

THE LEGITIMACY OF THE FIGHT AGAINST DOPING IN SPORT: STAKEHOLDER PERCEPTIONS

*A Report Prepared for The World Anti-Doping Agency
by The University of New South Wales, Canberra*

THE RESEARCH TEAM

The research team comprised the following individuals, based at the University of New South Wales, Canberra and Australian National University:

Associate Professor James M. Connor

A/Prof Connor is a sociologist who specialises in understanding the intersection of culture, social action and change. His military and sport research centres on understanding cultural influences on negative behaviours, and consequently, how these might be changed. He has been funded by the Australian and World anti-doping agencies to explore how and why athletes dope and cheat. Recent publications include the chapter on doping, cheating and corruption in the Research Handbook on Sports and Society (Edward Elgar 2021). Essentially, He tries to understand intransigent problems of behaviour in organisations and how we might overcome them utilising novel theory and methods.

Dr. Vanessa McDermott

Dr McDermott takes a sociological view to critically assess governance and regulatory mechanisms and the diversion of risk, or ‘risk shifting’, and the impact of this for worker, public and community safety. Vanessa takes an innovative approach to show that risk-driven regulatory responses affect worker safety by considering anti-doping policies in elite sport, with athletes conceptualised as workers. Corporate governance frameworks, and the ethics and values that underpin these, must align with community expectations if organisations, both public and private, are to maintain public trust. Vanessa makes a significant contribution to a growing body of work in this area by investigating corporate governance and executive decision-making, with a focus on senior executive remuneration schemes, corporate social responsibility, and organisational safety. Vanessa is a Senior Lecturer in the School of Business at the University of New South Wales, Canberra.

Professor Kathryn Henne

Professor Kathryn (Kate) Henne is the Director of the School of Regulation and Global Governance (RegNet). An interdisciplinarily trained scholar, she has a PhD in Criminology, Law and Society, with emphases in Critical Theory and Feminist Studies and a specialisation in Anthropologies of Medicine, Science and Technology, from the University of California, Irvine. Before commencing as RegNet’s Director, she held the Canada Research Chair in Biogovernance, Law and Society at the University of Waterloo, where she was also a Fellow of the Balsillie School of International Affairs. Kate Henne’s research is concerned with the interface between inequality, technoscience and regulation. She has published widely on topics related to biometric surveillance, criminological knowledge production, human enhancement and wellbeing, regulatory science, and technologies of policing. She also leads RegNet’s Justice and Technoscience (JusTech) Lab, a collaboratory that brings together scholars from Australia and overseas to study regulatory strategies that advance more just and equitable approaches to the governance of science and technology.

Jessica Foenander

Jessica Foenander completed a Bachelor of Arts with Honours in 2020 at Griffith University, Gold Coast, majoring in Sociology and Chinese Language. Jessica’s PhD, titled “From Fanzines to Facebook: Examining the use of media as a tool of resistance in the Singapore punk scene”,

will examine media's contribution to punk identity and authenticity while highlighting social and political resistance in Singapore. Jessica has also been involved in an ongoing research project on Australian government sports grants with the University of New South Wales, Canberra.

Dr. Jessica Borg

Dr. Jessica Borg is an early career academic and researcher who completed her PhD in Project Management at RMIT University, Melbourne, Australia. Jessica was awarded the Prestigious Women in Project Management Scholarship, awarded by the Project Management Institute (PMI) in recognition of her achievements in industry and research. Jessica's research focuses on stakeholder engagement, shared value, project management, work readiness, education and training. Dr. Borg's research has been published in the Project Management Journal and the International Journal of Managing Projects in Business and she contributes to practice through her work with an international development organisation focused on delivering humanitarian aid projects.

Table of Contents

The Research Team	ii
Executive Summary	1
1.0 Introduction	3
2.0 Research perspectives on doping	4
2.1 The anti-doping approach	4
2.2 The health-based harm minimisation View	4
3.0 The Legitimacy of the Fight against Doping in Sport	6
3.1 Factors shaping Stakeholders' Views on Anti-Doping in Sport	7
3.1.1 The legitimacy of anti-doping agencies influences stakeholders' views	7
3.1.2 General public is largely supportive of anti-doping due to unfairness, safety and sport authenticity	8
3.1.3 Athlete support networks - critical in the fight against doping	8
3.1.4 Athletes' perceptions may be influenced by contextual and cultural differences	9
Perceptions are influenced by the sport of the athlete	9
Perceptions may be influenced by the age of the athlete	10
Perceptions may be influenced by side effects of doping	10
Perceptions may be influenced by the consequences of reporting doping	10
Perceptions may be influenced by lack of education	10
3.2 Overview of factors shaping stakeholders' views of anti-doping in sport	11
5.0 Research Methodology	14
5.1 Research Objectives	14
5.2 Research Question	14
5.3 Research Methods	14
5.3.1 Sample	14
5.3.2 Data Collection	15
5.3.3 Data Analysis	17
6.0 Research Findings	20
6.1 Perceptions of Doping Prevalence	20
6.1.1 Supplement use and accessibility	21
6.1.2 Level of competition	23
6.1.3 Cultural and financial incentives	24
6.1.4 Recreational drug use	26
6.2 Anti-doping education	28
6.2.1 Cultural mainstreaming	30
6.2.2 Resource and Expertise Limitations	35
6.2.3 Geographical and technological Impediments	42

