

## TIIVISTELMÄ

Ketola, T. 2023. Suomalaisten huippu-urheilijoiden näkemyksiä antidopingjärjestelmästä ja toiminnasta. Liikuntatieteellinen tiedekunta, Jyväskylän yliopisto, Liikunnan yhteiskuntatieteiden pro gradu -tutkielma, 70 s., 2 liitettä.

Maailman antidopingtoimisto WADAn antidopingsäännöstö ja käytänteet ovat saaneet osakseen kritiikkiä urheilijoiden oikeuksiin ja osallistamiseen liittyen, vaikka yleisesti dopingvalvonta nähdään tarpeellisena. Tällä tutkielmalla on kolme päätavoitetta. Ensiksi tutkielman tarkoituksena on selvittää, miten Suomen urheilun eettisen keskuksen (SUEK) testauspooliurheilijat kokevat olinpaikkatietojärjestelmän tehokkuuden ja oikeutuksen. Toiseksi tutkielman tarkoituksena on tutkia kokevatko urheilijat, että he ovat saaneet tarpeeksi asianmukaista tietoa antidopingjärjestelmästä. Kolmanneksi tarkoituksena on selvittää urheilijoiden kiinnostusta vaikuttaa SUEKin toimintaan.

Tutkielman teoreettinen viitekehys luotiin Sport Drug Control Model -teorian (Donovan et al., 2002) pohjalta soveltaen legitimiteetin käsitettä. Teorian mukaan urheilijoiden näkemykset antidopingtoimijoiden ja heidän toimintansa oikeutuksesta vaikuttavat urheilijoiden dopingiin liittyviin asenteisiin ja käyttäytymiseen. Tätä teoriapohjaa sovellettiin antidopingtoiminnan nykykontekstiin perehtymällä aihealueen aiempiin tutkimuksiin. Tutkielman aineisto kerättiin käyttämällä kahta tutkimusmenetelmää. SUEKin rekisteröityyn testauspooliin (RTP) kuului tutkimuksen toteutuksen aikaan 120 urheilijaa, joille lähetettiin kyselylomake. Tämän lisäksi aineiston keräämiseksi toteutettiin kaksi puolistrukturoitua teemahaastattelua. Haastatteluihin osallistuneet kaksi urheilijaa olivat kuuluneet SUEKin rekisteröityyn testauspooliin, mutta heidät oli poistettu testauspoolista tutkimuksen toteutusta edeltävän vuoden aikana urheilu-uran lopettamisen takia. Tutkimuksen määrällinen aineisto analysoitiin frekvenssein ja ristiintaulukoinnein. Kyselyn ja haastatteluiden laadullinen aineisto analysoitiin käyttämällä teema-analyysiä.

Tutkielman tulokset osoittavat, että SUEKin RTP-urheilijat kokivat olinpaikkatietojärjestelmän laajasti hyväksyttävänä ja jopa tarpeellisena antidopingtoiminnan keinona. SUEK antidopingtoimijana näyttäisi saavuttavan legitimiteetin urheilijoiden näkökulmasta tarkasteltaessa koulutustoimintaa, sillä urheilijat raportoivat saaneensa tarpeeksi asianmukaista tietoa ja koulutusta antidopingjärjestelmästä. Kiinnostus vaikuttaa SUEKin toimintaan jakoi urheilijoiden näkemyksiä. Enemmistö urheilijoista ei ilmaissut kiinnostusta vaikuttaa SUEKin toimintaan, mutta samalla 43 % tutkimukseen osallistuneista urheilijoista ilmoitti olevansa tai mahdollisesti olevansa kiinnostuneita vaikuttamismahdollisuuksista.

Asiasanat: antidopingjärjestelmä; huippu-urheilijat; Maailman antidopingsäännöstö, olinpaikkatietojärjestelmä, legitimiteetti

#### ABSTRACT

Ketola, T. 2023. Finnish Elite Athletes' Perceptions on the Anti-Doping System and Activities. Faculty of Sport and Health Sciences, University of Jyväskylä, Master's thesis in Social Sciences of Sport, 70 pp., 2 appendices.

Despite the general support for doping controls, the policies and regulations of the World Anti-Doping Agency have received criticism regarding athletes' rights and engagement. This thesis has three main aims. Firstly, to investigate whether the Athlete Whereabouts system achieves legitimacy regarding its efficiency as an anti-doping strategy among Registered Testing Pool athletes of the Finnish Center for Integrity in Sports (FINCIS). Secondly, to examine if athletes feel that they have received appropriate information about the anti-doping system. And thirdly, to investigate athletes' interest in influencing the activities of FINCIS.

The theoretical framework of this thesis was constructed using the Sport Drug Control Model by Donovan et al. (2002) and adapting the concept of legitimacy. The theory states that perceived legitimacy of an anti-doping authority and its actions influence athletes' attitudes towards doping and consequently doping behaviors. These concepts were adapted to the current anti-doping context through examination of previous research. The data for this thesis was collected using two methods. A questionnaire that was sent to 120 elite athletes included in FINCIS' Registered Testing Pool (RTP) followed by two semi-structured theme interviews of athletes. The interviewed athletes had been included in the RTP but excluded within a year prior to conducting this study due to ending their sporting career. The quantitative data was examined through frequencies and cross-tabulation. The qualitative data from the questionnaire and the interviews were examined using thematic analysis.

The results of this study indicate that the Athlete Whereabouts system is widely accepted and even supported as a necessary anti-doping strategy by the FINCIS RTP athletes. FINCIS as an authority seems to gain legitimacy from the athletes through educational efforts, as athletes reported that they have been provided with appropriate information and education. Interest in influencing anti-doping activities seems to divide the athletes in this study. Most athletes did not express interest in influencing the system, while 43 percent reported that they would or might be willing to engage with FINCIS activities.

Key words: anti-doping policy; elite athletes; World Anti-Doping Code, Athlete Whereabouts system, legitimacy

# **ABBREVIATIONS**

ABP Athlete Biological Passport

ADAMS The Anti-Doping Administration and Management System

ADO Anti-Doping Organization

ADRV Anti-Doping Rule Violation

CAS Court of Arbitration for Sport

CODE The World Anti-Doping Code

FINCIS Finnish Center for Integrity in Sports

IF International Federation

IOC International Olympic Committee

ISE International Standard for Education

ISTI International Standard for Testing and Investigations

NADO National Anti-Doping Organization

RTP Registered Testing Pool

SDCM Sport Drug Control Model

WADA The World Anti-Doping Agency

# **CONTENTS**

# TIIVISTELMÄ

# ABSTRACT

1	INT	RODUCTION	1
	1.1	Background and Rationale	2
	1.2	Relevance and Operational Framework	3
	1.3	Anti-Doping Activities in Finland	5
2	OV]	ERVIEW OF THE GLOBAL ANTI-DOPING POLICIES AND ACTIVITIES .	8
	2.1	Short History of Anti-Doping	8
	2.2	The World Anti-Doping Agency WADA	10
	2.3	The World Anti-Doping Code	11
	2.4	Doping Controls	12
	2.5	Registered Testing Pool RTP	13
3	AN	TI-DOPING ACTIVITIES AND LEGITIMACY	16
	3.1	Theoretical Approaches to Anti-Doping Research	16
	3.2	Theoretical Framework: Assessing Legitimacy	18
	3.3	Legitimacy and Effectiveness of Anti-Doping Measures	21
	3.4	Legitimacy and the Athlete Whereabouts System	23
	3.5	Global Implementation of Anti-Doping Policies and Legitimacy	25
	3.6	Athletes' Rights to Education and Information	28
	3.7	Athlete Engagement	31
4	RESEARCH QUESTIONS AND METHODOLOGY		
	4.1	Research Design	33
	4.2	Data Collection	34
	4.3	Participants	36
	4.4	Data Analysis	38
	4 5	Ethical Considerations	39

5	RES	SULTS	41
	5.1	Description of Data	41
	5.2	Effectiveness of The Athlete Whereabouts System	42
	5.3	Education and Information	45
	5.4	Influencing Anti-Doping Activities	47
6 DISCUSSION			52
	6.1	Discussion of the Findings	52
	6.2	Limitations and Methodological Discussion	56
7	COl	NCLUSIONS AND IDEAS FOR FUTURE RESEARCH	59
R	REFERENCES		
A	PPE	NDICES	
A	ppen	dix 1: Feedback Questionnaire for Registered Testing Pool athletes of FINCIS.	
A	ppen	dix 2: Interview guide.	

#### 1 INTRODUCTION

Elite athletes are a part of the same society that we all live in, bound by the same laws and regulations (Petróczi et al., 2017). When entering the world of competitive sports, athletes will find themselves accepting various agreements, such as competition licenses, coaching agreements, player contracts, and sponsorship deals. When competing in organized sport, the athletes will not only commit themselves to the sport specific rules but also to the anti-doping rules established and regulated by the World Anti-Doping Agency WADA (WADA, 2021d).

Doping is a global concern within sports that jeopardizes its ethics, values, and integrity (Blank et al., 2016; UNESCO, 2005; Willick et al., 2016). Despite the general support for testing programs and the aim of protecting the integrity of sport (Moston et al., 2015; Overbye, 2017), the World Anti-Doping Code, and especially the Athlete Whereabouts system, has since its creation received criticism regarding athletes' rights and engagement by both scholars and stakeholders (Houlihan et al., 2019; Kambhampati & Star, 2021). The whereabouts system has been experienced as invasive and restrictive in regards of athletes' privacy and freedom and the requirements have been seen to conflict with the fundamental right to privacy established in the Finnish Constitution (Kanerva, 2013, Valkenburg et al., 2014).

In light of these findings, researchers have suggested that the question to ask is whether the anti-doping measures can gain justification by the athletes despite of the recognized privacy issues (Houlihan et al., 2019; Overbye & Wagner, 2014). The perceived legitimacy of the anti-doping system and strategies has also been recognized as a key determinant in athletes' doping behaviours, indicating that the stronger athletes perceive the legitimacy of these measures, the more likely they are to comply with the anti-doping rules (Donovan et al., 2002). Although doping and anti-doping as phenomena have been studied from multiple perspectives, the studies on perceived legitimacy have been scarce (Efverström, Ahmadi, et al., 2016).

This thesis is a cross-sectional mixed-method study conducted in co-operation with the Finnish Center for Integrity in Sports (FINCIS), the authority responsible for implementing anti-doping policies in Finland (FINCIS, 2023c). The aim of this study is to investigate whether the Athlete Whereabouts system achieves legitimacy regarding its efficiency as an anti-doping strategy among FINCIS' Registered Testing Pool (RTP) athletes and if they experience that they have received appropriate information about the system. Furthermore, in the light of increasing

athlete engagement in policy development, this study aims to investigate FINCIS' RTP athletes' interest in influencing the activities of FINCIS. The data for this thesis was collected through a questionnaire that was sent to elite athletes included in FINCIS' RTP in September 2023 and interviews of two athletes who retired and had therefore been excluded from FINCIS' RTP within the previous year.

# 1.1 Background and Rationale

Doping is considered a significant threat to the integrity of the modern sports where winners are separated from losers with the smallest of margins (Bowers, 2012; Houlihan et al., 2019). Athletes have generally reported being in favour of doping testing as doping has been seen to violate the integrity and spirit of sports (Moston et al., 2015; Overbye, 2017; Westmattelmann et al., 2018). Sport policies and activities have generally been criticized for rarely being created in consultation or in partnership with athletes, and the development of the anti-doping system has not been an exception (Valkenburg et al., 2014). The World Anti-Doping Code (Code) was established by WADA to globally harmonize the anti-doping policies, rules, and actions within sporting organizations and public authorities, and it functions as a framework for the implementation of the World Anti-Doping Program (WADA, 2021d, 9–10). Building on previous research on the Code, the theme that has received increased attention also in light of good governance policies during the recent years, is athlete engagement and their rights in the system (Dikic et al., 2011; Kambhampati & Star, 2021).

Safeguarding athletes' rights in the anti-doping context is crucial from multiple perspectives. The core rationale for the operations of WADA and the Code is to protect athletes' right to compete in fair and clean sports and protect their health and equality (WADA, 2021d, 9). Therefore, the need to emphasize athletes' rights in respect to anti-doping activities and strategies can be argued to arise from within the framework. Furthermore, the Code was developed to be a document that is to be reviewed and revised in consultation with all its key stakeholders to stay functional in its dynamic operational environment (WADA, 2021b, 1–2). Therefore, it is important that athletes are recognized as active stakeholders in both national and international anti-doping contexts (Efverström, Bäckström, et al., 2016; Overbye & Wagner, 2014). Woolway et al. (2020) further argue that it is critical for the success of the

system that athletes as the stakeholders who are first and foremost affected by the policies perceive the measures as legitimized.

Surprisingly, the assessment of the legitimacy of anti-doping strategies has received limited attention from policymakers and researchers, despite its potential to enhance compliance with the regulations (Efverström, Ahmadi, et al., 2016; Jalleh et al., 2014). Overbye (2017) is referring to McNamee (2010) in stating that when it comes to sustainable anti-doping strategies, it is essential that athletes are viewed as active partners in the processes and that the anti-doping efforts and the rationale behind them are supported by athletes. Therefore, it is important that all parts of the anti-doping regime are carried out with respect to transparency and clear communication of rules and rationale behind them, and that athletes are represented and included both in the development processes as well as in the decision-making tables (Efverström, Bäckström, et al., 2016; Overbye, 2017). Furthermore, it has been argued that anti-doping organizations (ADOs) should invest in engaging athletes in developing positive prevention strategies to support effective educational efforts to parallel with detection-based strategies (Petróczi et al., 2017). Moreover, scholars and ADOs have called for more research examining the perceptions of athletes and other stakeholders in regards of effectiveness and legitimacy of anti-doping activities (Connor et al., 2022).

### 1.2 Relevance and Operational Framework

The Athlete Guide to Anti-Doping was published in 2015 by WADA with the aim to emphasize and help athletes understand their rights in the Code (Koponen, 2021, 30). Six years later, the Athletes' Anti-Doping Rights Act was published along with the revised 2021 Code as a result of WADA's Athlete Committee's initiative, where athletes' rights are clearly recognized, defined and brought forward for the first time by WADA (Koponen, 2021, 30; WADA, 2020). Athletes' right to knowledge is also highlighted in WADA's International Standard for Education (ISE), also introduced for the first time in conjunction with the 2021 Code, mandating ADOs to ensure that athletes are educated in the anti-doping regulations that they are committed to (WADA, 2021c).

The described development towards increasing athlete engagement in the anti-doping framework has been recognized also in the Finnish Center for Integrity in Sports (FINCIS), so

the need and interest for this study arises from the researcher's professional life at FINCIS. Also, as it seems to be dependent on the national anti-doping organizations (NADOs) actions how the Code is interpreted and implemented in different countries and consequently, what kind of culture and atmosphere is created towards anti-doping efforts, such as doping controls and the Athlete Whereabouts system (Koponen, 2021, 28–29), studies examining anti-doping efforts in the national context are of great importance.

FINCIS, like many other ADOs, manages a Registered Testing Pool (RTP), which consists of a group of elite athletes who are obligated to report their whereabouts information for anti-doping purposes (WADA, 2023c, 27). Given the level and accuracy with which RTP athletes are required to update their whereabouts for every day of the year and be available for testing at all times, it can be argued that it is justifiable to study how athletes perceive the legitimacy of the system (Dikic et al., 2011; Overbye & Wagner, 2014; Valkenburg et al., 2014). Ensuring that athletes are appropriately educated and informed about the system is especially important from the perspective of safeguarding athletes' rights as the regulations in the Code have become more and more complex during the years (Westmattelmann et al., 2018).

The role of education was even further emphasized as the International Standard for Education (ISE) was introduced in 2021 by WADA to support harmonized creation and implementation of WADA's Education Program across ADOs (WADA, 2021c, 4). The ISE obligates all ADOs that have adopted the Code to include RTP athletes in the highest priority education group and states that it remains the responsibility of the ADO to ensure that those athletes are appropriately educated in anti-doping matters (WADA, 2021c, 11). Since the introduction of these obligations for ADOs in the ISE, FINCIS experts have provided all new RTP athletes a personal education session about their obligations and rights in the system. The educations also aim to address practical issues, such as using WADA's administrative system ADAMS to submit and update their whereabouts information, to avoid potential knowledge deficits such as reported by Scharf (2018) and Westmattelmann (2018).

Moreover, the inclusion to the RTP often marks a significant step towards professionalism in sport for the individual athlete, a career transition which can be characterized by re-assessment of sporting values and attitudes, imposing a vulnerable time for doping related considerations and potentially even behaviours (Mazanov et al., 2011; Petróczi et al., 2017). This was also a rationale behind why it was seen as important to invest resources into educating athletes

personally at FINCIS at this given point of time in their athletic career. Therefore, it is essential for FINCIS to examine RTP athletes' perceptions on how well they are informed about the system and if the personal educations are seen as functional in terms of sharing information.

Increased attention to athletes' rights has brought forward the need for both WADA and ADOs to reflect on their strategies, governance and organization structure in relation to supporting athletes' rights and engagement (Kambhampati & Star, 2021; Valkenburg et al., 2014). Athletes' voices are of critical importance in the development of anti-doping policies and promotion of a clean sport environment, and the development towards increased athlete engagement is also supported by athletes themselves (Global Athlete, 2020; Woolway et al., 2020). Moreover, it has also been recognized at FINCIS that the principles of good governance apply to all the actors within the sporting world, including various functions of public authorities, governing bodies, sporting federations and event organizers (Ojajärvi & Valtonen, 2016). Council of Europe (Council of Europe, 2019, 6-8) has stated that implementation of good governance policies, such as including key stakeholders in all processes, in sports organizations contributes to the strengthening of their position in the eyes of their stakeholders and the general public. As athletes globally have reported negative associations with managerial aspects of the anti-doping system (Global Athlete, 2020; Overbye & Wagner, 2014), there is a strong will in FINCIS to examine athletes' perceptions on its activities and their perceived legitimacy.

