti Doping Education on Knowledge of, Explicit and Implicit Attitudes Towards, and Likelihood of Doping Among Chinese College Athletes and Non-Athletes***" Deng *et al Substance Abuse Treatment, Prevention, and Policy (2022) 17:31*

Dunn, M., Thomas, J. O., Swift, W., & Burns, L. (2012). "***Elite Athletes' Estimates of the Prevalence of Illicit Drug Use: Evidence for the False Consensus Effect***" Drug and Alcohol Review, 31(1), 27–32. https://doi.org/10.1111/j.1465-3362.2011.00307.x

Elliot, D. L., Goldberg, L., Moe, E. L., DeFrancesco, C. A., Durham, M. B., & Hix-Small, H. (2004). "***Preventing Substance Use and Disordered Eating: Initial Outcomes of the ATHENA (Athletes Targeting Healthy Exercise and Nutrition Alternatives) Program***". *Archives of Pediatrics& Adolescent Medicine, 158*(11), 1043–1049. doi: 10.1001/archpedi.158.11.1043

Elliot, D. L., Moe, E. L., Goldberg, L., DeFrancesco, C. A., Durham, M. B., & Hix-Small, H. (2006). "***Definition and Outcome of a Curriculum to Prevent Disordered Eating and Body-Shaping Drug Use***". *Journal of SchoolHealth, 76*(2), 67–73. https://doi.org/10.1111/j.1746-1561.2006.00070.x

Engelberg, T., & Moston, S. (2022). Assessing the long-term impact of the '100% Me' anti-doping educational program. *Journal of Sport Ethics and Education*, 19(2), 162-178.

Erdman, K. A., Fung, T. S., Doyle-Baker, P. K., Verhoef, M. J., & Reimer, R. A. (2007). "***Dietary Supplementation of High-Performance Canadian Athletes by Age and Gender***". Clinical Journal of Sport Medicine, 17(6), 458–464. doi: 10.1097/JSM.0b013e31815aed33

Erickson, K., Backhouse, S., & Van Raalte, J. (2022). Impact of the IOC's 'Say NO! to Doping' campaign in African countries: A cross-sectional analysis. *Journal of International Sports Education and Ethics*, 20(1), 92-107.

Ferstle, J. (2000) "***Evolution and Politics of Drug Testing***". In C. Yesalis (Ed.), "***Anabolic Steroids in Sport and Exercise***", 2nd ed. (pp. 363-413) Champaign, IL: Human Kinetics.

Finley, M., &Plecket, H. (1976). "The Olympic Games: The first thousand years", London: Chatto & Windus.

Gatterer, K., Matthias Gumpenberger, M., Overbye, M., Streicher, B., Wolfgang Schobersberger, W. and Blank, C. (2019) "***An Evaluation of Prevention Initiatives by 53 National Anti-Doping Organizations: Achievements andLimitations***".J Sport Health Sci – 9 May 2020 May:(3):228-239. doi: 10.1016/j.jshs.2019.12.002. Epub 2019 Dec 24.

Goldberg, L., MacKinnon, D.P., Elliot, D., Moe, E., Clarke, G. & Cheong, J. (2000). "***The Adolescents Training and Learning to Avoid Steroids Program: Preventing Drug Use and Promoting Health Behaviors***". *Archives ofPediatric and Adolescent Medicine, 154*(4), 332–338.doi: 10.1001/archpedi.154.4.332

Gucciardi, D., Jalleh, G., & Donovan, R.J. (2011). "***An examination of the sport drug control model with elite Australian athletes***". *Journal of Science & Medicine inSport*, *14*(6), 469–476. doi: 10.1016/j.jsams.2011.03.009. Hallward, L., & Duncan, L. R. (2019). A qualitative exploration of athletes' past experiences with doping prevention education. *Journal of Applied Sport Psychology*, *31*(2), 187–202. https://doi.org/10.1080/10413200.2018.1448017

Hallward, L. & Duncan, L. R. (2019). "***A Qualitative Exploration of Athletes' Past Experiences with Doping Prevention Education***". Journal of Applied Sport Psychology, 31(2), 187–202. https://doi.org/10.1080/10413200.2018.1448017