6.2.4	Coach education.....	44
6.2.5	Athlete Engagement	47
6.3	Anti-doping Support – IF, NSO, RADO, ORADO, NADO	54
6.4	Anti-doping rules – impediments to compliance	57
6.4.1	Fit for purpose whereabouts system	57
6.4.2	Problems with the World Anti-Doping Code	59
6.4.3	Cultural influences	60
6.5	Perceptions of WADA more broadly	62
7.0	Recommendations	66
7.1	Evidence-based Recommendations to the World Anti-Doping Agency.....	66
8.0	Conclusion	68
	References	69
	Appendix A – Interview Guide	75

EXECUTIVE SUMMARY

Doping in sport continues to occur, suggesting that despite the World Anti-Doping Agency's now long-standing governance framework more work is needed. Whilst the commitment to, and support for anti-doping regulation is widespread, the governance framework can only become effective when anti-doping policy is designed with consideration of diverse stakeholders' perspectives. The fight against doping requires continued support from professional organisations, governments, athletes, athlete support networks and the general public.

Existing literature lacks a holistic evidence-informed understanding of stakeholder views on the legitimacy of the fight against doping in sport, and few studies to date have focused on ascertaining the perspectives of athletes on the legitimacy of anti-doping governance. By considering varied stakeholder perspectives, we can better come to understand the views of the global sporting community on anti-doping policy.

Oceania was selected as the study context, given the breadth of cultural, socio-economic and other lifestyle factors that span the region. The aim of the research was to identify differences in the perceptions of the anti-doping regulatory framework based on different stakeholders' role in sport and/or their cultural circumstances within Oceania.

The key research question is:

- How do members of the sportsnet perceive the legitimacy of the anti-doping fight?

Twenty-nine qualitative semi-structured interviews were conducted with 33 participants, including athletes, support personnel, and sporting administrators from across the Oceania region. We identified five themes using reflexive inductive thematic analysis:

- Perceptions of doping prevalence
- Anti-doping education
- Anti-doping support
- Anti-doping rules – impediments to compliance
- Perceptions of WADA

The most prominent theme from the interviews is that there is broad support for anti-doping education, but that this needs to be more engaging and tailored to meet the cultural needs of countries and sports in the Oceania region. Overall, participants pointed out that anti-doping educational materials are not fit for purpose and fail to consider the unique circumstances of athletes from Oceania. Language barriers make it difficult to educate, particularly when material is primarily limited to English and translation places a burden on already limited financial and administrative resources. Participants generally also felt that the educational materials and seminars are not engaging for athletes, or other support personnel.

Although doping is understood to be an issue, many respondents do not rank it as being one of the major issues or threats to their particular sport. A key theme around risk of doping

was the possibility of pressure to support family financially as an incentive to motivate motivating athletes to dope. However, strong cultural norms, and the shame and ostracism that athletes would face should they receive an Anti-Doping Rule Violation (ADRV), means that doping is not perceived to be a major concern in the Pacific Islands. Added to that, given the range of demands on support personnel, and the perception that doping is less of a problem in Oceania, time and money pressures mean anti-doping education is a low priority. Throughout the interviews, participants described a shift, across all Oceania, towards focusing on diet and nutrition, rather than taking substances to enhance performance, such as supplements. Other issues that threaten the integrity of sport and athlete well-being were regularly cited as being a higher priority than anti-doping, including athlete mental health and match-fixing.

There was consensus that the World Anti-Doping Agency (WADA) is doing the best they can with the resources available to them. Participants recognised that engaging with and generating stakeholder support from diverse nations, working with NSOs, IFs, NADOs, RADOs and local authorities is a difficult and complex task. There is general agreement that the WADA's anti-doping policies, rules and regulations are important to maintain integrity in sport and retain an image of clean sport. Yet, doubts were raised about whether the WADA is doing enough to ensure anti-doping education is being provided in a manner that offers the maximum benefit to stakeholders, and to inform athletes and thus promote compliance.

Participants agreed on the importance of the World Anti-Doping Code (WADC) as it ensures that doping policies and regulations are consistent and co-ordinated among public authorities and sport organisations globally. However, a major concern with the WADC is that it is difficult to navigate and comprehend, particularly in circumstances where language is a barrier or literacy levels are low. Due to the complex nature of anti-doping procedures, athletes are often unaware of the correct processes surrounding TUEs, where to find information, and who to direct specific questions to regarding prohibited substances.