### 1.3 Anti-Doping Activities in Finland

Finland experienced its biggest national anti-doping crisis to date in 2001 while hosting the World Ski Championships, when multiple Finnish national team skiers tested positive for doping. As a result of the scandal, support for promotion of anti-doping activities and doping controls increased both inside and outside the sporting community, although organized anti-doping work had been carried out in Finland already since the 1980s. Consequently, an independent organization Finnish Anti-Doping Agency (FINADA) with its organizational structure following the governance policies of WADA was established to implement the Code in Finland, becoming operational in 2002. (FINCIS, 2023d; Koponen, 2021, 6) The organization was funded by the Ministry of Culture and Education, and after a reform of the Finnish subsidy system in 2004, FINADA gained responsibility of all national anti-doping

activities. According to the Quality Manager of FINCIS Marjorit Elorinne (see Koponen, 2021, 7), establishing governmental and operational independence was an important milestone in the development of doping control activities in Finland. Elorinne explains that prior to the subsidy reform, sport federations were obligated to order doping controls and only a part of the funding was allocated to FINADA, which made it difficult to ensure that the efforts were coordinated, effective and independent (Koponen, 2021, 7).

The jurisdiction for promoting anti-doping activities in Finland today lies within the Finnish legislation through ratification of the international treaties, namely The Anti-Doping Convention of the Council of Europe that was ratified by Finland in 1990 and UNESCO's International Convention Against Doping in Sport, ratified in 2006 (FINCIS, 2023d; Ministry of Culture and Education, 2023). Furthermore, one of the key objectives of the Act on the Promotion of Sports and Physical Activity is to promote ethically sustainable and fair sports (Act on the Promotion of Sports and Physical Activity 390/2015, 2015). The responsible authority for promoting and supporting the anti-doping efforts in Finland is the Ministry of Culture and Education (Ministry of Culture and Education, 2023).

Finnish Center for Integrity in Sports FINCIS. Through the organizational change of FINADA, the Finnish Center for Integrity in Sports FINCIS was established in 2016 as a result of extensive research on the practical administration of the new sports conventions launched by the Ministry of Culture and Education. The research was initiated as ethical violations and issues had gained increasingly more attention in the sporting community. (FINCIS, 2023d) As a result, FINCIS gained the responsibility for the practical implementation of the Council of Europe's Convention on Spectator Violence and Convention on the Manipulation of Sports Competitions (FINCIS 2023d, Ministry of Culture and Education, 2023). The core responsibility of FINCIS is to safeguard and reinforce an ethically sustainable sports culture together with relevant stakeholders by answering for the practical implementation of the international anti-doping treaties (FINCIS, 2023d). Athletes are committed to Finland's Anti-Doping Rules via their respective national sport federation by obtaining their membership, competition license or other agreement, such as an anti-doping agreement, or by participating in sporting events organized by a national authority or league (FINCIS, 2021, 8–9).

Additionally, FINCIS supports stakeholders within the sporting community in ethical themes by conducting research and obtaining information and insights from global studies and taking it to the national context to create a foundation for further research (FINCIS, 2023c). The Finnish Olympic and Paralympic Committees, The Finnish Society of Sports Medicine and the State of Finland, represented by the Ministry of Culture and Education, constitute the members of FINCIS (FINCIS, 2023b).

#### 2 OVERVIEW OF THE GLOBAL ANTI-DOPING POLICIES AND ACTIVITIES

This chapter introduces a short history of anti-doping and how the current global framework for anti-doping activities was developed. The section is constructed to provide an operational context for this thesis by describing the development and rationale behind policies and regulations of the anti-doping system that the athletes are subject to today. Also, this section is building the base for understanding the theoretical and scientific approaches to the subject.

### 2.1 Short History of Anti-Doping

The use of performance enhancing substances is a known phenomenon in sports throughout the history of competitive sports (Ljungqvist, 2017; Willick et al., 2016). Already at the ancient Greek Olympics, athletes have reportedly used performance enhancing substances to gain competitive advantage by increasing strength, speed and endurance as well as decreasing feelings of fatigue and enhancing faster recovery (Willick et al., 2016). Doping, as in the use of prohibited substances or methods to enhance performance capacity, is seen as a violation against the spirit and core values of sport (Gebert et al., 2017; Gucciardi et al., 2010; Willick et al., 2016).

Growing concern related to both the increased use of performance enhancing substances by athletes as well as recognizing the health risks associated with them, led the International Olympic Committee (IOC) and international sports federations (IFs) to react and initiate antidoping activities in the 1900s (Ljungqvist, 2017; Willick et al., 2016). The International Amateur Athletics Federation IAAF (later known as International Association of Athletics Federations IAAF, and today as World Athletics WA) was the first IF to officially ban the use of doping in 1928 by prohibiting the use of certain stimulants (Bowers, 2012), but no measures, such as testing, were reportedly taken to ensure that the rules were followed by athletes (Ljungqvist, 2017). It was not until the death of a cyclist at the 1960 Olympics in Rome, the first ever Olympic Games to be televised live for millions of people, that made the IOC officially react to doping abuse, as the phenomenon was putting the entire reputation of Olympic sports at jeopardy, also in the eyes of the general public. This initiated the establishment of the IOC Medical Commission in 1961, which can be seen as the first step in the fight against doping as we know it today. (Ljungqvist, 2017)

In the beginning, there was not much knowledge about the performance enhancing substances used by athletes, nor about the extent to which they were used in competitive sports (Ljungqvist, 2017). In 1967, the IOC Medical Commission introduced a first proposal for a list of prohibited substances in sports for the detection of which doping controls were to be performed in the Olympic Games (Ljungqvist, 2017). The first comprehensive doping control program was realized in the Munich Olympics in 1972, where samples were collected and analysed to detect only various stimulants, although athletes were known to use anabolic androgenic steroids (Bowers, 2012; Ljungqvist, 2017; Willick et al., 2016). For a long time, the sporting community was not ready to put in a united effort to ban doping substances such as anabolic steroids because of their widespread use in competitive sports, insufficient knowledge on doping and mistrust in detection methods, while banning effective and narcotic stimulants, such as amphetamine, restricted by regulations and laws in many countries, was a widely supported effort also outside of sports (Bowers, 2012; Ljungqvist, 2017). Anabolic steroids were added to the prohibited list prior to the Montreal Olympics in 1976, which can be seen as a significant milestone in anti-doping history (Ljungqvist, 2017).

Despite of growing concern of the use of performance enhancing substances among athletes, the efforts to fight doping remained fragmented and uncoordinated within the sporting community (Willick et al., 2016). As the IOC stated that they were not willing to take on full responsibility of testing the athletes, a lot of the anti-doping activities were left to the responsibility of IFs and national actors with significant differences in resources, capacity, knowledge of doping and anti-doping programs and levels of commitment (Willick et al., 2016). Ljungqvist (2017) also suggests that developing anti-doping policies may not have been in the interest of sporting federations and nations because of e.g. state-run doping programs used to gain political leverage by athletic success. The German Democratic Republic (GDR) is an example of a country known to have operated a such program (Franke & Berendonk, 1997), while also holding power in the governing bodies of sporting institutions and therefore being able to turn down anti-doping initiatives (Ljungqvist, 2017).

In many countries, a lot of public funding was allocated for supporting competitive sports, so the attention for the increasing use of doping substances jeopardizing the ethics of sport and the growing understanding on the health risks on the athletes using them reached governmental level discussions in the 1980s and 1990s (Bowers, 2012). Reports and events, such as sprinter

Ben Johnson being stripped of his Olympic gold medal after testing positive for anabolic steroids, the Dubin Commission report in 1990, requested by the Canadian government indicating high prevalence of doping among competitive athletes, and the revelations of the GDR state-run doping program (see Franke & Berendonk, 1997) enlightened both sport organizations, governments and the general public about the extensive use of performance enhancing substances in competitive sports (Ljungqvist, 2017). Throughout the 1990s, anti-doping activities were gaining more and more support and legitimization by both within and outside the sporting community, leading up to establishment of national anti-doping agencies, the second Council of Europe Anti-Doping Convention and eventually the International Anti-Doping Arrangement (IADA) as an effort to create intergovernmental policies for anti-doping work (Bowers, 2012; Ljungqvist, 2017).

## 2.2 The World Anti-Doping Agency WADA

The World Anti-Doping Agency WADA was established in 1999, as the IOC and the sport organizations recognized that global co-operation with and involvement of national governments, public authorities and international legal community was a prerequisite for effective combat against doping (Bowers, 2012). According to Ljungqvist (2017), more and more athletes were caught using prohibited substances, and the need for standardized policies and especially sanctions became imminent as a result of greater anti-doping activities conducted by different NADOs and IFs. The sanctions for anti-doping rule violations (ADRV) varied greatly between different IFs and countries, creating significant inequalities between athletes competing in different sports and with different nationalities. The inconsistencies were a result of the uncoordinated development of rules and regulations by different ADOs, as they were typically created on the basis of the those of the IOC, but no framework for sanctions outside the Olympic Games was introduced and could therefore not be referenced by the sanctioning authorities. Without universal set of rules for ADRV sanctions, legal authorities were often involved in doping cases, resulting in even further inconsistent outcomes and in not only prolonged, but also even financially extensive processes for athletes and sports organizations. (Ljungqvist, 2017)

Even after the establishment of the Court of Arbitration for Sport CAS, whose operation became legitimized by the Federal Court of Switzerland in 1994, the need for coordinated system for

sanctions remained prevalent. The need was highlighted also due to further doping scandals, such as the Festina cycling team's possession of doping substances in Tour de France and collected samples being left unanalyzed in the IOC-accredited laboratory in Rome. In 1999, the IOC invited governments to collectively form the World Anti-Doping Agency WADA, which inarguably is one of the most significant turning points in the history of anti-doping. (Ljungqvist, 2017)

WADA is an independent organization with the purpose to harmonize, develop, coordinate, and promote anti-doping activities undertaken by national and international sports federations and governments worldwide. WADA's governance and funding is constructed through equal partnership of the Sport Movement and governments. (WADA, 2023h) All Olympic sports along with other signatories have adopted WADA's World Anti-Doping Code and are committed to its practical implementation (WADA, 2023a).

Governments and sports organizations coming together to form WADA to fight doping was a strong cross-sectional political statement to condemn the use of prohibited performance enhancing substances and to join efforts to safeguard the integrity of sports (Council of Europe, 1989; Ljungqvist, 2017). Furthermore, significant steps towards greater international cooperation in anti-doping was the establishment of two international treaties Council of Europe's Anti-Doping Convention (1989) and UNESCO's International Convention Against Doping in Sport established (2005). The Anti-Doping Convention treaty is by October 2023 ratified by 135 countries and UNESCO's International Convention Against Doping in Sport by 191 parties, being the second most ratified of all UNESCO treaties (Council of Europe, 2023; UNESCO, 2023).

# 2.3 The World Anti-Doping Code

The World Anti-Doping Code was established by WADA to globally harmonize the anti-doping policies, rules, regulations and actions within sporting organizations and public authorities. The Code together with eight International Standards and additional Technical Documents acts as a fundamental document creating the framework for standardized anti-doping policies. The aim of the Code is to safeguard the possibilities of all athletes to compete safe and fair while

protected equally by the anti-doping policies and actions regardless of their sport, nationality or testing location in the world. (WADA, 2021d, 9–11)

In conjunction with approval of the first Code in 2003, it was determined by WADA that the Code would be a document that is to be reviewed and updated periodically for it to stay appropriate and relevant in the dynamic environment it is designed to operate in. Since then, the Code has undergone three revisions resulting in the Codes of 2009, 2015 and 2021. The Code is formed together with the different stakeholders committed to it, namely public authorities, ADOs and other actors within the sports movement, who all are invited to give feedback and proposals for the next Code and International Standards in three stakeholder consulting rounds. The purpose of this practice is to utilize the extensive practical experiences and views on the current operational environment of all the stakeholders to reinforce the global fight against doping. In the revision for the 2021 Code, new areas of sport integrity, such as the protection of whistleblowers and education strategies were addressed as a response to issues arising from its operational context, such as the increased number of cases due to the use of recreational drugs and the state-led doping scandal in Russia (WADA, 2021b, 1–3).

### 2.4 Doping Controls

While it is widely known within the sports community and even by the general public that doping controls are conducted in-competition in major events such as the Olympics and World Championships, the majority of samples collected by NADOs these days are collected outside of competitions without an advance notice (Bowers, 2012; FINCIS, 2022a). Doping substances have throughout the years been used for multiple reasons and functions. For example, while increased muscle mass used to be the aim with steroid use until the beginning of 2000s, in modern sports they are primarily used to enhance recovery and enable a higher frequency and intensity of training programs. (Bowers, 2012) As doping controls were started with incompetition testing, it soon became imminent that testing athletes only in conjunction with competitions was ineffective as prohibited substances were used for performance enhancement also out-of-competition, i.e. during training periods preceding competitions, and were no longer detectible in samples collected in-competition (Donovan et al., 2002; Møller, 2011). Therefore, out-of-competition controls were introduced to combat the use of doping substances outside of

competitions (Møller, 2011). The desired deterring effect of out-of-competition testing was based on the idea that the athletes could be tested at anytime and anywhere (Møller, 2011)

According to Ljungqvist (2017), it is noteworthy that when WADA was established in 1999, only 12 international federations in the Olympic regime allowed out-of-competition testing in their rules. Furthermore, only a few of these IFs actually reportedly conducted these tests and even with great variability – 60 percent of the out-of-competition testing was done in athletics by IAAF and one fifth in swimming by Fédération Internationale de Natation (FINA), followed by only a couple of smaller sports such as rowing, canoeing and weightlifting. Today, an extensive out-of-competition testing program and its appropriate implementation is the prerequisite for any ADO to be defined as Code-compliant by WADA. (Ljungqvist, 2017) The creation of a system that enables out-of-competition doping controls at all times in all sports has been considered as one of the core establishments of anti-doping policy (Overbye & Wagner, 2014).

The introduction of the Athlete Biological Passport (ABP) can be considered one of the major milestones in developing new anti-doping strategies (Houlihan et al., 2019). The functionality of the ABP is based on identifying the use of prohibited substances or methods indirectly by monitoring individual biological variables of the athlete over a long period of time (WADA, 2023f). The ABP is a tool for ADOs to identify who should be tested and when, i.e. to build intelligence for target testing efforts so that right athletes are tested at right times with the right analytics, and even pursue potential anti-doping rule violations by timely expert interpretation and evaluation of the ABP data (Houlihan et al., 2019; WADA, 2023f).

# 2.5 Registered Testing Pool RTP

Athletes who used or intended to use doping quickly realized that in order to avoid out-of competition controls, they needed to stay out of reach of testing efforts during the periods when prohibited substances could potentially be detected in their samples (Møller, 2011). This was also realized by testing authorities, leading up to the conclusion that it should be possible to test elite athletes at all times (Møller, 2011). To support the efficiency of out-of-competition testing, and later on timely ABP-testing, so-called testing pools and the Registered Testing Pool (RTP), also referred to as the Athlete Whereabouts system, was introduced, obligating the athletes to

report their whereabouts for each day of the year (Møller, 2011; WADA, 2023c, 27) The system was created to harmonize out-of-competition doping controls and the equality of athletes from different nations and backgrounds around the world to ensure that all athletes can be found for doping controls at appropriate, targeted times and for avoiding of doping controls to become more difficult (Dikic et al., 2011).

The athletes that are included into testing pools are determined by IFs and NADOs based on criteria described in WADA' International Standard for Testing and Investigations (ISTI). As per the ISTI, each ADO shall consider the selection criteria and how they are prioritized within their own test distribution planning, considering both national characteristics and international perspectives. Athletes who fulfil the criteria for inclusion are typically high-level athletes who are part of national teams or compete independently at Major Events (e.g., Olympic and Paralympic Games and World Championship) or other sports of high national priority. Topathletes can also be included in an RTP if they are supported by public funding or are difficult to locate for out-of-competition testing. To summarize, RTP athletes are generally elite athletes within their respective sport that anti-doping organizations have the intent to test both in and out of competition. (WADA, 2023c, 26–27) Athletes are excluded from the RTP if they no longer fulfil the criteria for inclusion defined by the ADO or if they end their athletic career (WADA, 2023c, 37).

The RTP is the most extensive of the testing pools in terms of the requirements for the individual athlete (WADA, 2023c, 25–28). Since the introduction of the revised Code in 2009, the whereabouts system obligates the RTP athletes to submit a chosen 60-minute time slot for each day of the year along with their contact information and accommodation details where they can be reached for possible doping controls (Kreft, 2011; WADA, 2023c, 20–31). Additionally, testing pool athletes are required to report their training sessions and locations along with competitions and eventual travel plans, and the information shall be submitted quarterly (WADA, 2023c, 31). If the athlete fails to comply with the RTP requirements, that is, the athlete is not available for testing at the location they had informed, they have not submitted their whereabouts for the upcoming quarter by the given deadline or if deviations from the submitted information can be reported, they can be sanctioned with a so-called "Whereabouts Failure". As determined in the International Standard for Results Management (ISRM), this kind of non-compliance may result in a suspicion of illegal doping practices. Three Whereabouts Failures withing a year can lead to a two-year ban from competition. (WADA, 2023b, 40–43)

In 2009, WADA introduced and brought into use the administrative system ADAMS (Anti-Doping Administration and Management System) to create a digital platform for WADA, ADOs, athletes and laboratories to facilitate communication and entering, saving, storing and sharing data related to anti-doping work and doping controls (Scharf et al., 2018; WADA, 2023e). By 2018, ADAMS has been developed into a pivotal sociotechnical platform that is central for the administration of doping controls and results management (Scharf et al., 2018). The ADAMS system is used by testing pool athletes for submitting and updating their whereabouts information (WADA, 2023c, 26).

#### 3 ANTI-DOPING ACTIVITIES AND LEGITIMACY

This chapter presents the theoretical perspectives and approaches that have been used in previous anti-doping research. In this chapter, previous studies on the anti-doping system that have been seen to relate to the perceived legitimacy and athletes' rights are presented to provide a rationale and relevant scientific approach to the anti-doping regime to derive appropriate research questions for this study. The themes that were recognized to influence legitimacy and athletes' rights are athletes' views on the efficiency of the anti-doping efforts, and the Athlete Whereabouts system in particular, global implementation of the Code, education efforts of anti-doping authorities, and athlete engagement.