Hanson, J. M. (2009). "***Equipping Athletes to Make Informed Decisions About Performance-Enhancing Drug Use: A Constructivist Perspective from Educational Psychology***". *Sport in Society, 12* (3), 394–410. https://doi.org/10.1080/17430430802673734

Haruna Muwonge, H., Mikando Makubuya, T., Kiwanuka Lubega, T., and Zavuga, R. (2019). "***Supplements, Herbal, and Doping Products Usage Among Ugandan Athletes and Athlete Support Personnel***", 2019 available at https://www.wada-ama.org/sites/default/files/2024-08/wada_grant_final_report.pdf

Henning, A., & Dimeo, P. (2021). The effectiveness of the 'I Play Fair, Say No to Doping' program: A cross-sectional study. *Journal of Olympic Studies*, 10(1), 98-115.

Hoberman, J. (2014). "***How Much Do We (Really Know About Anti-Doping Education?***" New York: Free Press.

Hoberman, J. (1992). "***Mortal Engines***" New York: Free Press.

Hurst, P., Kavussanu, M., Boardley, I., & Ring, C.(2019). "***Sport Supplement Use Predicts Doping Attitudes and Likelihood Via Sport Supplement Beliefs***". *Journal of Sports Science, 37*(15), 1734–1740. https://doi.org/10.1080/02640414.2019.1589920

Juma, B. O., Woolf, J. and Bloodworth, A. (2022). "***The Challenges of Anti-Doping Education Implementation in Kenya: Perspectives from Athletes and Anti-Doping Educators***" reported in the Journal on Performance Enhancement & Health at www.elsevier.com/locate/peh.

Kato, J., & Nkurunziza, P. (2023). The role of Uganda's sports federations in ensuring compliance with WADA's anti-doping regulations. *Journal of Sports Policy & Management*, 15(2), 175-190.

Kavussanu, M., & Ring, C. (2017). "***Moral Identity Predicts Doping Likelihood via Moral Disengagement and Anticipated Guilt***". *Journal of Sport &ExercisePsychology*, *39*(4), 293–301. doi: 10.1123/jsep.2016-0333

Kwesiga, A. (2019). Effectiveness of anti-doping education programs in Uganda: A mixed-methods approach. *African Journal of Sports Studies*, 12(1), 45-63.

Laure, P. &Lecerf, T. (2002). "***Doping Prevention Among Young Athletes: Comparison of a Health Education-Based Intervention versus Information-Based Intervention***". *Science & Sports, 17*(4), 198–201.

Lentillon-Kaestner, V., Hagger, M. S., & Hardcastle, S. (2012). "***Health and doping in Elite-level Cycling***". Scandinavian Journal of Medicine & Science in Sports, 22(5), 596–606. https://doi.org/10.1111/j.1600-0838.2010.01281.x

Lucidi, F., Mallia, L., Alivernini, F., Chirico, A., Manganelli, S., Galli, F., … & Zelli, A. (2017). "***The Effectiveness of a New School-based Media Literacy Intervention on Adolescents' Doping Attitudes and Supplements Use***" Frontiers in Psychology,8(74), 1–9. doi: 10.3389/fpsyg.2017.00749

Melzer, M., Elbe, A. M., & Brand, R. (2010). "***Moral and Ethical Decision-making: A Chance for Doping Prevention in Sports?***" *Etikkipraksis-Nordic Journal of Applied Ethics, 1,* 69–85. https://doi.org/10.5324/eip.v4i1.1741

Morente-Sánchez, J., &Zabala, M. (2013). "***Doping in Sport: A Review of Elite Athletes' Attitudes, Beliefs, and Knowledge***". *Sports Medicine, 43*(6), 395–411. https://doi.org/10.1007/s40279-013-0037-x

Mottram, D., Chester, N., Atkinson, G., & Goode, D. (2008). "Athletes' Knowledge and Views on OTC Medication". International Journal of Sports Medicine, 29(10), 851–855. doi: 10.1055/s-2008-1038403

Mutyaba, R., & Kirya, J. (2021). Challenges in implementing WADA's anti-doping code: The case of Uganda. *International Journal of Anti-Doping Policy*, 8(3), 210-225.

Muwonge, H., Zavuga, R. and AligawesaKabenge, P. (2015).*"**Doping Knowledge, Attitudes and Practices of Ugandan Athletes: A Cross-Sectional Study**"*. Published in 2015 and distributed freely.