The results of the study enabled the formulation of evidence-based practical recommendations for the WADA to drive changes aimed at promoting anti-doping practice in the Oceania region, including:

- Development of fit for purpose education and support materials
- Review of WADA and WADC online resources for accessibility
- Integrate anti-doping education into other support measures
- WADA must continue to aggressively pursue anti-doping actions, in particular against state-sanctioned activity

Measures 1-3 should be developed in partnership with stakeholders in Oceania as they are best placed to understand what is required in their local context.

1.0 INTRODUCTION

The fight against doping in professional sport requires support from diverse stakeholder groups, including professional and non-government organisations, governments, individual athletes, athlete support networks and the general public. The complexity of the governance, education, and enforcement of anti-doping policies requires multi-organisational co-operation at a global level. Winning the fight against doping in elite sport can only be realised when the varied stakeholders are willing to accept, support and buy into anti-doping practices, messaging and strategies. Despite this, perspectives of key stakeholders on the matter remain largely ignored in both anti-doping research and policy to date.

This research is based on the premise that anti-doping practices can only become effective when anti-doping policy is designed with the consideration of stakeholders' diverse perspectives and understanding of the issue. This study investigates how previously neglected stakeholders perceive the legitimacy of the fight against doping in sport, with the objective of identifying and exploring the dimensions and factors that influence their perceptions. Developing a better understanding of different stakeholders' perceptions on anti-doping will help inform anti-doping governing bodies and agencies in how to best tailor their anti-doping efforts, policies and practices.

Despite decades of concerted efforts to eradicate doping in sport, athletes continue to be stripped of their medals and countries have been banned from competing at Olympic games (Connor, 2021). Anti-doping measures were first introduced in England at the FIFA World Cup of 1966 and in the 1968 Olympics in Mexico City following the deaths of athletes who had participated in the 1960 Olympics in Rome (Dvorak, Saugy & Pitsiladis 2014). Since then, sport governing bodies and agencies (such as the World Anti-Doping Agency and National Anti-Doping Organisations) have established guidelines and policies centered around anti-doping practices in sport.

While doping in sport is not regarded as a criminal offence in many countries, the issue is observed in both professional and amateur sport (Vakhitova & Bell 2018). Recently, prominent cases of doping, including systemic doping on a national scale (Connor 2021), around the world have continued to raise public awareness of performance enhancing drug (PED) use in sport and the effectiveness of anti-doping policies is again brought into the spotlight.

2.0 RESEARCH PERSPECTIVES ON DOPING

Some researchers have called for the relaxation of anti-doping regulations in sport (Savulescu, Creaney & Vondy 2013) on the basis that performance enhancement is part of elite level sport (Savulescu, Foddy & Clayton 2004). However, other scholars suggest that legalising doping in sport would not be supported by the broader community, with studies (Partridge, Lucke & Hall 2012; 2014) revealing the general public's perception that legalising the use of PED in sport would lead to unfairness, loss of safety and a lack of authenticity in sport as we know it. In summary, the extant literature reveals two lenses through which to view the matter; firstly, the anti-doping approach which is largely concerned with preventing doping and punishing athletes, support personnel and nations found to have engaged in doping, and secondly, the harm minimisation approach, which contends that rather than prohibiting drugs in sport, the sporting community should push towards regulation and medical oversights of drug use for athlete's health (Mazanov 2015).

2.1 THE ANTI-DOPING APPROACH

The anti-doping approach to drugs in sport is supported by the World Anti-Doping Code (WADC), which was created by the World Anti-Doping Agency (WADA) to globally coordinate, manage and fight against doping in sport (WADA 2021). According to the WADC, doping in sport goes against the values of 'ethics, fair play and honesty', or the three pillars, which are argued to encompass the spirit of sport (WADA 2021).

Essentially, the views of stakeholders who support anti-doping in sport centre around the ethical argument that drugs in sport lead to unfair performance advantages as well as detrimental health impacts for athletes who partake in doping. The WADC identifies a range of drugs which it considers to be a fundamental threat to the integrity of sports as well as athlete health (Mazanov 2015). Criticisms of this approach and anti-doping in general, are largely concerned with the Code compromising athlete's human rights (i.e. privacy and personal choice) (Houlihan 2004) and failing to address discriminatory advantages in athletes of different genders, ages and background (Connor 2009, Henne 2015, Connor 2021).

2.2 THE HEALTH-BASED HARM MINIMISATION VIEW

From a harm minimisation perspective, claims about PED use in sport largely centre around the argument that the health of the athletes is the priority. Essentially, the argument is that certain drugs may be beneficial to athlete performance (i.e., work towards increasing their fitness to compete). As an example, studies (Harmer 2010) suggest that medical supervision of the use of anabolic androgenic steroids by athletes can have positive outcomes in helping athletes overcome sports-related injuries. Moreover, bioethicists have argued for more use of cognitive enhancers in sport (Greely et al. 2008). Legalised doping has also been supported by bioethicists, who argue that athletes should be given the choice of using performance enhancing drugs (Kayser & Smith 2008). Under a proposed harm-minimisation regime, athletes would be able to use certain types of drugs for the purposes of fitness (i.e., recovery from injury, enhancing cognitive ability etc.) under medical supervision. Criticisms

of this approach centre around fairness in the accessibility of certain drugs to athletes and the dangers of athletes in becoming too reliant/dependant on the use of drugs (albeit medically supervised). An un-resolvable consent dilemma in these approaches is the impact it would have on child athletes as allowing drug use at the elite level would compel use for those under 18 who are unable to consent (Connor 2021).