## 3.1 Theoretical Approaches to Anti-Doping Research

Researchers agree that doping and antidoping are complex phenomena to study (Blank et al., 2016; Englar-Carlson et al., 2016; Ntoumanis et al., 2014). Although doping within competitive sports have been studied from various research perspectives, previous studies have mainly focused on the medical and psychosocial attributes of the phenomenon, leaving a need for more sociological and behavioural scientific approach to the subject (Kiani & Moghaddam, 2021; Morente-Sánchez & Zabala, 2013; Overbye et al., 2013; Westmattelmann et al., 2018). Sociological theories have though been used to approach the phenomena of doping and antidoping. One of the most prevalently used theories in understanding doping behaviours is the theory of planned behaviour by Ajzen (1991), the core idea of which is that the behaviours of an individual derive from intentional choices (Blank et al., 2016; Ntoumanis et al., 2014). Also, e.g. the Drug in Sport Deterrence Model (DSDM) by Strelan and Boeckmann (2003) is based on the deterrence theory from criminology, similarly building on the perspective that the behaviours of individuals result from intentions and weighing the perceived benefits and costs in relation to the outcome. It has been argued that shortcomings of research on athletes' perceptions of doping and anti-doping strategies could be because of the idea that athletes are reluctant to voice their opinions on doping with scholars due to the sensitivity of the topic (Alaranta et al., 2006; Bloodworth & McNamee, 2010).

Research implies that existing social studies have mostly focused on identifying attributes that might make the athletes vulnerable to using doping (Overbye et al., 2013; Petróczi et al., 2021),

and more focus could be placed on anti-doping strategies and their effectiveness, as well as positive preventive strategies derived from examining clean athletes (Englar-Carlson et al., 2016; Petróczi et al., 2017). Moreover, a broader social scientific approach should be applied to develop anti-doping policies towards preventive strategies rather than relying on the detection-based efforts (Overbye et al., 2013; Petróczi et al., 2017). Also, in addition to examining athletes' attitudes on doping controls and sanctions, future research should be conducted to study athletes' views on other anti-doping measures, such as the whereabouts system (Dunn et al., 2010, 332; Overbye & Wagner, 2014).

Athletes competing in elite sport are required to comply with the anti-doping rules as depicted in the Code, so one critical perspective that has been applied to view the system is as an institution of external control of athletes (Henning, 2014; Overbye & Wagner, 2014). Previous research has shown that athletes have experienced feelings of being under surveillance when reporting their whereabouts information for anti-doping organizations (Hanstad & Loland, 2009; Overbye & Wagner, 2014). Drawing from this perspective, the anti-doping regime and the Athlete Whereabouts system has also been approached through Michel Foucault's work on surveillance and social control in *Discipline and Punish: The Birth of the Prison* published in 1975, that provides a critical approach for understanding social control in modern societies and institutions (Foucault, 1995, 205; Hanstad & Loland, 2009).

Foucault's ideas of the Panopticon, a metaphorical construction of a prison describing surveillance in modern societies (Foucault, 1995), could be applied to the context of anti-doping system by examining it as an institution where social control of athletes is practiced by anti-doping authorities by measures such as doping controls and the Athlete Whereabouts system (Overbye & Wagner, 2014; Valkenburg et al., 2014). The idea is based on a concept of a prison design where a single watchtower is placed to enable visual access and consequently constant surveillance of the prisoners (Foucault, 1995, 200–202). The panopticon represents the constant threat of surveillance, which can be reflected to the way athletes are constantly monitored by the anti-doping authorities (Henning, 2014). Athletes are aware that they can be tested at any time, creating a sense of constant surveillance, which can influence their behavior and deter them from using prohibited substances, creating a system of self-surveillance where norms, such as clean sports, is respected (see Foucault, 1995, 201–203). Hanstad and Loland (2009) even argue that the whereabouts system takes this surveillance a step further, as it requires active participation from those under surveillance, i.e. the athletes. Building further on

Foucault's work (1995, 202), he argues that once a surveillance system like he described is in place, it does not matter who or what authority exercises power. This could be reflected on how WADA and the Code aims for harmonization of the anti-doping policies and efforts worldwide (WADA, 2023e, 9),

Building on Foucault's work on modern institutions, his theory acknowledges that individuals are not mere passive subjects of surveillance, but have the potential for resistance, challenging the norms and expectations imposed upon them (Foucault, 1995, 207). As athletes can be seen to have no choice but to comply with the regulations to keep up their profession (Kreft, 2011; Valkenburg et al., 2014), studying athletes' perceptions of the system is highly important also in light of good governance policies calling for more engagement of all key stakeholders (Council of Europe, 2019, 8). Nevertheless, examining the Athlete Whereabouts system through the Foucauldian lens is a complex and multifaceted approach to anti-doping. The perspective of looking at it as an institutionalization process can lead to critical discussions about the ethics and effectiveness of anti-doping systems in contemporary sports (Overbye & Wagner, 2014). Overbye et al. (2015) state that it is appropriate to differentiate between athletes' general attitudes towards doping controls and their perceptions of the efficiency and justification of the whereabouts system as an anti-doping measure. Therefore, it is essential to also examine athletes' perceptions and experiences on anti-doping policies and procedures and their thoughts on their effectiveness as anti-doping efforts (Westmattelmann et al., 2018).

### 3.2 Theoretical Framework: Assessing Legitimacy

The theoretical framework of the study is constructed adapting the Sport Drug Control Model by Donovan et al. (2002) and the concept of legitimacy reflecting previous research in the anti-doping context.

The creation of theoretical models has according to Overbye et al. (2013) increased the understanding of the components affecting athletes' attitudes towards and behaviours related to doping, which is why The Sport Drug Control Model is used as a framework for this study. The Sport Drug Control Model (SDCM) by Donovan et al. (2002) is a theoretical model created to guide the development of effective education, doping control and policy programs. The model was derived from various models describing attitudes and behaviour change. It consists of six

major components that are seen to contribute to athletes' attitudes and behaviour related to the use of doping substances: personality factors, threat appraisal, benefit appraisal, reference group influences, personal morality, and legitimacy. The authors state that the model can be used by anti-doping agencies as a structured framework for development and implementation of strategies and allocating resources in all six areas by engaging in research with athletes and other relevant stakeholders. (Donovan et al., 2002)

Drawing from the previous studies on the field as well as research needs arising from the national expert organization FINCIS, this study is focusing on the legitimacy component of the SDCM. Legitimacy, as a concept, can be defined as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (Suchman, 1995, 574). In line with this definition, the efforts and activities of ADOs are key determinants for how their legitimacy is perceived by athletes, which makes it important to study as legitimacy has been seen to be linked to higher compliance (Donovan et al., 2002; Efverström, Bäckström, et al., 2016; Suchman, 1995; Tyler, 2006). Similarly, Woolway et al. (2020) argue that it is critical for the success of the system that athletes as the stakeholders who are first and foremost affected by the policies perceive the measures as legitimized to comply with them.

Furthermore, even though doping behaviours have been studied from multiple perspectives from within the model (Figure 1), the perceived legitimacy of anti-doping programs has been relatively overlooked, despite its potential to strengthen the anti-doping efforts particularly in the context of prevention strategies (Efverström, Ahmadi, et al., 2016; Jalleh et al., 2014). Nevertheless, it's worth noting that athletes' perceptions of the legitimacy of anti-doping play a significant role in shaping their attitudes towards the use of doping substances (Donovan et al., 2002; Jalleh et al., 2014).

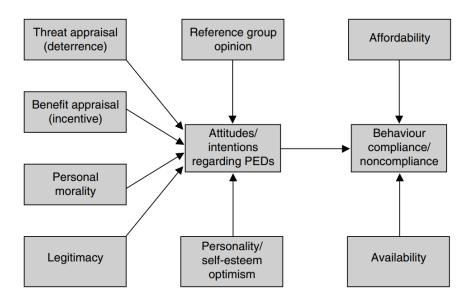


FIGURE 1. Schematic representation of the sport dug control model, where PEDs = performance enhancing drugs (Donovan et al., 2002).

Efverström et al. (2016) utilized the notion of procedural justice by Tyler (2006) to examine the legitimacy of anti-doping work. Drawing from a legal framework and the perspective of procedural justice, the authors state that as people see the outcomes of the system to be justified and fair, the system is more likely to be met with a higher level of trust and perceived legitimacy by this group of stakeholders, which is contributing to higher compliance with the rules and regulations of that governing authority (Donovan et al., 2002; Suchman, 1995; Tyler, 2006). Woolway et al. (2020) suggest that future studies should aim to develop a better understanding of the relationship between legitimacy and compliance.

When examining the concept of legitimacy, Donovan et al. (2002) state that the following factors are assumed to affect the perceived legitimacy of an anti-doping agency: "just laws and regulations, an appropriate agency for enforcement, testing procedures that acknowledge athletes' rights, and are fair and applied equitably across athletes, scientifically accurate and effective testing processes, fair and just sanctions for breaches of anti-doping laws, applied equitably across athletes". Woolway et al. (2020) further argue that "athletes' and stakeholders' perceptions of legitimacy indicate the degree by which the implemented measures, policies and procedures are perceived as proper, just and appropriate". The findings of their review on the legitimacy of the anti-doping system and measures as perceived by athletes indicate that they key determinants for the experience of jurisdiction are appropriate and just anti-doping measures along with transparency in strategies and policies conducted by ADOs (Woolway et

al., 2020). Also, the actions of an authority should be perceived as respectful, just and transparent (Tyler, 2006). Furthermore, it is imperative that athletes perceive the processes and decision-making of governing bodies as impartial and independent, and that athletes themselves are seen as active stakeholders that can influence these processes (Tyler, 2006; Tyler & Jackson, 2014).

To establish a credible anti-doping system, it is essential that athletes view the rules and procedures as just but also believe that they apply uniformly to all competitors, and perceive the responsibilities of being an athlete, as outlined in the Code, to be consistent for everyone (Donovan et al., 2002; Tyler, 2006). It was recognized already at the early stages in the history of the anti-doping framework that the more athletes experience that they are not treated equally by the authorities compared to their rivals, the more likely they are to use doping (Mazanov & Huybers, 1999). Donovan et al. (2002) argue that athletes' view on legitimacy of both the authority and the system is affected by their own experiences of the actions and functionality and by how the system has been experienced by others. They state that for example, if inequalities in how athletes are treated by a doping control authority are reported, it can lead to perceived de-legitimization of the respective authority or the system as a whole. (Donovan et al., 2002) Previous studies have revealed that athletes have seen inconsistencies in how regulations are implemented across various countries and sports federations (Bloodworth & McNamee, 2010; Efverström, Ahmadi, et al., 2016; Gleaves & Christiansen, 2019; Kambhampati & Star, 2021). Therefore, it is essential that perceived legitimacy of the system is studied in national context as inconsistencies of how the Code has been implemented have been reported between different NADOs (Dikic et al., 2011; European Union, 2010; Kambhampati & Star, 2021).

# 3.3 Legitimacy and Effectiveness of Anti-Doping Measures

Athletes widely believe that use of doping within competitive sports violates the central ideal of fair play and the general image of sports (Gebert et al., 2017). Athletes have also reported being generally in favor of doping testing (Gebert et al., 2017; Moston et al., 2015; Overbye, 2017; Westmattelmann et al., 2018). Previous research also indicates that anti-doping efforts are needed also in the future, as athletes have reported perceiving doping to be a problem in the international elite level of their respective sport (Gebert et al., 2017; Havumäki, 2022).

Furthermore, safeguarding clean sports will continue to face challenges, as for example commercialisation of sport has been considered a potential threat to it in the future (Gebert et al., 2017; Houlihan et al., 2019).

From the perspective of legitimacy, effective and just anti-doping measures are a key determinant for athletes perceived jurisdiction and therefore also higher compliance (Donovan et al., 2002; Woolway et al., 2020), hence why it is important to examine athletes' thoughts on the effectiveness of anti-doping strategies. Despite the overall support for the World Anti-Doping Program and testing efforts, athletes have reported negative associations with doping controls, such as invasions of privacy and feelings of being suspected despite supporting anti-doping work (Overbye & Wagner, 2014). Elite athletes have also reported being afraid of the sample falsely being reported positive, experiences of stress because of difficulty with providing the urine sample along with experiences of feeling like their privacy was violated when urinating under surveillance (Elbe & Overbye, 2014; Overbye & Wagner, 2014). Therefore, the appropriate question also in regards of athletes' rights is whether the anti-doping measures can be justified by the athletes despite the negative associations (Overbye & Wagner, 2014).

It is challenging to assess the efficiency of anti-doping strategies, especially with quantitative methodology, as the number or unrecorded doping cases remains an unknown key variable in the equation (de Hon et al., 2015). When 14 anti-doping professionals with different tasks and backgrounds around the world were interviewed about the current anti-doping regime, the findings suggest that the effectiveness and legitimacy of WADA and its efforts has been weakened due to its will to respond to other emerging challenges (Read et al., 2020). The authors suggest that this broadening of WADA's activities from its original purpose has led to perceived ineffectiveness, and poses a threat to the legitimacy of the system (Read et al., 2020). Therefore, it is essential to involve athletes in policy development and decision-making as they might be able give indication about how big a threat doping is in their respective sport and also to understand the determinants of doping behaviour to develop more efficient preventive strategies (Westmattelmann et al., 2018).

Athletes' perceptions of the probability of getting caught by testing positive for a prohibited substance and being sanctioned accordingly and more advanced diagnostics have been perceived as among the key deterrents behind their decision to not use doping to enhance their

performance capacity (Bowers, 2012; Dunn et al., 2010; Gebert et al., 2017; Gucciardi et al., 2010; Overbye et al., 2015, Westmattelmann et al., 2018). Furthermore, a strong moral quandary and value-base of athletes towards doping has also been recognized as strong deterrents for doping behaviors (Koskela, 2023; Ntoumanis et al., 2014). Moreover, these findings are supported by studies on elite athletes indicating that the moral quandary and shame of being sanctioned and publicly labelled as a cheater as a significant deterrent for doping use (Bloodworth & McNamee, 2010; Huybers & Mazanov, 2012). Similar results were reported when doping deterrents were discussed with athletes who had admitted to using doping (Kirby et al., 2011). These findings arguably emphasize the deterring effect of a system creating the framework to enable sanctions for such behavior. However, another study based on interviews of elite athletes who admitted to using performance enhancing substances to gain competitive advantage during their athletic career indicated that those athletes did not perceive that the detection efforts were a credible threat to get caught (Engelberg et al., 2015; Pappa & Kennedy, 2013).

The findings outlined above support the idea that continuous research on the substances and analytics as well as new measures for detecting doping use, such as improved analytics and investing in intelligence-based and multidisciplinary strategies, should be developed to more effectively combat doping use (Westmattelmann et al., 2018). Overbye & Wagner (2014) further suggest that it is appropriate and essential that questions about legitimacy of the measures are actively and comprehensively asked not only by organizations involved with elite sports, but also the athletes, as their voice should lay the groundwork for policy development. As the current anti-doping strategies have been seen to involve violations of privacy, athletes' personal experiences on doping control strategies, such as reporting whereabouts, is valuable information for organizations and stakeholders in determining whether those strategies can be justified (Overbye & Wagner, 2014; Waddington, 2010).

### 3.4 Legitimacy and the Athlete Whereabouts System

While previous studies have shown that doping controls and testing programs are generally supported by athletes (Moston et al., 2015; Overbye et al., 2015; Westmattelmann et al., 2018), the athlete whereabouts system has received more controversial views. According to Kreft (2011), the system has been critically discussed from moral and legal points of view for its

jurisdiction in relation to the fundamental right to privacy, as these kinds of measures would undoubtedly be deemed as unacceptable by authorities in any other context of the society. Also athletes have experienced the system as invasive and restrictive in regards of their privacy and freedom when reflected in the context of a legal framework (Kanerva, 2013; Valkenburg et al., 2014). Furthermore, inclusion of an athlete in the RTP can be argued to put them in an unequal position compared with athletes without such obligations, also by incorporating additional ways to get sanctioned in the anti-doping context if those obligations are not met (Waddington, 2010).

According to Valkenburg et al. (2014), WADA has responded to the criticism on the whereabouts system by emphasizing its role in protecting athletes' right to doping-free sport. Currently, the athlete whereabouts system is justified in the Code as a means to protect athletes' health which has even been viewed as a legitimate rationale for it in the European Court of Human Rights (see WADA, 2021b, 5). In line with this perspective, athletes have perceived the system as an important tool in detecting doping users in elite sports and even as necessary for efficient fight against doping (Overbye & Wagner, 2014; Valkenburg et al., 2014). Obligations related to the inclusion in the whereabouts system have been perceived as another characteristic of being an elite athlete, and the inclusion itself as a compliment to their level of performance (Overbye & Wagner, 2014). Also, the jurisdiction rationale for the system has still received approval by many scholars with respect to the special nature and characteristics of elite sports as a profession, where athletes and their bodies can be viewed to represent both the labor force and the outcome (Kreft, 2011).

On the other hand, studies have also reported negative associations and mistrust in the effectiveness of the Athlete Whereabouts system as an anti-doping measure (Overbye & Wagner, 2014; Waddington, 2010). Similarly, a Danish study indicated that the view was shared by athletes both with and without obligations to report whereabouts, and that mistrust seems to increase when athletes had personal experience of the system (Overbye & Wagner, 2014). Furthermore, athletes have also reported that they would be able to or were aware of ways to use the ADAMS system to avoid doping controls (Scharf et al., 2018), which can be seen as a major issue considering the functionality and consequently the legitimacy of upholding the whereabouts system. Athletes have also reported the whereabouts system to negatively affect their daily lives as it has been experienced as restrictive in terms of privacy and decrease the joy of being an elite athlete by it being time-consuming and increasing stress by adding another element based on which they can be sanctioned in the anti-doping context

(Kanerva, 2013; Overbye & Wagner, 2014). Also, Overbye & Wagner (2014) reported that the dissatisfaction of athletes increased when the results were compared to a similar study conducted by Hanstad and Loland before the introduction of the one hour time-slot requirement in 2009. Again, the question to ask is whether the system can gain justification by the athletes despite the reported negative associations and issues with perceived effectiveness.

Also, the athletes included in an RTP are placed under surveillance in a system the functionality of which is based on their active participation (Kreft, 2011). Furthermore, reporting whereabouts requires the use of WADA's administrative system ADAMS (see chapter 2.5), so it is appropriate to examine its functionality from athletes' perspective. Athletes have generally reported critical views on ADAMS, stating that it is inefficient, outdated and complex to use (Gebert et al., 2017; Westmattelmann et al., 2018). Also, athletes' right to informational privacy in the context of the digital platform should be discussed as their personal information is entered and processed in the system (Valkenburg et al., 2014). Athletes generally had little knowledge of ADAMS as such and have reported concerns about privacy aspects of the system, but still continue complying with the use of it despite voicing concerns (Scharf et al., 2018). In a study conducted with German top-level track and field athletes and cyclists, athletes reported mistrust in the effectiveness of the ADAMS system arguably due to lack of knowledge about how the information entered in ADAMS is used, its data security, where it is stored and who has access to it (Westmattelmann et al., 2018). As ADAMs is an essential tool for the athletes for reporting whereabouts, it is important that WADA invests in developing the platform and shares information on how the data is used and stored, as the athletes also called for more transparency in how the system is used (Scharf et al., 2018; Westmattelmann et al., 2018).