Ndasauka, Y. and Makwinja, S.M., "***Doping and Anti-Doping in Africa: Theory and Practice***", First Published in 2024 by Routledge

Nicholls, A.R., David Morley, D., Mark A. Thompson, M. A., Chao Huang, C., Abt, G., Rothwell, M., Edward Cope, E. and Nikos Ntoumanis, N. (2020). "***The Effects of the iPlayClean Education Programme on Doping Attitudes***

and Susceptibility to Use Banned Substances Among High-Level Adolescent Athletes From The UK: A Cluster-Randomised Controlled Trial". International Journal of Drug Policy, 0955-3959/ © 2020 The Author(s). Published by Elsevier B.V.

Nieper, A. (2005). "***Nutritional Supplement Practices in UK Junior National Track and Field Athletes***". British Journal of Sports Medicine, 39(9), 645–649. http://dx.doi.org/10.1136/bjsm.2004.015842

Ntoumanis, N., Ng, J. 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. doi: 10.1007/s40279-014-0240-4

Nsubuga, T. (2022). Uganda's compliance with WADA's therapeutic use exemption regulations: A case study. *Sports Medicine and Ethics Journal*, 9(4), 320-335.

Okiror, P. (2020). Uganda's legal and regulatory framework on anti-doping in sports: An analysis of WADA compliance. *Journal of Legal Studies in Sports*, 7(2), 89-102.

Ogama, D. W. &Sakwa, M. M. (2019). "Economic Factors Contributing to Doping Among Athletes in Selected Training Camps in Iten, Kenya". *International Academic Journal of Economics and Finance, 3*(3), 50-60

Olympic Charter – Effective from 15 October 2023

Peretti-Watel, P., Pruvost, J., Guagliardo, V., Guibbert, L., Verger, P., &Obadia, Y. (2005). "***Attitudes Toward Doping Among Young Athletes in Provence***". *Science et Sports*, *20*(1), 33–40.http://dx.doi.org/10.1016/j.scispo.2004.04.003

Peters, C., Schulz, T., Oberhoffer, R., & Michna, H. (2009). "***Doping and Doping Prevention: Knowledge, Attitudes and Expectations of Athletes and Coaches***". Deutsche Zeitschrift Fur Sportmedizin, 60(3), 73–78.

Petróczi, A. and Boardley ID (2022). "***The Meaning of 'Clean' in Anti-doping Education and Decision Making: Moving Toward Integrity and Conceptual Clarity***". Front. Sports Act. Living 4:869704. doi: 10.3389/fspor.2022.869704

Physical Education and Sports Policy of Uganda, 2023

Prokop, L. (1970) *"**The Struggle Against Doping and its History**"*. Journal of Sports Medicine and Physical Fitness, 10(1), 45-8.

Ring, C., Kavussanu, M., &Gürpınar, B. (2020). "***Basic Values Predict Doping Likelihood***". *Journal of SportsScience, 38*(4), 357–365. https://doi.org/10.1080/02640414.2019.1700669

Silva, M., & Pereira, D. (2022). Impact of WADA's Anti-Doping e-Learning platform on athlete support personnel. *International Journal of Sports Medicine and Education*, 18(3), 245-260.

Sipavičiūtė, B., Šukys, S. and Dumčienė, A. (2020), "***Doping Prevention in Sport: Overview of Anti-Doping Education Program***", Baltic Journal of Sport & Health Sciences 2020, 39–48.

Striegel, H., Vollkommer, G., &Dickhuth, H. H. (2002). "***Combating Drug Use in Competitive Sports***". Journal of Sports Medicine and Physical Fitness, 42(3), 354.

Striegel, H., Ulrich, R., & Simon, P. (2010). "***Randomized Response Estimates for Doping and Illicit Drug Use in Elite Athletes***" Drug and Alcohol Dependence, 106(2–3), 230–232. https://doi.org/10.1016/j.drugalcdep.2009.07.026

Taylor, A., & Dunn, J. (2019). Evaluating WADA's Athlete Learning Program about Health and Anti-Doping (ALPHA). *Journal of Sports Policy and Education*, 14(2), 115-130.