3.0 THE LEGITIMACY OF THE FIGHT AGAINST DOPING IN SPORT

At a global level, we see inconsistencies in stakeholders' perceptions of the fight against doping, with individuals in support of anti-doping in sport juxtaposed against others who argue for the harm minimisation approach. This, coupled with observations of selective messaging by sporting organisations and countries around anti-doping, results in a mixed message and understanding of the legitimacy of anti-doping in sport (see Møller 2016). Anti-doping rules and processes continue to be challenged, yet there remains little empirical research to date that has looked at the legitimacy of the fight against doping in sport. Scholars have identified a need to understand the effectiveness of anti-doping policy (Read et al. 2019), noting that it has been identified as an area of concern in sport policy and management research (Brissonneau & Ohl 2010; Engelberg & Skinner 2016). The current consensus in academic literature is that anti-doping policy to date has been predominantly reactive (Ritchie & Jackson 2014), and driven by political agendas, with athletes largely ignored in policy decision-making. Ritchie & Jackson (2014) have argued that this approach means that concerned stakeholders have continued to be overlooked in the development and implementation of anti-doping policies. Further, the unintended consequences of anti-doping policies are poorly understood and rarely researched (Waddington 2016). What this means is that we have a poor understanding of how complex rules like the WADC actually impact upon and influence diverse stakeholders – especially those outside the 'mainstream' of sport.

The approach to anti-doping is predicated on the belief that athletes, their support personnel and the nation they compete for, are an informed and compliant group well versed in international conventions of anti-doping conduct, with the funding, resources and expertise to enact the strategies. However, for some stakeholder groups, such as from the smaller nations of Oceania, this is just not the case. These countries struggle with the basics of competing (training, coaching, travel, equipment), let alone more difficult areas such as anti-doping education, which impacts on their ability to engage with anti-doping strategies.

The WADA, the WADC and the international arrangements governing anti-doping have come under considerable criticism from academics and athletes (see for example, Overbye 2016; Waddington & Møller 2019). These academic critiques centre around questions of effectiveness and purpose – does WADA meet its stated aims or not? The argument is that "complex political, economic and cultural environment" (Houlihan et al 2019, 200) of international sport makes it extremely difficult to maintain the integrity of anti-doping. The banning of sporting Federations from competition and, banning and suspensions of previously accredited testing laboratories are evidence of these challenges (Connor 2021). Athlete perception of anti-doping is in principle supportive – but deeply criticised in terms of how anti-doping is undertaken (Overbye 2016). Gleaves & Christiansen (2019) identified four core areas of concern: 1. fair application of the rules, 2. problems with the whereabouts system, 3. due processes and 4. the lack of athlete input into the system. All of these concerns have the potential to undermine commitment to anti-doping as fundamental to achieving compliance is the belief by stakeholders that a system is fair, equitable and fit for purpose. Donovan, Egger, Kapernick & Mendoza (2002) noted that as

well as perceptions of procedural fairness and justice, support for and compliance with a system must also be based on perceptions that the organisations responsible for administering that system have valid authority, i.e., that they enjoy positive perceptions of legitimacy.

Research has shown that understanding athletes' values, beliefs and motives is central to developing effective anti-doping policy (e.g., see British Medical Association 2002; Gucciardi, Jalleh & Donovan 2010; Mugford, Mugford & Donnelly 1999). Yet, few studies to date have focused on ascertaining the perspectives of athletes (Efverström et al. 2016) and indeed other stakeholders, on the legitimacy of anti-doping governance in sport. Some have argued that this lack of research on athletes' perceptions of doping is because athletes are reluctant to actually discuss the topic with researchers (Bloodworth & McNamee 2010). Despite this, researchers and anti-doping organisations alike have continued to call for more research in this area, recognising its importance as a critical first step to better understand the landscape of doping in sport. Hence, this research responds to the call to action observed in the literature to explore stakeholders' views of the effectiveness and legitimacy of the fight against doping in sport.

3.1 FACTORS SHAPING STAKEHOLDERS' VIEWS ON ANTI-DOPING IN SPORT

The extant literature reveals that there are a multitude of factors that contribute to stakeholders' perceptions of the legitimacy of the fight against doping in sport (Morente-Sanchez & Zabala 2013). In addition, these factors have also been seen to influence stakeholders' tendencies to engage in (in the case of athletes) or encourage/discourage (in the case of athletes' support networks) doping practices. Such factors are explored in the subsequent sections of the report.