As there seems to be evidence on that the Athlete Whereabouts system does in fact include invasions of privacy, the focus of the discussions related to privacy issues in the anti-doping context should be shifted towards whether the whereabouts system can be justified and gain legitimacy by the athletes (Waddington, 2010).

# 3.5 Global Implementation of Anti-Doping Policies and Legitimacy

The World Anti-Doping Code places obligations not only to athletes, but also to anti-doping organizations, such as NADOs and IFs managing the testing pools (WADA, 2023c, 25–39). In

line with studies reporting inconsistencies in global implementation of the Code (European Union, 2010; Kambhampati & Star, 2021), athletes have voiced mistrust in the whereabouts system in terms of its global implementation in different ADOs (Gebert et al., 2017; Gleaves & Christiansen, 2019; Hanstad et al., 2010; Overbye & Wagner, 2014). Athletes' distrust in the equal operations between different ADOs can be considered a major threat to the perceived justification and even the credibility of it (Overbye & Wagner, 2014).

Previous studies have indeed reported variations in how the Code is implemented in different countries and these inconsistencies have reportedly created inequalities between athletes from developed and developing countries (Dikic et al., 2011; European Union, 2010; Hanstad et al., 2010; Kambhampati & Star, 2021; Wagner & Hanstad, 2011). The criticism towards the whereabouts system seems to be justified as studies have indicated that there seems to be considerable variations in criteria for including athletes in the RTP, requirements on when athletes need to be available for doping controls and how they have been sanctioned in that context (Hanstad et al., 2010). Dikic et al. (2011) also reported significant differences in handling of filing failures and missed tests in the 20 NADOs examined. In addition to potentially undermined perception of the legitimacy of the anti-doping system (Overbye & Wagner, 2014; Woolway et al., 2020), inconsistencies could also create inequality between athletes residing or training in different countries as they might then not be subject to the same anti-doping regime, at least not to the same extent (Bloodworth & McNamee, 2010; Wagner & Hanstad, 2011). This view is supported by a Swiss study (2017), where better international cooperation was called for as the most important measure in fight against doping by athletes (Gebert et al., 2017). Drawing from the concept of procedural legitimacy, if athletes experience that they are not treated equally compared to other athletes, the system is likely to be met with lower legitimacy and consequently decreased compliance (Dikic et al., 2011; Donovan et al., 2002; Mazanov & Huybers, 1999).

When legitimacy is examined further, reports of inequality can lead to perceived delegitimization of the respective authority or the system as a whole (Donovan et al., 2002). Global Athlete (2020) conducted an international study with 491 athletes to examine the athletes' perceptions on the existing anti-doping programs of both WADA and NADOs. The study reported higher levels of trust among athletes in the independency, transparency, and efficiency of NADOs than for WADA. The results also indicated that the majority of athletes believed that there is a need for further governance reforms in WADA not only increasing athlete engagement, but also supported the idea that NADOs should have an equal seat in the decision-making of WADA. These findings suggest that also from athletes' perspective, WADA and NADOs are to some extent recognized as different actors in the anti-doping context, and potentially imply that global development of the system could benefit from leveraging on the experiences and expertise of NADOs. Such controversy includes risks that if mistrust is placed in one or more individual anti-doping organizations, be that a NADO, an IF or WADA, it consequently could lead up to perceptions of de-legitimization of the system as a whole, as described by Overbye & Wagner (2014).

Furthermore, the athletes surveyed also reported higher trust in national anti-doping programs and the efficiency of their NADO compared to those of WADA (Global Athlete, 2020). Moreover, athletes' assessment of the prevalence of doping use has shown to differ when compared between national and international context (Gebert et al., 2017; Havumäki, 2022). This is supported by national studies, such as the findings of Overbye (2016) indicating that two thirds of the 645 Danish athletes surveyed perceived the national testing program to be appropriate. Moreover, Finnish athletes reported strong trust in the Finnish doping control system (Havumäki, 2022). Furthermore, studies from Denmark (Overbye, 2016) and the United Kingdom (Bloodworth & McNamee, 2010) have reported that athletes seem to evaluate the anti-doping policies and activities as stricter in their respective countries than others. Similarly, the majority of Swiss athletes also perceived that they are more likely to be sanctioned in their own country where anti-doping activities are exemplary, while 41 percent saw that not enough measures are taken in some countries to effectively fight doping (Gebert et al., 2017). The mistrust was mostly placed on Russia and other Eastern European countries. These findings indicate that also athletes differentiate the efforts of different anti-doping organizations.

These findings are outlining diverse national interpretations of global policy efforts (Wagner & Hanstad, 2011) and supports the idea that culture specific characteristics should be taken into account when studying anti-doping policies, such as the Athlete Whereabouts system (Overbye & Wagner, 2014). In light of the reported inconsistencies, the role of the NADOs as central actors in the fight against doping becomes highlighted (European Union, 2010; Kambhampati & Star, 2021; Wagner & Hanstad, 2011). Furthermore, the development of the Code has increased the complexity of the regulations (Westmattelmann et al., 2018), creating a need to allocate more resources into implementing anti-doping efforts (Koponen, 2021, 22). This raises the question if all NADOs and IFs are in equal position to meet the requirements in the Code

and if the system and the strategies can be viewed as effective, also in light of the economic costs (Westmattelmann et al., 2018). Therefore, it is essential to conduct anti-doping research in a national context, as it seems to a significant extend be dependent on the respective ADO's actions how the Code is interpreted and implemented (Dikic et al., 2011; Hanstad et al., 2010; Kambhampati & Star, 2021) and what kind of culture and atmosphere is created towards the anti-doping system when educating, supporting and advising the athletes (Koponen, 2021).

Kambhampati & Star (2021) argue that it remains the responsibility of an international organization like WADA to recognize and develop strategies to combat these issues through reforms and re-evaluations of its activities and policies. They state that latest revisions to the Code and its amendments, such as the International Standard for Results Management (ISRM), are steps forward in harmonizing standards worldwide. In light of reported inconsistencies and variations in compliance and interpretation of the Code, it should be discussed to what level signing up to it actually binds those stakeholders and how it in reality affects establishing a level playing field for athletes and their support teams internationally (Dikic et al., 2011).

# 3.6 Athletes' Rights to Education and Information

Athletes' right to education and knowledge about ethics, integrity and prevention of doping was recognized and stated already in the Anti-Doping Convention in 1989, which all ratifying parties are committed to implementing on all relevant sporting levels (Council of Europe, 1989, 3). Commitment to develop and implement anti-doping education programs is also depicted in the Anti-Doping Convention of UNESCO, where it is stated that athletes should be educated not only on ethical issues and health risks related to doping, but also relevant and updated information on "(a) doping control procedures; (b) athlete's rights and responsibilities in regard to anti-doping including information about the Code and anti-doping policies of the relevant sports and anti-doping organizations" (UNESCO, 2005, 9).

However, WADA and its anti-doping policies and efforts have been criticized for relying on the deterrence strategies based on detection and sanctions instead of putting more emphasis on education and communication efforts (Engelberg et al., 2015; Moston et al., 2015). Morente-Sánchez & Zabala (2013) argue that doping controls are necessary in the preventive fight against doping, but it is effective only when combined with an effective anti-doping education.

Although communication efforts have seen as less effective deterrents for doping use compared to doping controls and sanctions, education programs have been perceived as moderately effective (Westmattelmann et al., 2018). Also, Ntoumanis et al. (2014) highlight the importance of anti-doping education and social engineering in the fight against the normalization of doping use. Additionally, their study suggests that empowerment of both the athlete and their support persons enhances the commitment to the norms of clean sports (Ntoumanis et al., 2014).

The right to education is highlighted in the International Standard for Education (ISE) that was published for the first time in conjunction with the 2021 Code (WADA, 2021c), the creation of which itself highlights that the importance of sharing relevant information has been recognized by the anti-doping stakeholders. Throughout the development of the Code, the rules and regulations for all stakeholders, including athletes, have become more and more complex, which his highlights the importance of athletes to be well informed about the rules and obligations they are subject to (Westmattelmann et al., 2018). RTP athletes have added demands and obligations in the system compared to their competitors who are not required to report whereabouts, also meaning that there are more ways for them to be sanctioned within the antidoping framework (Waddington, 2010). This is putting them in an unequal position with other athletes, which highlights the right of RTP athletes to be provided with appropriate information on their rights and obligations in the anti-doping framework (Westmattelmann et al., 2018). Research also suggests that various knowledge deficits, such as reported lack of information about how the ADAMS system works and how the data is used and stored, indicating that there is a need for coordinated education strategies to avoid leading to mistrust in the system as whole (Efverström, Bäckström, et al., 2016; Westmattelmann et al., 2018).

Ntoumanis et al. (2014) imply that a knowledge based education program decreases the athletes' intention to use prohibited substances, supported by studies in which educational approach has been shown to have a deterring effect on the use of doping among young athletes (European Commission Directorate General for Education and Culture, 2014, 53; Lucidi et al., 2017). Also, such a deterring effect of educating the athletes and providing them with information about the methods and strategies used in detecting doping users has also been reported in conjunction with the introduction of the ABP-module in cycling, after which a significant decrease in abnormal blood parameters was reported among cyclists (Zorzoli, 2011). Furthermore, results of a recent study examining factors affecting Finnish athletes' attitudes towards clean sports indicate that health risks related to doping along with athletes' value base

were most influential, emphasizing the importance of education strategies and sharing knowledge in anti-doping context (Koskela, 2023).

Studies have shown that athletes perceive education programs as reasonable part of an effective anti-doping program (Morente-Sánchez & Zabala, 2013; Westmattelmann et al., 2018). Based on the findings of their study on German elite athletes' perception on the existing anti-doping regime, Westmattelmann et al. (2018) even raise a question on whether the perceived importance of testing and sanctions could be the result of inadequately conducted communication efforts not reaching the right target groups. Additionally, Elbe & Brand (2016) found that athletes participating in an education program built around ethical decision-making reported higher levels of deterrence for doping than those who took part in a knowledge-based education program.

According to Efverström, Bäckström, et al. (2016), previous research on athletes' perspectives and experiences regarding anti-doping measures has predominantly focused on Western European countries, but some research outside of Europe has examined athletes' perceptions of anti-doping measures in other regions of the world, with a specific focus on the aspect of legitimacy. For instance, Efverström, Bäckström et al. (2016) are referring to an interview study conducted in Australia by McDermott in 2016, which found that athletes felt a lack of fairness in how different anti-doping organizations carried out testing procedures or provided relevant education to athletes. Furthermore, in their own study, Efverström, Bäckström et al. (2016) found that athletes were reporting a lack of knowledge about anti-doping and that the responsibility of NADOs in providing appropriate education was emphasized as they had experienced significant variations in educational efforts. These findings of unequal access to education and information have been identified as threats to the legitimacy of anti-doping efforts and therefore, also education and communication efforts should be regarded as important in terms of legitimacy. Drawing from the perspective of procedural justice, if the athletes do not feel that they are getting appropriate education form their respective NADO, they might place mistrust on equal and respectful conduct of their authority, and consequently question the legitimacy. (Efverström, Bäckström, et al., 2016)

## 3.7 Athlete Engagement

Safeguarding athletes' rights in the anti-doping context is crucial from multiple perspectives. Protecting athletes' health and their right to participate in fair and clean sports are the core rationales behind WADA's anti-doping policies and regulations (WADA, 2021d, 9). Furthermore, the use of doping substances involves considerable health risks for athletes (Willick et al., 2016) so from this perspective, the Code and anti-doping policies and strategies can be considered a significant means to safeguard athletes rights to participate in clean and fair sports without having to risk their health or compromise their wellbeing (UNESCO, 2005). In the revised 2021 Code, recognizing athletes' rights and guarantees was included as a substantial part of the ground rationale for the rules and policies (WADA, 2021b, 5).

Valkenburg et al. (2014) discuss that WADA's rationale for the jurisdiction of placing athletes in the whereabouts system lies in an institutional perspective, where elite sport is seen as an activity that an individual can freely choose to engage in or withdraw from, with the condition of accepting to follow the given rules. Similarly, elite sports have seen as a special context where athletes are set under an additional set of rules and expected to refuse behaviors that might be generally acceptable for others (Itkonen, 2021, 139–145). Furthermore, Kreft (2011) argues that doping control is based on the idea that athletes have no choice but to comply with the regulation because their profession depends on it. According to Waddington (2010), this same conceptualization of an individual's freedom to make choices is how WADA argues that the engaging in the surveillance and the whereabouts system are voluntary in nature. However, in line with Valkenburg et al. (2014), it can be argued that safeguarding athletes' rights is therefore even that much more important, as in practice, athletes are not given a realistic choice to not comply with the requirements of the anti-doping system while pursuing an athletic career., i.e. it remains the responsibility of all the stakeholders to consider the interests of the athletes placed in the system.

Both athletes, scholars and other stakeholders have called further governance reforms in WADA in terms of engaging the athletes in decision-making and development processes (Dikic et al., 2011; Global Athlete, 2020; Kambhampati & Star, 2021). For example, according to Waddington (2010), the WADA's Athletes' Committee could not be seen to truly represent the voice of the athletes as the members were appointed by the WADA Foundation Board and not by other athletes (Valkenburg et al., 2014). An important step forward to strengthening athlete

engagement within WADA was the establishment of WADA Athlete Council in May 2022 as recommended by the Working Group on the Review of WADA Governance Reforms (2022). Furthermore, the group recommended that representatives of NADOs and athletes should be included in the Foundation Board as an effort to increase its representativeness. The WADA Athlete Council now consists of 20 athlete representatives appointed by the following three groups: the Athlete Commissions of the IOC and International Paralympic Committee, Athlete Commissions of IFs and the Appointment Panel (WADA, 2023g). Similarly, greater athlete representation has been supported and called for by athletes (Global Athlete, 2020).

Even when the 2021 Code was critically examined, many improvements and new amendments, such as amendments to the Code and the introduction of the International Standard for Results Management (ISRM), were considered as steps towards the right direction in safeguarding athletes' rights and the Code serving its purpose (Kambhampati & Star, 2021), and implying that they're increasingly recognized by WADA and its stakeholders.

Koponen (2021) has examined how changes in the Code, International Standards and Technical Documents have affected the development of the national doping control system in Finland throughout the years and implies that athlete's rights to information and knowledge have deliberately been included in the Code as it has been revised. In Finland, contact with athletes along with athletes' attitudes towards doping control has become better during the years, which is supported by feedback from the athletes highlighting their trust in clean sports in Finland as well as in the actions of FINCIS (Koponen, 2021, 29–30). In terms of governance of FINCIS, for the two-year term of 2022-2023, the Board of Directors of FINCIS consists of the Chair, six to seven ordinary members, one of which is an athlete member, appointed by the Athletes' Commission of the Finnish Olympic Committee and the Finnish Paralympic Committee (FINCIS, 2023a). In June 2023, the Board of Directors approved a change in its composition in its decision to include a second athlete member (FINCIS, 2023e). As the term of each Board of Directors is two years, the change will come into effect when the new board is appointed and starts its operation in 2024 (FINCIS, 2023a).

## 4 RESEARCH QUESTIONS AND METHODOLOGY

This chapter presents the aim and research questions of this thesis, followed by the chosen research design, data collection, analysis, and ethical considerations related to this study.

The aim of this study is to investigate whether the Athlete Whereabouts system achieves legitimacy regarding its efficiency as an anti-doping strategy among FINCIS' Registered Testing Pool (RTP) athletes and if they experience that they have received appropriate information about the system. Furthermore, in the light of increasing athlete engagement in policy development, this study aims to investigate FINCIS' RTP athletes' interest to influence the activities of FINCIS. Thus, the aim is to try to link the athlete's micro level perceptions with the activities of FINCIS, and moreover, macro structures of the global policy level.

Therefore, the following three research questions are presented for this study:

- 1. How do FINCIS' Registered Testing Pool athletes perceive the Athlete Whereabouts system as an anti-doping measure regarding its effectiveness and necessity?
- 2. How do FINCIS' Registered Testing Pool athletes perceive that they have been educated and informed about anti-doping matters and the Athlete Whereabouts system?
- 3. Are FINCIS' Registered Testing Pool athletes interested in influencing the activities of FINCIS and if so, how?

## 4.1 Research Design

This thesis employs a cross-sectional mixed-method study design, so data for this study was collected using a combination of qualitative and quantitative methods to gain a broader understanding on the chosen topic at a given time. With a qualitative research approach social phenomena can be examined through experiences and through a variety of empirical data, while quantitative method is a tool for studying theories and phenomena based on quantifiable data. The two approaches should be perceived to complement one another instead of solely being in contrast with each other, so a combination of qualitative and quantitative methods was chosen for this study to obtain different kind of information, as both methods have their limitations and strengths. (Hirsjärvi et al., 2009,136–137; Skinner et al., 2015, 248; Smith & Sparkes, 2016, 1–

2) In this study, the interviews were conducted to gain depth and therefore complement the quantitative data. Also, it was interesting to examine whether the results derived with quantitative and qualitative methods support each other.

As this study aims to get a picture of athletes' perceptions at the time when this research was conducted instead of examining change, a cross-sectional research design was chosen. Cross-sectional studies aim to examine a phenomenon in its context at a given point in time by examining a cross-section of a chosen group of people. According to Kumar (2011), the cross-sectional research approach is one of the most commonly used in social sciences. Moreover, the research design was seen to fit the objectives of this study as it is a simple approach that can be adapted to many different topics and phenomena. (Kumar, 2011)

Due to the specific operative framework of this study examining the anti-doping system and specifically the Athlete Whereabouts system, an extensive review of previous research was done to gain a broader understanding of the framework this thesis is meant to operate in. The most recent studies seem to be related to the themes of this study were emphasized in building the scientific background for the thesis to be relevant in today's context. However, the studies have not been restricted to a certain time frame to gain broader understanding on how the system was developed and on the rationale for the system characteristics that athletes are subject to today, as the anti-doping system has gone through changes during its existence (Kambhampati & Star, 2021; WADA, 2021b, Westmattelmann et al., 2018).