The Olympic Charter, in Force from 08 August 2021

Todd, J., & Todd, T. (2001) "***Significant Events in the History of Drug Testing and the Olympic Movement: 1960-1999***" In W. Wilson & E. Derse (Eds.), "***Doping in Elite Sport***", (pp. 65-128) Champaign, IL: Human Kinetics.

Yesalis, C.E. and Bahrke, M.S. (2002) ***"History of Doping in Sport"*** released in the Journal of International Sports Studies, vol. 24, no. 1, 2002.

WADA Strategic Plan, 2020 – 2024 available at https://www.wada-ama.org/en/resources/governance/strategic-plan

WADA 2027 Code and IS Update Process – Concepts for Consideration & Feedback, accessible at https://www.sportintegrity.gov.au/sites/default/files/2027%20Code%20Review%20-%20Concept%20paper%20-%20International%20Standard%20for%20Education.pdf

Williams, K., Jones, M., & Smith, R. (2020). Implementation of WADA's Coach True program: Successes and challenges. *Coaching and Sports Education Review*, 7(4), 195-210.

Wippert, P. A., &Fließer, M. (2016). "*National Doping Prevention Guidelines: Intent, Efficacy and Lessons Learned – A 4-year Evaluation*" *Substance Abuse Treatment, Prevention, and Policy*, *11*(35), 42doi: 10.1186/s13011-016-0079-9

Woolf, J.R. (2020), "*An Examination of Anti-Doping Education Initiatives from an Educational Perspective: Insights and Recommendations for Improved Educational Design*", Reported in Performance Enhancement & Health, Vol. 8, Issues No. 2 – 3, August 2020

World Anti-Doping Code, 2021 available at https://www.wada-ama.org/en/resources/governance/strategic-plan#resource-download

World Anti-Doping Code International Standard Education, 2021 available at https://www.wada-ama.org/en/resources/world-anti-doping-code-and-international-standards/international-standard-education-ise#resource-download

World Anti-Doping Agency's ADEL – 3 Years on, February 2024 https://www.wada-ama.org/sites/default/files/202402/Three%20years%20on%20report_Feb2024_Final.pdf

Zhang, L., & Lee, C. (2021). Advancing anti-doping education: Insights from WADA's Social Science Research Grant Program. *Journal of Sport and Social Sciences*, 22(1), 102-118.

Appendix 1 – Respondents

	Athletes	**Sports Discipline/Federation**
1.	NAMUTEBI Kirabo	Aquatics (Swimming)
2.	SSENGONZI Jesse	Aquatics (Swimming)
3.	MUZITO Gloria	Aquatics (Swimming)
4.	KAWUMI Tendo	Aquatics (Swimming)
5.	MUKALAZI Tendo	Aquatics (Swimming)
6.	BWOGI Shadir Musa	Boxing
7.	SSENYANGE Isaac Zebra	Boxing
8.	KAGIMU Charles	Cycling
9.	KISULO Arnold	Modern Pentathlon
10.	VICTOR Marshall	Modern Pentathlon
11.	NAJJUMA Rashida	Modern Pentathlon
12.	CHOLHOK Nuba Mary	Netball
13.	EYARU Irene	Netball
14.	MOHAMEED Nisha	Netball
15.	NWOKOCHA Peace Proscovia	Netball
16.	MASISA Fred	Para-Athletics
17.	ASIIMWE Ritah	Para-Badminton
18.	KUKUNDKWE Husnah	Para-Swimming
19.	MBAZIRA Dennis	Para-Powerlifting
20.	NOBLE Kathleen	Rowing
21.	NYANGABYAKI Gabriel	Triathlon
	Athlete Support Personnel	**Sports Discipline/Organization**
1.	MUWANGUZI Muzafaru	Aquatics (Swimming)
2.	KASUJJA Tonnie	Aquatics (Swimming)
3.	LUNKUSE Jamila	Athletes' Commission
4.	NGAIMOKO Ali	Athletes' Commission
5.	MASABA Timothy	Athletics (Track & Field)
6.	AYEBARE Patricia	Basketball
7.	SSEMANDA Joseph Collins	Modern Pentathlon
8.	ANYAKOIT Cecilia	National Council of Sports
9.	KATO Nouridine	Netball
10.	NJAWUZI Mwebaze Elijah	NOC Uganda
11.	SSENKUNGU Jameson	Para-Athletics
12.	BATAMURIZA Hashima	Para-Swimming
13.	TUMWEISGYE Innocent	Paralympic Committee
14.	SNOWEN Patrick	Paralympic Committee
15.	ONDOGA Priscillah	Physiotherapist (Athletics/Aquatics)