3.1.1 THE LEGITIMACY OF ANTI-DOPING AGENCIES INFLUENCES STAKEHOLDERS' VIEWS

An effective anti-doping regulatory framework can only be realised with the support of the global sporting community, which in itself encompasses a range of stakeholder groups that bring with them diverse interests and objectives. At the highest level, sport governing bodies need to consistently apply anti-doping procedures and sanctions (Donovan et al. 2002), which in turn must be supported by stakeholders at all levels. An important point to note is that legalistic authority (e.g., the WADC) does not automatically result in legitimacy (Koppell 2008). Research shows that compliance with anti-doping regulations is more likely to be realised if the organisations applying such strategies are perceived to be legitimate (Donovan et al. 2002). Hence stakeholders' perceptions of the legitimacy of anti-doping governance in sport can be seen to be influenced by their perception of the sport governing bodies, as well as the anti-doping regulations themselves.

In their discourse analytical approach to investigate legitimisation strategies used in WADA's athlete's guides, Qvarfordt et al (2019) found a tendency to use a top-down authoritarian approach. One problem with this type of approach is that it does not include stakeholders in the co-creation and enactment of anti-doping legitimacy and instead speaks to them as passive recipients. Qvarfordt et al (2019, p 8) note that "The change we were able to see in

this study towards a more rational attitude might indicate a movement away from the authoritarian approach to the construction of legitimacy in the anti-doping system". This suggests that the guide has shifted from a 'don't do it' or you will be punished (authoritarian) to a more rational, athlete engaged model. As they note "The rational legitimation strategy constitutes a turn away from the earlier focus on prohibition, suspicion and fighting, and towards protecting the clean athlete, in a seemingly carefully considered way" (Qvarfordt et al 2019, p 6). The extent to which this shift in discourse has modified athlete perception of anti-doping remains to be empirically tested.

3.1.2 GENERAL PUBLIC IS LARGELY SUPPORTIVE OF ANTI-DOPING DUE TO UNFAIRNESS, SAFETY AND SPORT AUTHENTICITY

Researchers recognise the importance of public support in the fight against doping in sport (Stamm et al. 2008), noting that public support for anti-doping policy and regulation can only be realised through more widespread information concerning the issue (Stamm et al. 2008). Studies conducted to date suggest that the views of the public on doping in sport tends to be supportive of anti-doping regulations. In Australia, a survey of the Australian general public found that only 7% of the surveyed population considered the use of prescription drugs without a diagnosed condition to be acceptable (Partridge, Lucke & Hall 2012). With specific regards to sport, only 3% of surveyed individuals believed it acceptable for athletes to use PED regardless of whether there were rules in sport to allow athletes to do so (Partridge, Lucke & Hall 2012). Further studies in the same context (Partridge, Lucke & Hall 2014) found that participants were against the legalisation of doping in sport, citing unfairness, safety and authenticity as the three key reasons upon which they formed their collective basis. In general, the literature highlights that the general public has a preference for prohibition of drugs in sport and that this has increased over time (Stamm et al. 2008). While research to date has included the perspectives of certain stakeholders regarding doping in sport, we note a significant literature gap with regards to studies in less developed parts of the world (i.e. the South Pacific region), whereby the views of both the public, athletes, as well as other stakeholders (Morente-Sanchez & Zabala 2013), are largely not present in the extant literature.

3.1.3 ATHLETE SUPPORT NETWORKS - CRITICAL IN THE FIGHT AGAINST DOPING

An athlete's support network can be conceptualised as individuals who the athlete engages with to be able to compete and can include their doctors, coaches, their team directors, their close friends and family members (Connor 2009). While there is limited research examining the viewpoints of an athlete's support networks, the extant literature suggests that individuals within this network play the important role of social facilitators when it comes to supporting and encouraging athletes in their fight against doping in sport (Mazanov et al 2013; Overbye, Knudsen & Pfister 2015; Vakhitova & Bell 2018). Moreover, individuals in the athletes' support networks have been found to serve as social deterrents (Overbye, Knudsen & Pfister 2015) for athletes, with only minor differences observed between athletes of different gender, age and type of sport. Conversely, athletes who have contact with doping users (e.g., who may have doping users within their professional

networks) have been found to be more likely to have a positive attitude towards doping and are considered at higher risk of engaging in the practice themselves (Pitsch, Emrich & Kleinm 2007; Zucchetti, Candela & Villossio 2014).

Based on such findings, there have been calls for individuals in athletes' support networks to be particularly attuned to the way they talk about doping practices (Morente-Sanchez & Zabala 2013). The underlying rationale from this perspective is that athletes will be less likely to engage in doping practices if the practices are not condoned within their support networks (Morente-Sanchez & Zabala 2013). With this understanding in mind, it becomes evident that the views and behaviours (in relation to doping) of individuals within the athletes' support networks themselves are a factor affecting the athletes' perceptions of doping in sport.