#### 4.2 Data Collection

The data for this study was collected through a survey of FINCIS that was distributed to the RTP athletes (n=120) of FINCIS in September 2023 (Appendix 1). The survey data was complemented by interviews of two athletes who have been a part of the FINCIS' RTP but were excluded from the registered testing pool within the past year of conducting this study as they had ended their sporting career. This was done to also get views of athletes that had been part of the system since the introduction of the 2021 Code but were no longer active athletes subject to doping surveillance to gain balance in the perspective of this study. As FINCIS' register was used, the number of interviews could not have been affected to fit the scope of this study. The survey was sent to 120 athletes included in the FINCIS' RTP at the given time representing a

range of individual sports as described in further detail in the next section. The study was designed to be conducted once a year to continue collecting feedback and information about athletes' thoughts about the activities of FINCIS, which is seen as especially important given the dynamic nature of the RTP. The questionnaire was completed by 30 respondents.

The survey was conducted on a web-based platform Webropol. FINCIS has an agreement with Webropol, and the data is stored and secured by their administration rights. The survey was sent out to FINCIS' RTP athletes in September 2023, and it was open for two weeks. Two reminders were sent to the participants using an inbuilt tool in Webropol allowing the reminders to be sent only to those participants who had not answered the questionnaire at the time when the reminder was to be sent. The feature is designed to allow this to be done without allowing the administrator to see who had completed the questionnaire, which was essential to safeguard the integrity of the participants. The first reminder was sent halfway through the survey time and the second three days before the survey was closed, accumulating several more responses both times.

Taking into consideration the scope of this thesis, six questions of the FINCIS' survey were selected to be examined based on themes identified from previous research on the topic: athletes' perceptions on the Athlete Whereabouts system as an anti-doping measure, FINCIS' educational efforts to provide adequate information and interest to influence FINCIS' activities (Appendix 1). For this thesis to provide a cross-sectional insight on how the athlete whereabouts system and interest in influencing FINCIS' activities, open-ended questions were included to further examine athletes' thoughts and perceptions and potentially allow new aspects outside of the researcher's understanding to be discovered.

The two athlete interviews were conducted with a semi-structured thematic design. The method was chosen as it allows the researcher to focus on chosen themes while providing the participants flexibility in regards of opportunities to discuss their views. The structure was constructed based on themes identified from the previous studies and existing knowledge on the topic. The idea is to focus on athletes' experiences and interpretations on the chosen themes while holding all information as valuable. (Jacobsen, 2007, 92–96) The interviewed had been a part of the FINCIS' RTP but were excluded from the registered testing pool within the past year of conducting this study as they had ended their sporting career. The interviews were conducted in autumn 2023 through video calls due to the geographical distance between the

researcher and interviewees. Video calls were considered the best alternative as it still allows non-verbal communication to be noted and interpreted to increase the validity of the interview material.

# 4.3 Participants

The participants of this study were FINCIS' RTP athletes, that is, Finnish top-level athletes in individual sports, who have been included in the whereabouts system based on criteria described in the International Standard for Testing and Investigations ISTI with national and sport specific considerations done by the experts at FINCIS (WADA, 2023c). The two athletes that were interviewed were a female endurance athlete and a male muscular endurance athlete who both had ended their sporting careers and were therefore excluded from the RTP within one year of conducting this study.

Based on previous research presented in this study, it was justifiable to study the perceptions of Registered Testing Pool athletes specifically. This is not only because previous studies have indicated the need for further studies on elite level athletes' perceptions on the anti-doping policies (Overbye et al., 2015), but also because RTP-athletes are the most extensively affected stakeholders, and even athletes, by the anti-doping regulations and obligations (Waddington, 2010; Westmattelmann et al., 2018). Moreover, they can also be expected to have extensive personal experience on anti-doping efforts and the characteristics and practicalities of the whereabouts system. Also, access to a group of high-level athletes such as the ones included in the FINCIS' RTP is a unique chance to examine their perceptions, as they represent the current Finnish professional elite across a number of individual sports.

In this study, to ensure that anonymity and integrity of the respondents is appropriately respected, the respondents were not required to specify their exact sport. It is of high importance to guarantee the anonymity of the participants, especially as they are still active athletes, because they might not be willing to disclose their perceptions on anti-doping activities due to the sensitivity of the subject even if these aspects are guaranteed (Alaranta et al., 2006; Bloodworth & McNamee, 2010). The rationale behind this choice was that although the list of FINCIS' RTP athletes at a given moment is not public information nor something to be disclosed, the employees of FINCIS interpreting the survey results might have been able to

identify athletes based on their register information, gender, and respective sport. Also, the RTP is a dynamic group of athletes that is reviewed and updated throughout the year, so giving out the specific sport would risk the anonymity of some of the athletes when results are comprised, but also could reveal sensitive information about the current RTP of FINCIS for anyone reading this study. Therefore, athletes were asked to place themselves in one of four different sport categories when answering the survey. The sport disciplines within each category were derived from the WADA Technical Document for Sport Specific Analysis (2023d, 19–26), as they are used in the context of doping controls and therefore corresponding with the framework this study is meant to operate in. The categories were created based on the primary performance specific qualities of each sport adapting the scientific research gathered in FINCIS' internal Risk Assessment document created for and utilized in test distribution planning (WADA, 2021a, 28–29). In this study, category A included endurance sports, category B muscular-endurance sports, category C strength and power sports and category D martial arts as follows:

A: Endurance sports: biathlon, cross-country skiing, Nordic combined, rowing, orienteering, triathlon, and athletics: long distance running (over 3000 m)

**B**: Muscular endurance: speed skating, canoe, swimming, alpine skiing, athletics: middle distance running (800-1500 m)

C: Strength and power sports: weightlifting, powerlifting, athletics: throws, jumps, combined events, and sprints (400 m or less)

**D**: Martial arts: judo, boxing, wrestling

At the time of sending the survey, 54 (45%) out of the 120 athletes were female and 66 (55%) male athletes. The distribution of athletes in different sport categories at the time of sending the questionnaire was the following: 47 athletes (39%) in category A, 17 athletes (14%) in category B, 48 athletes (40%) in category C, and 8 athletes (7%) in category D. This distribution is following the outlines of FINCIS statistics of doping controls in 2022 (FINCIS, 2022a), where the sports that have been most tested were also the most prevalent categories when the composition of the RTP is examined. As described earlier in this chapter, this is also following the FINCIS' internal risk assessment of each sport based on scientific research on their characteristics and qualities in terms of potential to enhance performance by doping.

## 4.4 Data Analysis

The quantitative data from the questionnaire provides this study with the descriptive statistics. Examination of the frequencies and cross-tabulation were used in this thesis to study the chosen variables, while for example, the chi-square was not used on this study because of the small sample size. Cross-tabulation is among the most commonly used methods for examining survey results, as it can be used to study categorical variables more closely (Greasley, 2008, 61). Following the suggestion of Overbye et al. (2013) regarding empirically testing theoretical models, such as the Sport Drug Control Model that is used as framework for this thesis, age, gender and type of sport were examined.

The qualitative data in this study was analysed with thematic analysis as described by Braun et al. (2016, 191–203). Thematic analysis as a method is based on identifying themes and concepts across a dataset. The approach provides the researcher flexibility and analytic tools to interpret qualitative data, as it does not require to be tied to a theoretical framework or to specific ways to collect or analyse data. Furthermore, it is a flexible method that dovetails with other methods, such as the descriptive survey data in this study. This methodological approach is especially fitting for studies dealing with rather descriptive work, such as this thesis. Thematic analysis allows the researcher to explore experiences, values and perceptions of people related to certain themes, behaviours or phenomena. (Braun et al., 2016, 191–193) In the analysis process, both theory-based and data-based approaches were utilized to get as comprehensive results as possible by allowing themes to be constructed both by the basis of the data and supported by the theoretical approach (Tuomi & Sarajärvi, 2009, 95–97). In this study, a mixed approach was used to analyse the data to build on the specific context and framework this study operates in. The objective with qualitative approaches is to broaden understanding of a certain theme or phenomenon by examining people who themselves have experiences of it. What is accumulating value to empirical studies is recognizing that the perceptions of the participants have a unique perspective in how they experience or interpret a phenomenon and those views can only be appropriately understood within that given context. (Castleberry & Nolen, 2018)

The thematic analysis was constructed through the open-ended survey questions and the two semi-structured interviews with the objective to identify relevant themes for the research topic following the steps presented by Braun et al. (2016, 196–202). Braun et al. (2016, 196–202) outline that the analysis process and basis is constructed through the theoretical approach and

topic-specific knowledge applied to the actual collected data. The interviews were transcribed so that the data could be examined and continuously revisited for the process of coding and thematization. The first step was to get familiar with the collected data, so the materials were reviewed multiple times. After this, preliminary codes were created based on the research questions and literature view, and the topics that were seen to be relevant for this study in the material were tagged. (Braun et al., 2016, 196-198) Each code was given its own colour to facilitate the thematization of the material.

The main thematic categories were constructed from the chosen research questions, so subthemes were categorized and coded as also presented under the three themes guiding this study, namely athletes' perceptions on the Athlete Whereabouts system, educational efforts, and interest in influencing the anti-doping activities. According to Braun et al. (2016, 198), it is essential to understand that a theme is not only a coherent pattern existing through the data, but also includes some relevant content in relation to the study question. Therefore, the importance of each theme was determined not only based on the frequency of them, but also on their value and depth (Braun et al., 2016, 198). Consequently, also deviations were tagged when they were considered to provide valuable insights or views on the subject. Codes were created under each theme by identifying similarities and patterns from the data. For example, the codes for the theme examining the Athlete Whereabout system were constructed through tags under factors that were seen to either support or undermine the system, while tagging perspectives that provided deeper insights within these categories, such as the influence of the sporting community that the athlete is part of. Following the coding, the codes and tags were organized into themes through continuously revisiting the data and challenging the codes. Furthermore, the themes were connected to the framework of the previous research and theoretical approach and by this triangulation, the overall findings were constructed, presented and discussed. (Braun et al., 2016, 196–202)

#### 4.5 Ethical Considerations

Ethical considerations are essential in all phases of studies following good scientific practice to ensure research integrity by respecting the dignity, integrity and safety of all participants (The Finnish National Board on Research Integrity, 2023). As a researcher, I am obligated to respect the confidentiality of all material and information that I have collected or had access to during

conducting this study. I have also committed to not disclosing any potentially sensitive and confidential information about FINCIS and its activities at any part of this research, and this obligation withstands even after this thesis has been published.

When conducting scientific research, it is vital that researchers ensure that all participation on the study is voluntary in nature. Furthermore, all participants shall be informed about the objectives and their rights in the process. (Jacobsen, 2007, 21–22) The survey data for this study was collected by a questionnaire of FINCIS, and the participants were appropriately informed about the aim of the study in the questionnaire as well as in the email invitation to the survey. The interviewed athletes were also informed about the study objectives and their rights in the process when they were asked to participate in this study, and the athletes gave their consent in their email reply. The rights and research objectives were also presented again at the beginning of both interviews, after which informed consent was obtained.

In all empiric research, it is crucial to respect the integrity of the study participants. One aspect of integrity is that the participants are guaranteed anonymity in all parts of the research process, which means that details that might reveal the participants' identity should be considered when collecting and handling the data and presenting the results (Jacobsen, 2007, 24–25, 28). This is why the exact sport of athletes was not asked in the questionnaire to ensure the anonymity of the respondents as presented in the chapter 4.3. of this study. Furthermore, it was decided that no further demographic information other than gender and sporting category of the interviewed athletes is presented in this thesis to ensure that they cannot be identified by anyone reading this paper.

All data collected for this study was handled and stored confidentially. The tapes and transcriptions of the interviews are appropriately disposed after this research project. The research process is described as accurately as possible and all information, analysis and results of this thesis are presented with respect to transparency and honesty.

#### 5 RESULTS

This chapter presents the results of this study based on the analysis of the quantitative data on the questionnaire and the qualitative data from the questionnaire and athlete interviews. The results are presented thematically to provide a more structured overview of results for all the research questions of this study.

## 5.1 Description of Data

A total of 30 athletes completed the questionnaire. The questionnaire was sent to 120 athletes, and therefore, the response rate for this study was 25 percent. Both genders were represented in the responses, as 17 (56,7%) of the participants were female and 13 (43,3%) were male athletes. This was quite representative of the gender distribution of the RTP composition at the time of this study (45% female and 55 %male athletes), although female athletes were slightly more represented in this study than males.

The largest age group represented in this study is the group with age range 26-30, as 50 percent (n=15) of the respondents reported belonging to that group. The second largest age group was the group of 18-25 years, representing 30 percent (n=9) of the respondents. Twenty percent of the respondents were above the age of 31. Also, 80 percent of the respondents were  $\leq$  30 years old. The distribution of respondents in age groups is presented in Figure 2.

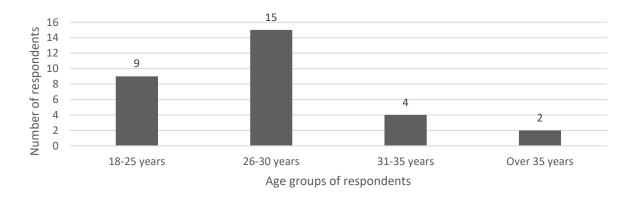


FIGURE 2. The distribution between respondents' age groups.

The respondents represent four different sport categories as described in chapter 4.3. The distribution between sport categories is presented in Figure 3.

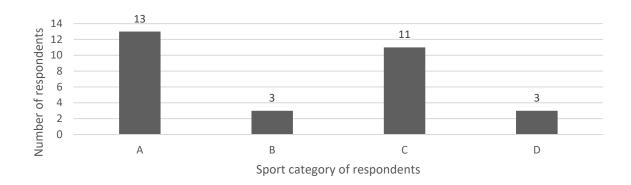


FIGURE 3. Sport categories of respondents where A represents endurance sports, B muscular endurance sports, C strength and power sports, and D martial arts.

Two former athletes were interviewed for this study: a female endurance athlete (category A) and a male muscular-endurance athlete (category B).

## 5.2 Effectiveness of The Athlete Whereabouts System

Athletes' views on the Athlete Whereabouts system were examined with the following two questions in the survey:

Q1: Do you perceive the testing pool system and obligations related to it as a good and effective measure for the effort to promote the position of clean athletes in elite sports?

Q2: Comments or feedback regarding the athlete whereabouts system and its functionality in promoting clean sport?

As a response to the first question (Q1), 29 (97%) of the respondents replied "yes". One (3%) female strength and power sport athlete (category C) did not perceive the Athlete Whereabouts system as a good an effective anti-doping measure. Based on this numeric data, the Athlete Whereabouts system is perceived as an effective measure to promote clean sports.

In line with the quantitative data, athletes described the testing pool system as an important tool for protecting clean sports. Even though it was recognized that reporting whereabouts required

active participation and efforts from the athletes, the support for the system was strongly brought forward by both the responses to Q4 and the two interviews.

"Definitely necessary. It does have a role in protecting clean sports, and an important one...It does bring equality and it is the way it should be, sports should be fair from that perspective too."

"At times it is a lot of work for the athlete, but it is for sure fitting for the purpose to promote clean sports."

The Athlete Whereabouts system was widely considered to work well especially nationally in Finland both in the survey responses and interviews. Despite the general support for the system, its functionality in the international context was met with some controversy. In the survey responses, some mistrust was placed on if the system was equally effectively implemented in some other countries to ensure that all athletes are subject to the same anti-doping regime. While supporting the Athlete Whereabouts system as an anti-doping measure, one athlete also elaborated that even more testing resources could be directed at top-level athletes to ensure that the testing efforts are adequate and effective in the highest level globally. Nevertheless, the interviewed athletes discussed that as all other athletes on the international elite level seemed to be subject to the same system, but they said that their impressions were based on what they saw on competition and training sites as it is not public information who is tested and when. All in all, the criticism placed in the global efforts still did not undermine the overall support for the system and its necessity.

"The system looks the same from what we athletes can see. I have a feeling that everyone is tested and so on so it's not like some country would skip it or would try to soften it."

WADA's administrative system ADAMS was most prevalently mentioned aspect of the Athlete Whereabouts system with a negative association in both the open-ended questionnaire responses and the two interviews. The system was experienced as unreliable and complex to use, which had caused stress and uneasy feelings as the athletes had experienced that they could not count on the system to function the way it should.

"It felt like a lot of work, especially the app. That and the website have always been so bad and worked poorly so it was troubling to think about whether I was able to do it correctly. And if you tried to do it the right way, you were not sure if the information was actually registered and saved."

Developing the ADAMS system was identified both in Q2 responses and interviews as the main way in which the whole whereabouts system could, and moreover should, be improved. The functionality of the digital platform is a substantial part of how the process of reporting whereabouts is experienced in practice, so athletes placed criticism on why the issues with the system had not been resolved despite them being prevalent for a long time, especially as digital platforms are commonly and successfully applied to many contexts in the society. When the system requires active participation from the athletes and the reporting of whereabouts needs to be done digitally in ADAMS, it would be important that the provided tool fulfils its function without reliability issues. Also, the ADAMS system should be improved to be more user friendly as well as investing in the ADAMS mobile app were seen to significantly increase the functionality of the system from the athletes' perspective. One athlete stated that the system relies too much on technology, as the whereabouts can only be updated through internet connection or by a text message, which can cause difficulties in locations with no or bad connection. Also, one of the interviewed athletes stated that simplicity of reporting whereabouts supports its purpose and function in relation to compliance.

"If it was as simple as possible and would function with as little information as possible, the more likely it would be up to date. The more is required, the more there is likely to be mistakes."

Both interviewed athletes also brought up that the culture and attitudes towards doping within the community in their respective sport influenced their perceptions on anti-doping measures. One of the interviewees also stated that inclusion in the RTP marked a milestone in the athletic career, as their athletic performances were recognized also in the anti-doping context. The more the attitudes towards clean sports were based on moral quandary, the more likely anti-doping efforts are met with acceptance. One of the interviewed athletes also discussed that how an individual athlete experiences the system, and its obligations could be dependent on their personality traits and how much responsibility the athlete is used to taking in his athletic career, as there could be differences within sports and training groups how athletes are supported with

various tasks. Both interviewed athletes implied that the Athlete Whereabouts system felt like a normal part of being an elite athlete as the purpose and rationale for it seemed to be justified.

"Doping and anti-doping has been such a natural part of it all so from the start, it was something that you understood was a part of the system. Also, my own attitude has been strict that doping has always been not only generally forbidden but also morally forbidden. It is kind of something that you grew into, like it feels more like an automation."