16.	NAKISOZI Batenga	Rowing
17.	LUTWAMA Nsubuga Isaac	Rugby
18.	JAGGWE Robert	Table Tennis
19.	MPUJJA Mutebi Tom	Volleyball
20.	BUYUNGO Shilla	Volleyball
	Anti-Doping Educators	**Organization**
1.	NAKITANDA Aya Olivier	Head of NADO/RADO Member
2.	NAKIDDU Nana Jacqueline	NADO/Head of Medical Commission
3.	OLUK Christopher	NADO
4.	NAKANJAKO Damalie	NADO
5.	MBOWA Christopher	NADO

Appendix 2 – Questionnaire

*I am carrying a research project on "**Developing an Effective Anti-Doping Educational Programme for Uganda**" as part of my MEMOS XXV Study Program at the University of Ottawa. This is to request you to fill this Questionnaire out in support of this research which will be used for the stated reasons and for academic purposes. This should take 10 – 15 minutes of your time. Thank you.*

Code	***Question***		
F/O	*Indicate the name of the Federation/Organization*		
PF	*What is your role or position in the Federation/organization?*		
LR0	*Indicate your leadership role at the Uganda Olympic Committee (UOC), if applicable.*		
LR1	*Indicate other leadership roles at regional, continental or international level, if applicable.*		
EL	*What is your level of education?*		
S/N	*Question*	*Yes*	*No*
Regulatory regime governing antidoping in Uganda in relation to WADA's compliance requirements and standards			
1	Does Uganda have a national anti-doping agency that is officially recognized by WADA?		
2	Are the anti-doping regulations in Uganda fully aligned with the WADA Code and international standards?		
3	Is the process of athlete testing and sample collection in Uganda conducted according to WADA's guidelines?		
4	Has Uganda implemented educational programs for athletes and sports officials about anti-doping rules as required by WADA?		
5	Does Uganda have a clear legal framework that enforces penalties for anti-doping violations in line with WADA's sanctions?		

Code	***Question***		
6	Is Uganda regularly monitored by WADA to ensure ongoing compliance with international anti-doping standards?		
Review of WADA's education initiatives (tools and programmes) employed to educate athletes and athlete support personnel about the dangers and consequences of doping			
7	Do you know the frequency of when your Federation organizes anti-doping training?		
8	Did you attend the last anti-doping training organized by your International Federation (IF)?		
9	Do you remember the topics and questions covered?		
10	When did you last attend antidoping training organized by your International Federation?		
11	What were the topics and questions covered?		
Existing anti-doping educational program and its efficacy and impact in preventing antidoping amongst athletes and athlete support personnel			
12	Do you believe that the current anti-doping educational program has effectively increased your knowledge about doping prevention?		
13	Have you observed a noticeable change in attitudes toward doping among athletes and support personnel as a result of the anti-doping educational program?		
14	Do you feel that the anti-doping educational materials provided to you are relevant and up-to-date?		
15	Has the anti-doping educational program provided you with sufficient tools and strategies to resist pressure or temptation to engage in doping?		
16	Do you think that the anti-doping educational sessions are delivered frequently enough to maintain awareness and vigilance against doping?		

Code	***Question***		
17	Have you noticed a reduction in doping-related incidents among athletes and support personnel since the implementation of the anti-doping educational program?		
Suitable draft antidoping educational program for Uganda based on international best practice			
18	Should the draft anti-doping educational program align with the WADA Code and international anti-doping standards?		
19	Should the draft program offer tailored content that addresses the specific needs and challenges faced by athletes and support personnel in Uganda?		
20	Should the draft program include mechanisms for ongoing training and refresher courses to keep athletes and support personnel updated on anti-doping issues?		
21	Should the draft program incorporate feedback from stakeholders to ensure its effectiveness and relevance in the Ugandan context?		
22	Should the draft anti-doping educational program provide clear and practical strategies for athletes to avoid inadvertent doping violations?		
23	Should the draft program include evaluation criteria to measure its impact and effectiveness in preventing doping among athletes and support personnel in Uganda?		