3.1.4 ATHLETES' PERCEPTIONS MAY BE INFLUENCED BY CONTEXTUAL AND CULTURAL DIFFERENCES

From the extant literature, we note cross-cultural variations in individuals' experiences of legitimate anti-doping activity (Overbye, Knudsen & Pfister 2015). In this context, culture includes the dynamic manners in which group memberships (i.e., ethnic, national) shape individuals' outlooks and how they make sense of the world around them (Mitchell 2000). This also includes sport-specific influences. The literature to date indicates that culture shapes participants' perspectives on doping and their understanding of anti-doping rules (Henne 2015; Overbye, Knudsen & Pfister 2015). In fact, the same research suggests that these dynamics can also undermine attempts to achieve compliance. The assumption that sporting contexts are universal is deeply problematic as ethnic and national cultures frame the understanding of sport and its purpose (Wheaton 2007).

PERCEPTIONS ARE INFLUENCED BY THE SPORT OF THE ATHLETE

In line with the understanding that culture can shape athletes' perceptions of anti-doping in sport, the literature reveals a relationship between the sport of the athletes and tendencies to report incidences of doping. As an example, a study found that national level track and field athletes were largely in support of anti-doping in their sport and, in instances where they were aware of a fellow athlete using PED, they were likely to assume the role of a whistle blower and report individuals who were doping in their sport (Whitaker, Backhouse & Long 2014). However, the same study (Whitaker, Backhouse & Long 2014) also investigated the views of rugby league players on doping and found contextual differences between the two groups of athletes. Rugby league players revealed that when it comes to doping in their sport, regardless of whether they may support the anti-doping stance, they felt unable to report their team members who were using PEDs (Whitaker, Backhouse & Long 2014). The rugby players asserted that their loyalty to their team members, their feelings of helplessness in actually stopping PED use and their worries about the repercussions on their sporting community and staff, would lead them to not report instances of doping. This indicates that informal dynamics and cultural practices are more influential on doping decisions than formal rules and threats of sanctioning. Findings from

this study, coupled with findings from other studies around the world (Lazuras, Barkoukis & Rodafinos 2010) support the contention that sport-based contextual differences may shape the behaviours and beliefs of athletes in relation to doping in sport.

In a large study based on results from 507 elite athletes across ten Olympic sports, it was found that athletes involved in athletics, cycling and weightlifting were more knowledgeable on doping (Lazuras, Barkoukis & Rodafinos 2010). It is asserted that athletes in team-based sports may be less likely to report doping instances in their sport due to the loyalty they feel towards members of their team, whereas in sports such as field and track, athletes compete against one another and therefore feel no moral obligation to protect their competitors from scandal (Whitaker, Backhouse & Long 2014).

PERCEPTIONS MAY BE INFLUENCED BY THE AGE OF THE ATHLETE

It is worth noting that based on research, it has been suggested that older athletes may be less likely to report athletes who take PED in sport (Whitaker, Backhouse & Long 2014), yet this remains largely unexplored in the extant literature. Moreover, age itself has been found to affect athletes' reactions to different circumstances that may deter or trigger doping practices (Overbye, Knudsen & Pfister 2015), but research in this area remains limited (Mazanov et al 2011).

PERCEPTIONS MAY BE INFLUENCED BY SIDE EFFECTS OF DOPING

It has been suggested that the side-effects of doping serve as significant deterrents to athletes from partaking in doping practices. Hence, studies have recommended that anti-doping educational programmes focus on communicating such side effects to athletes (Overbye, Knudsen & Pfister 2015). However, it must be noted that certain doping substances do not necessarily result in negative health side effects, nor are all athletes necessarily concerned about possible side effects (Overbye, Knudsen & Pfister 2015). Elite performance is also detrimental to long term health and consequently athletes have a different engagement with their body, health and use of substances and methods to support it (Woolf et al 2016).

PERCEPTIONS MAY BE INFLUENCED BY THE CONSEQUENCES OF REPORTING DOPING

There have been concerns that athletes who report doping in sport are treated harshly (Working Group, 2013), with examples including cyclists being ostracised and pushed out of their sport upon speaking out against doping and being unwilling to partake in the practise (Hardie et al., 2010; Møller, 2010). The negative consequences of reporting drug use in sport can be seen to affect the individual athlete's tendency to actively speak up against the practice. These include ostracisation from team-based sports, as well as being banned from the sport (Overbye, Knudsen & Pfister 2015).