#### 5.3 Education and Information

This chapter presents the results examining athletes' perceptions on whether they were provided with adequate information about the testing pool and if the personal education session was viewed as useful. The selected survey questions are presented as abbreviations "Q3" and "Q4".

Q3: Do you think that you have received enough information about the FINCIS' testing pool, its purpose and rationale, and obligations related to it?

Q4: Did you find the personal introduction education provided in conjunction with the inclusion to the FINCIS' registered testing pool useful?

Answering Q3, 29 (97%) of the participants reported that they had received enough information about the testing pool system and its purpose as opposed to one athlete (3%), who reported not having received enough information. That one athlete represented category A sports and was therefore an endurance athlete. Both interviewed athletes also experienced that they had received enough information about the testing pool system, highlighting the importance of educational efforts.

"I did experience that I was ready to be tested and report my whereabouts, so I think that I was getting enough information, also about the testing process as a whole and all so at least for me, it was successful overall - - I don't know though how it would've been if I for some reason had missed some educations."

When examining Q4, it needs to be considered that personal introduction educations were started at FINCIS in 2021 after the ISE, so only athletes included in FINCIS' RTP after 2021 had been personally educated. For Q4, 22 of the respondents (73 %) perceived the personal introduction education session as useful. Eight of the respondents (27 %) reported that they had not received the introduction session. Consequently, no-one of those who had participated in the education session reported that they had not found the education session useful, which is indicative that the educations are contributing to adequate information distribution to RTP athletes.

Even though athletes reported that they had received enough information about the testing pool, its purpose and rationale, together with obligations related to it, it is interesting to examine the results in light of the replies to whether athletes perceived the personal education session provided by FINCIS as useful. All athletes that had received the education since 2021 reported that they found it helpful. It remains unclear whether that education contributed to athletes getting enough information about the system, that is, if the replies would have been different if the personal educations were not provided as not much analysis could be done with these data due to the wide consensus. However, even if perceived knowledge deficits were not reported in this study, the results indicate that the athletes received useful information from the education sessions, maybe covering topics that they did not realize to be useful as testing pool athletes. This is supported by the fact that when the data for these questions was cross-tabulated, the one athlete who experienced not receiving enough information also one of the athletes who had not attended the education session, indicating that knowledge deficits could emerge without proper education efforts.

In both interviews in the open-ended responses to Q4, the role of education sessions was perceived as important so that adequate information reaches the right athletes, which was brought forward also in the open-ended responses to Q4. Education sessions for teams or training groups were considered a valuable especially for young athletes and considering elite athletes or young athletes as a target group, athletes both in interviews and open-ended survey responses stated that interactive sessions were more effective in information sharing than online courses or other digital platforms.

"In education sessions, you have the people there and they have a chance to ask. when someone asks something and maybe someone else then is brave enough to ask more so these sessions have been a lot better."

The education sessions can provide practical information and help the athletes get a broader understanding of the purpose and rationale of anti-doping measures, so they could also remove misunderstandings related to anti-doping efforts. If athletes feel that they can ask questions and get answers to them, it could make the authority's actions to be perceived as more justified. Also, actual education sessions where athletes get to discuss the anti-doping themes with the representatives of the authority could potentially decrease the gap between the anti-doping authority and the athletes and contribute to higher levels of trust and perceptions of transparency. For example, one athlete referred to the ABP program that is tightly related to and supported by the Athlete Whereabouts system, saying that a better understanding of its function may have erased some confusion and questions around the system and anti-doping work in general.

"If I had dared to ask or something, it might have erased some of the thinking of like what does this and that mean. – Like what would they think be thinking if someone went around asking questions like that. It would sound more like I was preparing, like that one wants to dope as they want to know."

## 5.4 Influencing Anti-Doping Activities

Athletes' willingness to influence the activities of FINCIS were asked in the questionnaire with the following questions presented as abbreviations "Q5" and "Q6".

Q5: Would you be interested in or willing to influence FINCIS' activities?

Q6: How or in what matters would you like to influence the activities of FINCIS?

Of the respondents in Q5, 57 percent (n=17) stated that they were not interested in influencing FINCIS' activities. On the other hand, 43 percent (n=13) answered that they would be or would maybe be interested in influencing FINCIS' activities, so the results indicate that there is

interest among athletes to have an influence on the anti-doping work. To examine this further, the answers to Q5 were cross tabulated with age, gender, and sport of the respondents.

The cross tabulation of the data by gender indicates that female athletes seem to be more interested in possibilities to influence anti-doping activities compared to male athletes (Table 1). Female athletes were also more represented in the study responses with 56 percent (n=17), and even more so when compared to the gender distribution of the FINCIS' RTP, which can be seen to support this finding if participating in the study is perceived as an indication of wanting to have an influence.

TABLE 1. Athletes' interest in influencing the activities of FINCIS based on gender.

	Male				
Answer	n	%	n	%	Total %
Yes	1	8	3	18	13
Maybe	3	23	6	35	30
No	9	69	8	47	57
Total	13	100	17	100	100

The cross tabulation by age group indicates that younger athletes seem to be more interested in possibles to influence anti-doping activities compared to athletes above the age of 31 (Table 2). However, it needs to be stated that 80 percent of respondents also belonged to the age groups 18-25 years and 26-30 years, reflecting the age of athletes in the FINCIS' RTP, which might explain this finding. Also, as 22 of the of the respondents (73%) had received the education session (see chapter 5.3), it can be concluded that 73 percent of the athletes of this questionnaire were included in the RTP after the year 2021, which supports the interpretation that young athletes are more inclined to be interested in influencing FINCIS' activities.

TABLE 2. Athletes' interest in influencing the activities of FINCIS based on age group, where y = years.

	18–25 y		26-	26–30 y		31–35 y		over 35 y	
Answer	n	%	n	%	n	%	n	%	
Yes	1	11	3	20	0	0	0	0	
Maybe	4	44	5	33	0	0	0	0	
No	4	44	7	47	4	100	2	100	
Total	9	100	15	100	4	100	2	100	

When the answers were cross tabulated by athlete's sport, the results indicate that athletes competing in endurance and strength and power sports are more likely to be willing or maybe willing to influence anti-doping activities (Table 3). This is in line with the distribution between sports in FINCIS' RTP, which indicates that athletes representing sports with potentially higher risk of doping use, would be more willing to influence the activities of an anti-doping organization.

TABLE 3. Athletes' interest in influencing the activities of FINCIS based on sport group, where A=endurance sports, B=muscular-endurance sports, C= strength and power sports, and D=martial arts.

	A			В	С		D	
Answer	n	%	n	%	n	%	n	%
Yes	2	15	1	33	1	9	0	0
Maybe	2	15	1	33	3	27	3	0
No	9	70	1	33	7	64	0	100
Total	13	100	3	100	11	100	3	100

Based on the fact that 43 percent of the athletes stated that they would or maybe would be interested in to influencing the activities of FINCIS, there seems to be willingness among athletes to have a say in how anti-doping activities are carried out. Drawing from the qualitative data collected through responses to Q6 and the interviews, athletes seem to be interested in influencing the practicalities of the anti-doping system, rather than the anti-doping regime or system as a whole. Overall, the anti-doping regime and doping control strategies were considered as relatively fixed structures that were out of reach from athletes' influence.

"When it comes to influencing the system itself, there is of course not or I never really thought that there was much that an athlete can have an influence on."

When the two interviewees were asked about if they would've been interested in influencing FINCIS' activities, both stated that it was not something that actively would have crossed their minds during their active career. An interesting perspective is that the surveyed athletes were still active in their athletic career and 43 percent of them reported that they might be or would be interested in influencing the activities of FINCIS. This combined with the quantitative data indicating that younger athletes, and moreover newer additions to the RTP, would be or might

be willing to influence, which could also indicate that the new generation of athletes would be more interested in taking a more active role in anti-doping contexts. However, also both athletes stated that they now after ending their athletic careers could possibly contribute to developing the activities of FINCIS.

"At the time [during active career], I couldn't think of anything like how it could be developed. I guess there could have been something, but I never really had thoughts about how the whole system could be improved... Now [after active career], if my thoughts would help in developing things, I could probably be of assistance to some extent if you would want to have my opinion."

Both the interviews and the questionnaire responses indicate that athletes did not have too many clear ideas on how they could or would like to participate in developing anti-doping activities, as not as many ideas were presented compared to how many implied that they would be or might be interested in influencing the activities of FINCIS. However, it seems that athletes voiced more interest in influencing the more practical aspects related to anti-doping activities, as improving the functionality of ADAMS and developing the testing pool system to be more user-friendly and curating the education efforts were mentioned in the survey responses. Athletes acting as role models or athlete ambassadors to promote clean sports in both national and international context were also suggested as ways engage athletes in FINCIS' activities. Also, one athlete suggested that FINCIS could have an athlete representative or another way through which athletes could participate in FINCIS activities by giving feedback and ideas with a low threshold. One of the athletes stated that they had suggested a practical improvement for one of FINCIS' digital services, and once noticing that the development was done, it felt like they could have an influence on the system and its functionality.

An interesting aspect related to both influencing and promoting the anti-doping activities that arose from the interviews was how athletes experienced that the aim and objectives of anti-doping work in promoting clean sports could be facilitated and influenced indirectly through the sports and sporting culture. As presented in the chapter 5.2. in this study, the sporting culture is seen to have an effect on how anti-doping work is perceived, which indicates that a lot of work to promote anti-doping efforts can be done on the grass-root level of sports. One of the athletes talked about how the sports, and their seasons and competition calendars should be

constructed on the terms of the sport itself so that it is overall possible for the athletes to compete clean.

"When it comes to ways how anti-doping could be promoted, for example the competition calendar should be constructed realistically. The better the sport itself sets the framework so that it is possible for the athletes to carry out the season by performing clean, the higher the chance that the sport is actually clean."

#### 6 DISCUSSION

In this section, the results are discussed in relation to the theoretical approach and previous research. Also, the methodological discussion with limitations of this study is presented.

# 6.1 Discussion of the Findings

The results of this study indicate that the Athlete Whereabouts system is widely accepted and even receives strong support as an anti-doping strategy from the FINCIS' RTP athletes. In light of previous research reporting ambivalent perceptions on effectiveness of the Athlete Whereabouts system (Hanstad & Loland, 2009; Overbye & Wagner, 2014; Waddington, 2010), the findings of this study are rather surprising. Also, if the Athlete Whereabouts system is examined through the Foucauldian perspective as an institutionalization process (Hanstad et al., 2010; Henning, 2014; Overbye & Wagner, 2014), this study suggests that elite athletes are not voicing criticism on why the system is in place as the whereabouts system is seemingly met with approval by the athletes who are obligated by it. From the perspective of legitimacy (Donovan et al., 2002; Efverström, Bäckström, et al., 2016; Tyler, 2006), the athlete whereabouts system as an anti-doping activity seems to gain justification in regard to its effectiveness and necessity from the FINCIS' RTP athletes. Furthermore, the system was even viewed as an important tool in the fight against doping both nationally and globally.

Building on the concept of procedural legitimacy, despite the support for the whereabouts system, what seems to undermine the system in terms of the process of practically reporting whereabouts is WADA's administrative system ADAMS. For the experience of legitimacy, the implemented measures and procedures are to be seen as just and appropriate (Woolway et al., 2020). As ADAMS was perceived as a rather unreliable and outdated tool for reporting whereabouts by both the surveyed and interviewed athletes, it can be argued that it poses a threat to perceived legitimacy of the means provided by WADA. As ADAMS is a substantial part of reporting whereabouts for the RTP athletes and studies have reported similar findings related to the platform (Gebert et al., 2017; Scharf et al. 2018; Westmattelmann et al., 2018), this study also indicates that for the athletes to perceive the system as justified, it is important that WADA invests in developing both the web-based and mobile application of ADAMS to be as user-friendly and functional as possible.

Views of the legitimacy of an anti-doping authority and its measures can affect the perceived legitimacy of the system as a whole and vice versa (Donovan et al., 2002; Overbye & Wagner, 2014). As issues with ADAMS gained attention in this study even though the system is owned and administered by WADA and not FINCIS, it indicates that this aspect could potentially undermine not only the perceived legitimacy of the system and but potentially even FINCIS. Athletes have reported more trust in independency, transparency and effectiveness of the testing efforts of NADOs than WADA (Global Athlete, 2020), which indicates that athletes on some level distinguish NADOs and WADA as different anti-doping actors. However, ADAMS seems to cut through the system as a de-legitimizing factor despite it not being a system of FINCIS, which highlights the importance of understanding that the system indeed is applied worldwide and global actions also might affect the legitimization of NADOs, such as FINCIS.

One aspect that was identified in both athlete interviews outside the initial interview structure was the impact of the culture towards clean sports within the respective sport that the athlete is a part of to how anti-doping efforts are met. This is supported by the study of Ntoumanis et al. (2014) who found that people around athletes influence athletes' attitudes towards doping and furthermore by Morente-Sánchez and Zabala (2013) who found that especially coaches have a significant role in how athletes' attitudes are composed. Donovan et al. (2002) also suggested that athletes' view on the legitimacy of the authority and their actions and strategies is influenced by the functionality of the implemented measure and their own and others' experiences of it. In light of these findings, it can be argued that that this study suggests that it should be recognized that general attitudes towards doping influence athletes' view on anti-doping efforts.

In the Sport Drug Control Model, Donovan et al. (2002, see Figure 1) have illustrated that perceived legitimacy affects athletes' attitudes towards doping, and therefore compliance. As this study indicates that the culture within their respective sport and people around them affects athletes' attitudes towards doping and anti-doping efforts, it could be argued that the relation between these two components also works in both directions. Also, the findings of this study seem to validate other components of the SDCM, as athletes also reported that for example personal morality and reference group opinion influenced their views on anti-doping measures, so all these components seem to be intertwined through athletes' attitudes.

Drawing from the legitimacy perspective, unequal access to education and information have been identified as threats to the perceived legitimacy of anti-doping efforts (Efverström, Bäckström, et al., 2016). As almost all the athletes reported receiving enough information about the characteristics, purpose and obligations of the Registered Testing Pool and moreover evaluated the personal introduction educations as useful, the educational actions of FINCIS can be seen to gain legitimacy from the RTP athletes. However, these two findings would seem to correlate, but the possible causality remains unclear. Athletes brought forward that it is important that anti-doping educations are organized especially for young athletes, which is supported by previous research where a similar approach has been seen as especially effective in deterring doping behaviors (European Commission Directorate General for Education and Culture, 2014, 53; Lucidi et al., 2017). This study suggests that while educations for young athletes are essential in promoting a sporting culture where clean sports is a value-based norm, educations for elite athletes could focus on providing specific information related to practicalities of the Athlete Whereabouts system. This study suggests that both of these educational approaches should be conducted as education sessions where athletes have a possibility to ask questions about the anti-doping system as well as about practicalities related to it. This kind of approach would contribute in not only increasing perceived trust and transparency of the ADO as an authority but also preventing potential knowledge deficits, which have been seen to undermine the legitimacy of an ADO by raising questions if athletes are treated fairly and respectfully (Efverström, Bäckström, et al., 2016).

Also, athletes' value base has been shown to be one of the key determinants of Finnish athletes' attitudes towards clean sports (Koskela, 2023). This study indicates that the more the support for anti-doping efforts is based on strong moral and value-based foundation where clean sports is seen as a norm, the more likely anti-doping efforts are to be met with higher sense of legitimacy. Consequently, as this view is also suggested by Ntoumanis et al. (2014), education and communication efforts should be therefore aimed at both athletes and their support persons to build a strong value base that supports doping-free sports as a norm. This approach could also build on ethical decision-making, as it has been reported to be more effective deterrence for doping than more traditional knowledge-based education programs (Elbe & Brand, 2016). Furthermore, as athletes representing endurance and strength and power sports reported most interest in influencing anti-doping activities in this study, it could be hypothesized that it could also be reflecting moral quandary of the athletes, as those sport categories are most represented in FINCIS' RTP, which reflects the fact that those sports are also evaluated as high-risk sports

for doping use based on scientific research in the Risk Assessment document (see WADA, 2021a, 28–29). This could imply that athletes with a strong moral rationale for not using doping could be more likely to be interested in engaging protecting clean sports and athletes by influencing anti-doping activities when their own sport has been considered a high-risk sport for doping use.

While the majority of athletes in this study reported that they were not interested in influencing FINCIS' activities, 43 percent of the survey respondents still voiced that they would or might be interested. Finnish athletes have also generally reported high trust and satisfaction in FINCIS' doping control activities (FINCIS, 2022b), which could explain that athletes do not feel a strong need to develop their activities. The fact that FINCIS will be increasing athlete representativeness in its Board of Directors by including a second athlete member from 2024 onwards (FINCIS, 2023e) is a step towards higher athlete engagement in light of the results of this study and previous research supporting greater athlete engagement in ADOs (Global Athlete, 2020; Kambhampati & Star, 2021; Valkenburg et al., 2014; Woolway et al., 2020). Furthermore, Athletes of Finland representing athletes across sports was established earlier in 2023 to promote the interests of active Finnish athletes and athletes in Finland (Suomen Urheilijat, 2023). The association has also established an ethical panel to address ethical matters (Yliniemi, 17.3.2023). Co-operation with athlete associations like these could also be of high value when it comes to increasing athlete engagement in FINCIS' activities.

Moreover, this development is also following good governance principles integrating key stakeholders more in all processes (Council of Europe, 2019, 8). While athletes voice will hopefully be better heard when athlete representativeness is increased in FINCIS, could look into ways of offering the athletes low-threshold ways or possibilities to participate in developing the practical activities affecting the athletes directly. As the questionnaire that was analyzed in this study is meant to be used yearly to examine RTP athletes' perceptions on anti-doping work, it could be argued that it is one way for the athletes to participate in developing the activities by giving feedback and ideas. FINCIS also conducts a feedback survey for tested athletes each year (FINCIS 2022b). In addition to questionnaires, FINCIS could develop other activities to support athlete engagement, like increasing athlete representativeness or by cooperating with athletes willing to act as ambassadors for clean sports as suggested in this study. Furthermore, this study indicates that younger athletes seem to be more interested in influencing the anti-doping activities, and also 80 percent of the participants in this study were

under 31 years old. This also reflects the fact that RTP athletes are typically relatively young as elite athletes generally reach the top of their sport at a young age, and athletes are often included in the RTP system at a time when their athletic career is becoming more professionalized (Mazanov et al., 2011; Petróczi et al., 2017). Therefore, athletes could be incorporated in developing educational and communicational strategies that would effectively reach the young target audience. This way, athletes would more strongly be recognized as key stakeholders and their voice could be heard at development processes and decision-making tables (Scharf et al., 2018).

# 6.2 Limitations and Methodological Discussion

Reliability and validity are concepts that need to be considered and evaluated in scientific research. Validity of the study refers to if the chosen research design actually is measuring what it is supposed to, and to what extent the results are generalizable (Vehkalahti, 2014, 41). Reliability refers to the consistency of the given research. In other words, it means the ability of how well the study can be re-created with the same measurements and get similar results. On the other hand, the validity of the study refers to the extent that the questions asked match the given concept and give a realistic viewpoint on the research subject. (Skinner et al., 2015, 255).

In terms of validity, the low response rate to the survey must be addressed as it is seen to decrease the validity of the study (Hirsjärvi et al., 2009, 195; Vehkalahti, 2014, 41, 44). The results are difficult to generalize as the number of participants was low and representative of one fourth of the athletes included in the FINCIS' RTP at the time of conducting this study. However, this was a risk that was taken in this research as the sample size were known to be small to begin with as the total number of athletes was 120, but it was considered important and justifiable to study the views of RTP athletes specifically as they are not only assumed to be most familiar but also most extensively affected by the obligations and requirements of the antidoping system (Waddington, 2010; Westmattelmann et al., 2018). Also, as research has suggested that athletes might be unwilling to voice their actual opinions and thoughts on doping related matters due to the sensitivity of the topic (Bloodworth & McNamee, 2010), a questionnaire was chosen to prioritize the aspect that the athletes are given the possibility to take part in the study completely anonymously, as they are still active in their athletic career. Furthermore, the athletes being subject to the particular surveillance system that was studied,

and even by the authority responsible for the surveillance, might alter their responses despite guaranteed anonymity. However, the two athletes that were interviewed were not subject to the anti-doping surveillance as athletes anymore and still reported similar perceptions, so it could be argued that it brought balance to the perspective of this study.

Consequently, due to the small number of responses, it needs to be addressed that drawing deeper information from the data and utilizing quantitative methods was a challenge for this study. Furthermore, in the light of previous research on the Athlete Whereabouts system reporting ambivalent views of athletes (Overbye & Wagner, 2014; Waddington, 2010), it was surprising that all but one reported perceiving the system as a good and effective tool in fight against doping. Therefore, not much statistical analysis could practically be drawn from the results reporting such consensus, which means that the results are examined as descriptive statistics in this study.

Also, in terms of external validity, it needs to be taken into account that this was a cross-sectional study that exclusively examined the perceptions of Finnish athletes representing individual sports. Therefore, the findings cannot be generalized outside of Finland, as the activities and perceived legitimacy of an authority have been recognized to be dependent on the respective authority (Donovan et al., 2002; Efverström, Bäckström, et al., 2016) and as inconsistencies between implementation of the Code have been reported (Dikic et al., 2011; European Union, 2010; Kambhampati & Star, 2021). To increase the validity of the study, the results are discussed in light of the theoretical framework and reflecting previous research on the subject (Jacobsen, 2007, 166–167). Generalization of the results is still often a challenge with studies employing qualitative methods, as these studies often aim to describe experiences and perceptions of a certain group of people at a given time (Jacobsen, 2007, 166–167; Kumar, 2011).

Considering the analysis of the data collected through interviews, it needs to be considered that the interview is affected by the researcher and the situation that the interviewer is able to create (Jacobsen, 2007, 170). Also, when working with qualitative data, the results can hardly be seen as completely objective as they are constructed through the interpretations of the interviewer (Tuomi & Sarajärvi, 2009, 136).

Evaluation and Learning Outcomes of the Research Process. From the researcher's perspective, conducting this thesis provided a valuable learning experience that has led to greater understanding of the research as a process. One of the key learning outcomes of conducting this study was the importance of acknowledging and addressing potential data limitations early in the research process. Although the research was designed with a clear idea of the objectives and rationale for the selection of the participants, the limitations of available data still posed challenges for this study and consequently forced to re-evaluate and adapt the research approach and expectations for this study. Therefore, if this research was conducted again, additional or parallel ways to collect data could be explored, such as possibly conducting more interviews or possibly providing a possibility for athletes who had been part of the Athlete Whereabouts system earlier to answer the questionnaire. Nevertheless, these possibilities were not explored for this study as the objective was to gain a cross-sectional understanding of the perceptions of athletes that had been a part of the Athlete Whereabouts system after the current World Anti-Doping Code was introduced in 2021. Also, given the scope of this thesis and the fact that FINCIS' register and questionnaire was used to collect the data as part of the activities of FINCIS, it was important to acknowledge that the core activities and functions of FINCIS and the RTP still laid the framework for conducting this study. Furthermore, it became imminent that a thorough research process takes time, so a longer timeframe for conducting this study could have benefited the researcher by providing opportunities to address any arising issues, which should be taken into consideration when planning and conducting research in the future.

However, the relatively small sample size also provided an opportunity to engage even more deeply with the previous research on the subject to contribute to deriving valuable and meaningful insights from the data. Moreover, this research process increased understanding on that the value of a study is not only determined by the size of the dataset but is gained through interpretation and contextualization of the available data. From the researcher's perspective, when evaluating the various components of this study, the strength of this thesis lies in the examination and exploration of the previous research and background as well as discussion of the results in relation to the literature review. Therefore, based on the researcher's experiences of conducting this research, investing in gaining a broad understanding of the chosen research topic should lay the foundation for all research efforts in the future. Also, careful planning of the methodology, as well as considering possible challenges, should be integrated, and reflected early in the research process. Furthermore, it became clear that flexibility and readiness to adapt throughout the research process are highly valuable qualities for a researcher.

#### 7 CONCLUSIONS AND IDEAS FOR FUTURE RESEARCH

This study indicates that the Athlete Whereabouts system is widely accepted and even supported as an anti-doping strategy by the Registered Testing Pool athletes of FINCIS. The system seems to gain justification regarding its effectiveness and necessity, as it was even viewed as an important tool in the fight against doping. FINCIS seems to gain legitimacy from the athletes also through their educational and informational efforts, as athletes reported that they have been provided with appropriate information and education on anti-doping matters and obligations related to the Athlete Whereabouts system. This can have an influence on how athletes perceive the legitimacy of FINCIS as an authority and the implemented anti-doping strategies.

Anti-doping educations are perceived as important by athletes and interactive sessions, where athletes have a chance to ask questions and discuss anti-doping related matters were considered effective in ensuring that appropriate information reaches the intended target groups. Educations targeted at young athletes should focus on building a sporting culture where striving for clean sports would be based on morals and value-based decision-making. Thereafter, education efforts for elite athletes should focus on more specific information related to their obligations and practicalities of the system to avoid knowledge deficits that could undermine the perceived legitimacy of the anti-doping authority or the system as a whole.

Interest in influencing FINCIS' activities seems to divide the RTP athletes in this study. The majority of the athletes did not express interest in influencing the system, while 43 percent still reported that they would or might be willing to influence the activities. Therefore, FINCIS could investigate possibilities to provide the athletes easily accessible ways to voice their opinions and ideas so that athletes voice can be taken into consideration when developing anti-doping activities.

For future research, it would be interesting to examine athletes' perceptions of the whereabouts system as an anti-doping measure in other countries. Furthermore, it would be highly interesting to examine if athletes' perceptions of the whereabouts system differ when they first are included in an RTP and when they have been included in the system. Also, exploring and comparing thoughts and attitudes towards the whereabouts system of athletes with and without personal experience on it would be interesting in terms of perceived legitimacy.

Furthermore, it would be highly interesting to examine the relationship between athletes' trust on the anti-doping regime and their attitudes towards clean sports, and perceived legitimacy of the system. As Finnish athletes have reported strong trust in the Finnish doping control system (FINCIS, 2022b; Havumäki, 2022), it would be interesting to examine if these two views support each other.

Drawing from the legitimacy perspective, unequal access to education and information have been identified as threats to the perceived legitimacy of anti-doping efforts (Efverström, Bäckström, et al., 2016). As almost all the athletes reported receiving enough information about the characteristics, purpose and obligations of the Registered Testing Pool and moreover evaluated the personal introduction educations as useful, the educational actions of FINCIS can be seen to gain legitimacy from the RTP athletes. However, these two findings would seem to correlate, but the possible causality remains unclear, which would be interesting to study further.

#### REFERENCES

- Act on the Promotion of Sports and Physical Activity 390/2015. (2015). Retrieved from https://www.finlex.fi/fi/laki/alkup/2015.
- Alaranta, A., Alaranta, H., Holmila, J., Palmu, P., Pietilä, K., & Helenius, I. (2006). Self-reported attitudes of elite athletes towards doping: Differences between type of sport. *International Journal of Sports Medicine*, 27(10), 842–846. https://doi.org/10.1055/s-2005-872969.
- Blank, C., Kopp, M., Niedermeier, M., Schnitzer, M., & Schobersberger, W. (2016). Predictors of doping intentions, susceptibility, and behaviour of elite athletes: A meta-analytic review. *SpringerPlus*, 5(1), 1333. https://doi.org/10.1186/s40064-016-3000-0.
- Bloodworth, A., & McNamee, M. (2010). Clean Olympians? Doping and anti-doping: the views of talented young British athletes. *The International Journal on Drug Policy*, 21(4), 276–282. https://doi.org/10.1016/j.drugpo.2009.11.009.
- Bowers, L. D. (2012). Anti-Dope Testing in Sport: The History and the Science. *The FASEB Journal*, 26(10), 3933–3936. https://doi.org/10.1096/fj.12-1001ufm.
- Braun, V., Clarke, V., & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith, & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise*. London: Taylor & Francis (Routledge), 191-205. https://doi.org/10.4324/9781315762012.ch15.
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10(6), 807–815. https://doi.org/10.1016/j.cptl.2018.03.019.
- Connor, J., McDermott, V., Henne, K., Foenander, J., & Borg, J. (2022). The Legitimacy of the Fight Against Doping in Sport: Stakeholder Perceptions. Retrieved from https://www.wada-ama.org/sites/default/files/2023-06/connor\_2013.pdf.
- Council of Europe. (1989). Anti-Doping Convention. Retrieved from https://rm.coe.int/168007b0e0.
- Council of Europe. (2019). Promotion of good governance in sport: Recommendation CM/Rec(2018)12 adopted by the Committee of Ministers of the Council of Europe on 12 December 2018 and explanatory memorandum. Retrieved from https://rm.coe.int/recommendation-of-the-committee-of-ministers-to-member-states-on-the-p/168093fb61.

- Council of Europe. (2023). Chart of signatures and ratifications of Treaty 135. Retrieved from https://www.coe.int/en/web/conventions/full-list?module=signatures-by-treaty&treatynum=135.
- de Hon, O., Kuipers, H., & van Bottenburg, M. (2015). Prevalence of doping use in elite sports:

  A review of numbers and methods. *Sports Medicine (Auckland, N.Z.)*, 45(1), 57–69. https://doi.org/10.1007/s40279-014-0247-x.
- Dikic, N., Samardzic Markovic, S., & Mc Namee, M. (2011). On the Efficacy of WADAs Whereabouts Policy: Between Filing Failures and Missed Tests. *German Journal orf Sports Medicine*, 62(10), 324-328. Retrieved from https://www.germanjournalsportsmedicine.com/archive/archive-2011/heft-10/on-the-efficacy-of-wadas-whereabouts-policy-between-filing-failures-and-missed-tests/.
- Donovan, R. J., Egger, G., Kapernick, V., & Mendoza, J. (2002). A Conceptual Framework for Achieving Performance Enhancing Drug Compliance in Sport. *Sports Medicine*, *32*(4), 269–284. https://doi.org/10.2165/00007256-200232040-00005.
- Dunn, M., Thomas, J. O., Swift, W., Burns, L., & Mattick, R. P. (2010). Drug testing in sport: The attitudes and experiences of elite athletes. *International Journal of Drug Policy*, 21(4), 330–332. https://doi.org/10.1016/j.drugpo.2009.12.005.
- Efverström, A., Ahmadi, N., Hoff, D., & Bäckström, Å. (2016). Anti-doping and legitimacy: An international survey of elite athletes' perceptions. *International Journal of Sport Policy and Politics*, 8(3), 491–514. https://doi.org/10.1080/19406940.2016.1170716.
- Efverström, A., Bäckström, Å., Ahmadi, N., & Hoff, D. (2016). Contexts and conditions for a level playing field: Elite athletes' perspectives on anti-doping in practice. *Performance Enhancement & Health*, *5*(2), 77–85. https://doi.org/10.1016/j.peh.2016.08.001.
- Elbe, A.-M., & Brand, R. (2016). The Effect of an Ethical Decision-Making Training on Young Athletes' Attitudes Toward Doping. *Ethics & Behavior*, 26(1), 32–44. https://doi.org/10.1080/10508422.2014.976864.
- Elbe, A.-M., & Overbye, M. (2014). Urine doping controls: The athletes' perspective. *International Journal of Sport Policy and Politics*, 6(2), 227–240. https://doi.org/10.1080/19406940.2013.801361.
- Engelberg, T., Moston, S., & Skinner, J. (2015). The final frontier of anti-doping: A study of athletes who have committed doping violations. *Sport Management Review*, *18*(2), 268–279. https://doi.org/10.1016/j.smr.2014.06.005.

- Englar-Carlson, M., Gleaves, J., Macedo, E., & Lee, H. (2016). What about the clean athletes? The need for positive psychology in anti-doping research. *Performance Enhancement & Health*, *4*(3), 116–122. https://doi.org/10.1016/j.peh.2016.05.002.
- European Commission Directorate General for Education and Culture. (2014). Study on doping prevention: A map of legal, regulatory and prevention practice provisions in EU 28. Publications Office. https://data.europa.eu/doi/10.2766/86776.
- European Union. (2010). The implementation of the WADA Code in the European Union.

  Retrieved from

  https://www.asser.nl/upload/documents/9202010\_100013rapport%20Asserstudie%20(
  Engels).pdf.
- FINCIS. (2021). Suomen Antidopingsäännöstö. Retrieved from https://suek.fi/wp-content/uploads/2020/12/Suomen-antidopingsa%CC%88a%CC%88nno%CC%88sto%CC%88.pdf.
- FINCIS. (2022a). Dopingtestitilasto 2022. Retrieved from https://suek.fi/wp-content/uploads/2023/03/Dopingtestitilasto-2022.pdf.
- FINCIS. (2022b, June 27). FINCIS' testing activities enjoy the trust of athletes. https://suek.fi/en/fincis-testing-activities-enjoy-the-trust-of-athletes/.
- FINCIS. (2023a). Board of Directors. Retrieved from https://suek.fi/en/fincis/fincis/board-of-directors/.
- FINCIS. (2023b). FINCIS. Retrieved from https://suek.fi/en/fincis/fincis/.
- FINCIS. (2023c). FINCIS Activities. Retrieved from https://suek.fi/en/fincis/activities/.
- FINCIS. (2023d). FINCIS History. Retrieved from https://suek.fi/en/fincis/background/history/.
- FINCIS. (2023e, June 19). SUEKin hallitustiedote 4 / 2023. Retrieved from https://suek.fi/suekin-hallitustiedote-4-2023/.
- Foucault, M. (1995). Discipline and Punish: The birth of the prison (2nd Vintage Books ed). Ebook. Vintage Books.
- Franke, W. W., & Berendonk, B. (1997). Hormonal doping and androgenization of athletes: A secret program of the German Democratic Republic government. *Clinical Chemistry*, 43(7), 1262–1279. https://doi.org/10.1093/clinchem/43.7.1262.
- Gebert, A., Lamprecht, M., & Stamm, H. (2017). Survey of Swiss Athletes 2017. Retrieved from https://www.sportintegrity.ch/sites/default/files/athlete survey 2017 summary.pdf.

- Gleaves, J., & Christiansen, A. V. (2019). Athletes' perspectives on WADA and the code: A review and analysis. *International Journal of Sport Policy and Politics*, 11(2), 341–353. https://doi.org/10.1080/19406940.2019.1577901.
- Global Athlete. (2020). 2020 survey results: Athlete feedback anti-doping programs. Retrieved from https://static1.squarespace.com/static/62977c0c6d5ae019f8967785/t/62d5406731a499 39d63d61ba/1658142825208/Global%2BAthlete%2BSurvey%2BResults%2BAnti-Doping.pdf.
- Greasley, P. (2008). Quantitative data analysis using SPSS: An introduction for health and social science. Open University Press.
- Gucciardi, D. F., Jalleh, G., & Donovan, R. J. (2010). Does social desirability influence the relationship between doping attitudes and doping susceptibility in athletes?

  \*Psychology of Sport and Exercise, 11(6), 479–486.\*

  https://doi.org/10.1016/j.psychsport.2010.06.002.
- Hanstad, D. V., & Loland, S. (2009). Elite athletes' duty to provide information on their whereabouts: Justifiable anti-doping work or an indefensible surveillance regime? *European Journal of Sport Science*, 9(1), 3–10. https://doi.org/10.1080/17461390802594219.
- Hanstad, D. V., Skille, E. Å., & Loland, S. (2010). Harmonization of anti-doping work: Myth or reality? *Sport in Society*, *13*(3), 418–430. https://doi.org/10.1080/17430431003588036.
- Havumäki, R. (2022). Reaching the top without doping Athletes' attitudes towards clean sports in Finland. Malmö University, Faculty for Education and Society, Sport Sciences. Master's Thesis.
- Henning, A. D. (2014). (Self-)Surveillance, Anti-Doping, and Health in Non-Elite Road Running. *Surveillance & Society*, 11(4), 494–507.
- Hirsjärvi, S., Remes, P., & Sajavaara, P. (2009). Tutki ja kirjoita (15th ed.). Tammi.
- Houlihan, B., Vidar Hanstad, D., Loland, S., & Waddington, I. (2019). The World Anti-Doping Agency at 20: Progress and challenges. *International Journal of Sport Policy and Politics*, 11(2), 193–201. https://doi.org/10.1080/19406940.2019.1617765.
- Huybers, T., & Mazanov, J. (2012). What Would Kim Do: A Choice Study of Projected Athlete Doping Considerations. *Journal of Sport Management*, 26, 322–334. https://doi.org/10.1123/jsm.26.4.322.
- Itkonen, H. (2021). Liikkumisen sosiologia. Vastapaino.