PERCEPTIONS MAY BE INFLUENCED BY LACK OF EDUCATION

Scholars have reasoned that education is critical for both minimising doping culture in sport and reducing the cases of doping in the long term (Morente-Sanchez & Zabala 2013). Athletes require targeted education strategies focused on helping them make informed

decisions concerning PEDs (Mottram, Chester & Atkinson 2008). In addition, it is understood that education strategies must also include informing individuals within athletes' networks, such as their coaches and doctors (Mottram, Chester & Atkinson 2008; Nieper 2005). Scholars have continued to recommend the use of internet-based education programs and training (Morente-Sanchez & Zabala 2013) which can be rolled out and implemented across a range of contexts, asserting that widespread, easily available information on the effects of doping in sport, is critical in equipping athletes and their support networks with the knowledge they need to make informed decisions concerning PED in sport. Others (Erdman, Fung & Doyle-Baker et al. 2007) suggest that tailored programs may be better suited to athletes depending on their ages, sport and individual circumstances. Consistent among researchers calling for education as a preventative measure for doping in sport, is the belief that education efforts to date have not been sufficient (Peters et al. 2009; Overbye 2016). This has largely been attributed to issues with i) the content of the messaging, ii) athletes receiving the information and iii) the individuals giving the information and conducting the training (Lentillon-Kaestner et al. 2012).

3.2 OVERVIEW OF FACTORS SHAPING STAKEHOLDERS' VIEWS OF ANTI-DOPING IN SPORT

It is important to note that although the majority of athletes do not condone doping in sport (Dunn et al. 2010; Elbe & Overbye 2013), there are certain circumstances and factors that may contribute to their perception of anti-doping in sport. These factors can also contribute to the athletes' advocacy (or lack thereof) for anti-doping in sport. Similarly, literature reveals that the general public largely supports anti-doping in sport based on certain factors. Moreover, there is a gap in research which has considered the legitimacy of the anti-doping system from the perspective of athletes and stakeholders from different contexts (including both cultural and geographical) (Qvarford 2019). Table 1 summarises factors affecting stakeholders' views about anti-doping in sport.

Table 1. Factors affecting stakeholders' perceptions of anti-doping in sport

STAKEHOLDER GROUP	FACTORS AFFECTING VIEWS OF ANTI-DOPING
GENERAL PUBLIC	Information on doping (<i>Stamm et al. 2008</i>) Unfairness as a result of doping (<i>Partridge, Lucke & Hall 2014</i>) Authenticity of the sport (<i>Partridge, Lucke & Hall 2014</i>) Athlete safety (<i>Partridge, Lucke & Hall 2014</i>) Legitimacy of sport governing bodies (<i>Donovan et al. 2002</i>) Education (or lack thereof) (<i>Mottram, Chester & Atkinson 2008; Nieper 2005</i>).
ATHLETE	Athletes' support networks (<i>Connor 2009; Overbye, Knudsen & Pfister 2015; Pitsch, Emrich & Kleinm 2007; Vakhitova & Bell 2018; Zucchetti, Candela & Villossio 2014</i>) Athletes' sport (<i>Overbye, Knudsen & Pfister 2015; Whitaker et al. 2014</i>) Consequences on the athlete's team (in team-based sports) (<i>Overbye, Knudsen & Pfister 2015; Whitaker, Backhouse & Long 2014</i>) Consequences of reporting doping (i.e. ostracisation and being banned) (<i>Hardie et al. 2010; Møller 2010; Overbye, Knudsen & Pfister 2015</i>) Age (<i>Overbye, Knudsen & Pfister 2015; Whitaker, Backhouse & Long 2014</i>) Legitimacy of sport governing bodies (<i>Donovan et al. 2002</i>) Legitimacy of the way rules and principles are enforced (<i>Efverström 2016</i>) Health Side-effects (<i>Overbye, Knudsen & Pfister 2015</i>) Education (or lack thereof) (<i>Morente-Sanchez & Zabala 2013; Peters et al. 2009</i>)

4.0 Research Significance

There is concern that the development of anti-doping policy in sport to date has largely ignored the views of stakeholders, including athletes (Efverström et al. 2016; Qvarfordt 2019). While the extant literature suggest that athletes generally support anti-doping policies in sport (Dunn et al., 2010; Elbe & Overbye, 2013; Overbye & Wagner, 2014), doping regulations have been found to have negative consequences on athletes (Qvarfordt 2019). From being ostracised for whistleblowing on a doping incident (Working Group 2013), to experiencing intrusiveness in the implemented drug testing regimes, studies have flagged the negative implications of anti-doping policies. There is a need to understand the effectiveness of the policy and its impact on the athletes themselves.

The extant literature reveals that when it comes to doping in sport, there are two main schools of thought: i) those in support of anti-doping regulations and ii) those who claim that medical supervision of certain PEDs in sport should be allowed. The question of legitimacy in the context of elite sport, however, points to other areas of regulatory influence – and it is an area that is critically understudied. To date, most research into stakeholder views on doping in sport have mainly only considered one stakeholder group at a time, with limited comparisons across stakeholder views made in the literature. Thus, the literature lacks a holistic research-based understanding on stakeholder views on the legitimacy of the fight against doping in sport.