- Jacobsen, D. I. (2007). Förståelse, beskrivning och förklaring: Introduktion till samhällsvetenskaplig metod för hälsovård och socialt arbete (2nd ed.). Studentlitteratur.
- Jalleh, G., Donovan, R. J., & Jobling, I. (2014). Predicting attitude towards performance enhancing substance use: A comprehensive test of the Sport Drug Control Model with elite Australian athletes. *Journal of Science and Medicine in Sport*, 17(6), 574–579. https://doi.org/10.1016/j.jsams.2013.10.249.
- Kambhampati, A., & Star, S. (2021). Playing true? A critique of the 2021 WADA Code. *The International Sports Law Journal*, 21. https://doi.org/10.1007/s40318-021-00193-z.
- Kanerva, S. (2013). Dopingvalvonnan olinpaikkatietomääräykset ja yksityiselämän suoja. University of Helsinki, Faculty of Law. Retrieved from http://urn.fi/URN:NBN:fi:hulib-201508062806.
- Kiani, M. S., & Moghaddam, K. (2021). The relationship between age and athletes' view of the phenomenon of doping. *International Journal of Sport, Exercise and Health Research*, 3, 45–48. https://doi.org/10.31254/sportmed.3204.
- Kirby, K., Moran, A., & Guerin, S. (2011). A qualitative analysis of the experiences of elite athletes who have admitted to doping for performance enhancement. *International Journal of Sport Policy and Politics*, 3(2), 205–224. https://doi.org/10.1080/19406940.2011.577081.
- Koponen, M. (2021). Dopingista antidopingiin: Selvitys Maailman Antidopingsäännöstön muutosten vaikutuksista kansalliseen dopingvalvontaan. Retrieved from https://suek.fi/wp-content/uploads/2021/05/Dopingista-Antidopingiin-5-21.pdf.
- Koskela, P. (2023). Terveyttä, sääntelyä vai arvovalintoja—Urheilijoiden puhdasta urheilua koskevien asenteiden muotoutuminen. University of Jyväskylä, Faculty for Sport and Health Sciences. Master's Thesis. Retrieved from https://jyx.jyu.fi/bitstream/handle/123456789/87724/1/URN%3ANBN%3Afi%3Ajyu-202306143792.pdf.
- Kreft, L. (2011). Elite sportspersons and commodity control: Anti-doping as quality assurance.

  \*International Journal of Sport Policy and Politics, 3(2), 151–161.

  https://doi.org/10.1080/19406940.2011.577795.
- Kumar, R. (2011). Research methodology: A step-by-step guide for beginners (3rd ed). E-book. SAGE.
- Ljungqvist, A. (2017). Brief History of Anti-Doping. *Medicine and Sport Science*, 62, 1–10. https://doi.org/10.1159/000460680.

- Lucidi, F., Mallia, L., Alivernini, F., Chirico, A., Manganelli, S., Galli, F., Biasi, V., & Zelli, A. (2017). The Effectiveness of a New School-Based Media Literacy Intervention on Adolescents' Doping Attitudes and Supplements Use. *Frontiers in Psychology*, 8, 749. https://doi.org/10.3389/fpsyg.2017.00749.
- Mazanov, J., & Huybers, T. (1999). An Empirical Model of Athlete Decisions to Use Performance Enhancing Drugs: Qualitative Evidence. *N Qualitative Research in Sport and Exercise*, 2(3), 385–402. https://doi.org/10.1080/19398441.2010.517046.
- Mazanov, J., Huybers, T., & Connor, J. (2011). Qualitative evidence of a primary intervention point for elite athlete doping. *Journal of Science and Medicine in Sport*, *14*(2), 106–110. https://doi.org/10.1016/j.jsams.2010.06.003.
- Ministry of Culture and Education. (2023). Liikunnan ja urheilun eettiset periaatteet. Retrieved from https://okm.fi/eettiset-periaatteet.
- Møller, V. (2011). One step too far about WADA's whereabouts rule. *International Journal of Sport Policy and Politics*, 3(2), 177–190. https://doi.org/10.1080/19406940.2011.579145.
- 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.
- Moston, S., Engelberg, T., & Skinner, J. (2015). Athletes' and coaches' perceptions of deterrents to performance-enhancing drug use. *International Journal of Sport Policy and Politics*, 7(4), 623–636. https://doi.org/10.1080/19406940.2014.936960.
- Ntoumanis, N., Ng, J. Y. Y., Barkoukis, V., & Backhouse, S. (2014). Personal and Psychosocial Predictors of Doping Use in Physical Activity Settings: A Meta-Analysis. *Sports Medicine*, 44(11), 1603–1624. https://doi.org/10.1007/s40279-014-0240-4.
- Ojajärvi, S., & Valtonen, S. (2016). Hyvä hallintotapa liikunta-alalla. *Liikuntatieteellisen Seuran tutkimuksia ja selvityksiä*, 13. Retrieved from https://www.lts.fi/media/lts\_julkaisut/lts\_selvityksia/hyva-cc-88-hallintotapa-liikunta-alalla.pdf.
- Overbye, M. (2016). Doping control in sport: An investigation of how elite athletes perceive and trust the functioning of the doping testing system in their sport. *Sport Management Review*, 19(1), 6–22. https://doi.org/10.1016/j.smr.2015.10.002.
- Overbye, M. (2017). Deterrence by risk of detection? An inquiry into how elite athletes perceive the deterrent effect of the doping testing regime in their sport. *Drugs: Education*,

- *Prevention and Policy*, 24(2), 206–219. https://doi.org/10.1080/09687637.2016.1182119.
- Overbye, M., Elbe, A.-M., Knudsen, M. L., & Pfister, G. (2015). Athletes' perceptions of anti-doping sanctions: The ban from sport versus social, financial and self-imposed sanctions. *Sport in Society*, *18*(3), 364–384. https://doi.org/10.1080/17430437.2014.982539.
- Overbye, M., Knudsen, M. L., & Pfister, G. (2013). To dope or not to dope: Elite athletes' perceptions of doping deterrents and incentives. *Performance Enhancement & Health*, 2(3), 119–134. https://doi.org/10.1016/j.peh.2013.07.001.
- Overbye, M., & Wagner, U. (2014). Experiences, attitudes and trust: An inquiry into elite athletes' perception of the whereabouts reporting system. *International Journal of Sport Policy and Politics*, 6(3), 407–428. https://doi.org/10.1080/19406940.2013.791712.
- Pappa, E., & Kennedy, E. (2013). 'It was my thought ... he made it a reality': Normalization and responsibility in athletes' accounts of performance-enhancing drug use. *International Review for the Sociology of Sport*, 48(3), 277–294. https://doi.org/10.1177/1012690212442116.
- Petróczi, A., Heyes, A., Thrower, S., Martinelli, L., Boardley, I., Backhouse, S., & Boardley, I. (2021). Understanding and building clean(er) sport together: Community-based participatory research with elite athletes and anti-doping organisations from five European countries. *Psychology of Sport and Exercise*, 55(1), 101932. https://doi.org/10.1016/j.psychsport.2021.101932.
- Petróczi, A., Norman, P., & Brueckner, S. (2017). Can We Better Integrate the Role of Anti-Doping in Sports and Society? A Psychological Approach to Contemporary Value-Based Prevention. *Medicine and Sport Science*, 62, 160–176. https://doi.org/10.1159/000460726.
- Read, D., Skinner, J., Lock, D., & Houlihan, B. (2020). Balancing mission creep, means, effectiveness and legitimacy at the World Anti-Doping Agency. *Performance Enhancement & Health*, 8(2), 100175. https://doi.org/10.1016/j.peh.2020.100175.
- Scharf, M., Zurawski, N., & Ruthenberg, T. (2018). Negotiating privacy. Athletes' assessment and knowledge of the ADAMS. *Performance Enhancement & Health*, *6*(2), 59–68. https://doi.org/10.1016/j.peh.2018.07.002.
- Skinner, J., Edwards, A., & Corbett, B. (2015). *Research methods for sport management*. Routledge.

- Smith, B., & Sparkes, A. C. (2016). Routledge Handbook of Qualitative Research in Sport and Exercise. Taylor & Francis.
- Strelan, P., & Boeckmann, R. (2003). A new model for understanding performance-enhancing drug use by elite athletes. *Journal of Applied Sport Psychology*, *15*(2), 176–183. https://doi.org/10.1080/10413200390213795.
- Suchman, M. C. (1995). Managing Legitimacy: Strategic and Institutional Approaches. *The Academy of Management Review*, 20(3), 571-610. https://doi.org/10.2307/258788.
- Suomen Urheilijat. (2023) Suomen Urheilijat. Retrieved from https://suomenurheilijat.fi/.
- The Finnish National Board on Research Integrity. (2023). Hyvä tieteellinen käytäntö jaa sen loukkausepäilyjen käsitteleminen Suomessa 2023. Retrieved from https://tenk.fi/sites/default/files/2023-05/RI Guidelines 2023.pdf.
- Tuomi, J., & Sarajärvi, A. (2009). Laadullinen tutkimus ja sisällönanalyysi (6th ed.). Tammi.
- Tyler, T. R. (2006). Why people obey the law. E-book. Princeton University Press.
- Tyler, T. R., & Jackson, J. (2014). Popular legitimacy and the exercise of legal authority: Motivating compliance, cooperation, and engagement. *Psychology, Public Policy, and Law*, 20(1), 78–95. https://doi.org/10.1037/a0034514.
- UNESCO. (2005). International Convention against Doping in Sport. Retrieved from https://unesdoc.unesco.org/ark:/48223/pf0000142594.
- UNESCO. (2023). International Convention against Doping in Sport. Retrieved from https://en.unesco.org/themes/sport-and-anti-doping/convention.
- Valkenburg, D., de Hon, O., & van Hilvoorde, I. (2014). Doping control, providing whereabouts and the importance of privacy for elite athletes. *International Journal of Drug Policy*, 25(2), 212–218. https://doi.org/10.1016/j.drugpo.2013.12.013.
- Vehkalahti, K. (2014). Kyselytutkimuksen mittarit ja menetelmät. Helsingin yliopisto. https://doi.org/10.31885/9789515149817.
- WADA. (2020). Athletes' Anti-Doping Rights Act. Retrieved from https://www.wada-ama.org/sites/default/files/resources/files/athlete\_act\_en.pdf.
- WADA. (2021a). 2021 Code Implementation Support Program: Guidelines for Implementing an Effective Testing Program. Retrieved from https://www.wada-ama.org/sites/default/files/resources/files/isti\_guidelines\_for\_implementing\_an\_effective testing program final.pdf.
- WADA. (2021b). 2021 World Anti-Doping Code and International Standard Framework Development and Implementation Guide for Stakeholders. Retrieved from

- https://www.wada-ama.org/sites/default/files/resources/files/worldconferencebackgrounder 0.pdf.
- WADA. (2021c). International Standard for Education. Retrieved from https://www.wada-ama.org/sites/default/files/resources/files/international standard ise 2021.pdf.
- WADA. (2021d). World Anti-Doping Code 2021. Retrieved from https://www.wada-ama.org/sites/default/files/resources/files/2021 wada code.pdf.
- WADA. (2023a). Code Signatories. Retrieved from https://www.wada-ama.org/en/what-we-do/world-anti-doping-code/code-signatories.
- WADA. (2023b). International Standard for Results Management. Retrieved from https://www.wada-ama.org/sites/default/files/2023-01/international\_standard\_isrm\_-abp update 2023 final 0.pdf.
- WADA. (2023c). International Standard for Testing and Investigations. Retrieved from https://www.wada-ama.org/sites/default/files/2022-12/isti\_2023\_w\_annex\_k\_final\_clean.pdf.
- WADA. (2023d). WADA Technical Document for Sport Specific Analysis. Retrieved from https://www.wada-ama.org/sites/default/files/2023-01/tdssa\_version\_8.0\_final\_clean.pdf.
- WADA. (2023e). ADAMS. Retrieved from https://www.wada-ama.org/en/what-we-do/adams.
- WADA. (2023f). Athlete Biological Passport. Retrieved from https://www.wada-ama.org/en/athlete-biological-passport.
- WADA. (2023g). Athlete Council. Retrieved from https://www.wada-ama.org/en/athletes-support-personnel/athlete-engagement/athlete-council.
- WADA. (2023h). Who we are. Retrieved from https://www.wada-ama.org/en/who-we-are.
- Waddington, I. (2010). Surveillance and control in sport: A sociologist looks at the WADA whereabouts system. *International Journal of Sport Policy and Politics*, 2(3), 255–274. https://doi.org/10.1080/19406940.2010.507210.
- Wagner, U., & Hanstad, D. V. (2011). Scandinavian perspectives on doping a comparative policy analysis in relation to the international process of institutionalizing anti-doping. *International Journal of Sport Policy and Politics*, 3(3), 355–372. https://doi.org/10.1080/19406940.2011.596156.
- Westmattelmann, D., Dreiskämper, D., Strauß, B., Schewe, G., & Plass, J. (2018). Perception of the Current Anti-doping Regime A Quantitative Study Among German Top-Level Cyclists and Track and Field Athletes. *Frontiers in Psychology*, *9*, *1890*. https://doi.org/10.3389/fpsyg.2018.01890.

- Willick, S. E., Miller, G. D., & Eichner, D. (2016). The Anti-Doping Movement. *PM&R*, 8(3), 125–S132. https://doi.org/10.1016/j.pmrj.2015.12.001.
- Woolway, T., Lazuras, L., Barkoukis, V., & Petróczi, A. (2020). "Doing What Is Right and Doing It Right": A Mapping Review of Athletes' Perception of Anti-Doping Legitimacy. *International Journal of Drug Policy*, 84, 102865. https://doi.org/10.1016/j.drugpo.2020.102865.
- Working Group on the Review of WADA Governance Reforms. (2022). Working Group on the Review of WADA Governance Reforms—Final Report. Retrieved from https://www.wada-ama.org/sites/default/files/2022-05/FINAL%20REPORT%20Item\_4\_1\_Attach\_1\_GovReviewWG\_FinalReport\_April %202022\_FINAL.pdf.
- Yliniemi, K. (17.3.2023). "Haluamme olla urheilijoiden kollektiivinen ääni yli lajirajojen" vastikään perustettu Suomen urheilijat -yhdistys korostaa urheilijoiden edunvalvontaa ja urheilun eettisyyttä. Etelä-Suomen Sanomat. Retrieved from https://www.ess.fi/urheilu/5797357.
- Zorzoli, M. (2011). Biological passport parameters. *Journal of Human Sport and Exercise*, 6(2), 205-217. https://doi.org/10.4100/jhse.2011.62.02.

# **APPENDICES**

APPENDIX 1. Feedback Questionnaire for Registered Testing Pool Athletes of FINCIS.

# Testauspooliurheilijoiden palautekysely

Hyvä testauspooliurheilija,

Tämän kyselyn tavoitteena on saada SUEKin rekisteröityyn testauspooliin kuuluvilta urheilijoilta palautetta SUEKin toiminnasta ja dopingvalvonnan toteutuksesta. Kaikki vastaukset käsitellään anonyymisti ja luottamuksellisesti.

Kyselyyn vastaaminen vie 5-10 minuuttia.

# **TAUSTATIEDOT**

Sukupuoli
O nainen
O mies
O muu
O en halua vastata
Ikä
alle 18 vuotta
18–25 vuotta
O 26–30 vuotta
○ 31–35 vuotta
◯ yli 35 vuotta
Lajiryhmä
A: ampumahiihto, maastohiihto, yhdistetty, soutu, suunnistus, yleisurheilu (kävely ja 3000m tai enemmän)
B: pikaluistelu, melonta, uinti, yleisurheilu/parayleisurheilu (keskimatkat eli 800-1500m)
C: painonnosto, voimanosto, yleisurheilu/parayleisurheilu (hypyt, heitot, ottelut ja pikamatkat 400m tai vähemmän)
D: judo, nyrkkeily, paini

Oletko mielestäsi saanut riittävästi tietoa SUEKin testauspoolista, sen tarkoituksesta ja perusteista sekä siihen liittyvistä velvoitteista?
○ kyllä
O en
Ovatko testauspoolijärjestelmä ja siihen liittyvät velvollisuudet mielestäsi hyvä ja tehokas tapa pyrkiä parantamaan puhtaiden urheilijoiden asemaa huippu-urheilussa?
○ kyllä
O ei
Kommentteja tai palautetta koskien testauspoolijärjestelmää ja sen toimivuutta puhtaan urheilun edistämisessä
Koitko SUEKin rekisteröityyn pooliin liittämisen yhteydessä järjestetyn henkilökohtaisen perehdytyskoulutuksen hyödylliseksi?  Henkilökohtaiset perehdytyskoulutukset aloitettiin vuonna 2021, joten mikäli sinut on liitetty pooliin aiemmin, et
välttämättä ole saanut henkilökohtaista perehdytystä. Valitse siinä tapauksessa alin vaihtoehto.
○ kyllä
en, miksi?
en ole saanut kyseistä koulutusta

löytää urheilijoille tapoja vaikuttaa puhtaan ja reilun urheilun edistämiseen.
Olisiko sinulla kiinnostusta ja halua vaikuttaa SUEKin toimintaan?
○ ehkä ○ ei
Millä tavoin tai minkälaisissa asioissa toivoisit pystyväsi vaikuttamaan SUEKin toimintaan?

SUEKin yksi lähitulevaisuuden tavoitteista on saada urheilijoiden ääni kuulumaan ja

# APPENDIX 2. Interview guide.

Haastattelurunko: Olinpaikkatietojärjestelmä ja testauspooli

- Millaisia ajatuksia pooliin liittäminen herätti?
- Miten olet kokenut järjestelmään kuulumisen? Millaisia kokemuksia sinulla on testauspoolista ja olinpaikkatietojen ilmoittamisesta urheilijana?
- Mitä mieltä olet järjestelmästä, koetko että se vahvistaa puhdasta urheilua ja puhtaiden urheilijoiden asemaa huippu-urheilussa?
- Miten koit testauspoolijärjestelmän toteutumisen kansainvälisesti? Onko testauspoolijärjestelmä tasapuolinen kaikille urheilijoille?
- Koitko saavasi tarpeeksi tietoa testauspoolista ja siihen liittyvistä velvoitteista, kun sinut liitettiin pooliin? Koitko tarvitsevasi ja oletko saanut apua pooliin kuulumisen aikana? Keneltä?
- Millaisena koit ADAMS-järjestelmän ja sen käyttämisen?
- Koetko, että testauspoolijärjestelmää tulisi tai voisi kehittää? Millä tavalla?
- Olisiko sinulla nyt tai aiemmin ollut kiinnostusta ja halua vaikuttaa SUEKin toimintaan? Ajatuksia tai ideoita millä tavoin?