Only through considering the views of the stakeholders involved can we establish a stronger ethical basis for controlling drugs in sport (Mazanov 2015), yet the attitudes of many stakeholders including members of the public and stakeholders from different cultural and geographical contexts towards the use of drugs in sport, are generally not well understood (Efverström et al. 2016b; Partridge, Lucke & Hall 2014; Qvarfordt 2019). Despite calls in literature for approaching the topic through the lenses of stakeholder theory and the stakeholder theory of corporate social responsibility (Mazanov 2015), there has been minimal research that has actually explored the issue of doping in sport from multiple stakeholder perspectives across diverse contexts. Our current study takes a step towards bridging this gap and ascertaining varied stakeholders' perspectives.

We contend that in considering varied stakeholder perspectives, we can better come to understand the views of the global sporting community on anti-doping policy. This is consistent with recommendations that one of WADA's priorities over the next few years is to better understand the causes and perspectives of doping behaviour in athletes (Petroczi & Aidman 2010).

Furthermore, while doping in sport continues to gain interest worldwide, no literature to date has investigated cross-cultural perceptions of the legitimacy of anti-doping regulation. Scholars have found that inequities arise when anti-doping policy is implemented across different contexts (Efverström et al. 2016b), suggesting differences in the interpretation and understanding of anti-doping policy across geographical and cultural contexts. This, coupled with the gap in literature on cross-cultural perceptions of different stakeholders on the

matter, helped form the rationale of this research which seeks to explore the beliefs and understandings of doping in sport across different cultural contexts, with particular focus on the views of sport participants in Oceania (specifically, New Zealand, Australia, Papua New Guinea, and the Oceania RADO). Oceania was selected as the study context, given the breadth of cultural, socio-economic and other lifestyle factors that span the region. It was held that this context would be particularly valuable for offering insights into different social, cultural, situational factors and how they impact stakeholders' perspectives of anti-doping practice and policy.

5.0 RESEARCH METHODOLOGY

The following sections will detail the methodology adopted for this research, with specific focus on the research objectives and the research question formulated to address this objective, as well as an overview of the data collection and analytic processes that were followed.

5.1 RESEARCH OBJECTIVES

This research empirically examines how various actors perceive the anti-doping framework with the aim of understanding factors that build positive (or negative) perceptions of the legitimacy of anti-doping policies or procedures. Specifically, the aim of the research was to identify differences in the perceptions of legitimacy based on different stakeholders' role in sport and/or their cultural circumstances within Oceania.

5.2 RESEARCH QUESTION

In alignment with the objectives of the research, the research question of the study is:

- *How do members of the sportsnet perceive the legitimacy of the anti-doping fight?*

5.3 RESEARCH METHODS

In this section, we discuss the methodology used to investigate views about current anti-doping governance and regulation held by individuals from the sporting community across the Oceania region. Currently, anti-doping regulation takes a deterrence-based approach that seeks to change the behaviour of individuals using testing, sanctions, and education (Donovan et al. 2002). Underpinning anti-doping regulation is a commitment to the intrinsic value of sport, which WADA describes as the 'spirit of sport' (WADA 2017). However, support for anti-doping regulations, and for the sporting organisations responsible for anti-doping governance, cannot be taken for granted. Donovan et al. (2002, p. 277) have suggested that several factors influence perceptions of the legitimacy of the current anti-doping model, including:

- Anti-doping laws and regulations are seen as just (i.e., a valid basis for anti-doping laws)
- An appropriate agency for enforcement (i.e., scientific credibility, constitutional or legislative authority)
- 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 that are applied equitably across athletes

5.3.1 SAMPLE

To explore these factors and test whether they apply in cross-cultural and diverse geographic locations, we conducted qualitative interviews with individuals from the sporting

community across the Oceania region (the sportsnet). The interviews sought to gain insight into how participants perceive the legitimacy of sporting organisations' anti-doping efforts and of WADA, the WADC, and the anti-doping governance framework more broadly. Participants included athletes, support personnel, and sporting administrators, as detailed in Table 5.3. To ensure participant confidentiality, and as some participants were from the same country, sporting organisation or type of sport, the total number of participants interviewed overall is provided.

Table 5.3: Interview Participants (all categories), Countries and Type of Sport

Participant	Total	Number of countries	Sports and Organisations
Athlete	6	5	Combat, strength and endurance
Support Personnel	10	7	National level and sport coaches, combat, strength, endurance, target, ball sports.
Administration	17	10	Combat, strength, endurance, target, ball sports. NADO and NOC members and senior officials.
Total	33		

All participants were asked about their views of the types of activities that form the anti-doping regulatory context. Open-ended and semi-structured interview questions were used across key topic areas, such as anti-doping education, the role of WADA, the WADC, testing and sanctions. Data collection was ceased when data saturation occurred – that is, when the information being collected from each interview becomes confirmatory to the already identified themes and no new data is being generated (Braun & Clarke 2021a).

5.3.2 DATA COLLECTION

Data were collected using qualitative semi-structured in-depth interviews. In-depth interviews are primarily used in situations where the researcher seeks to capture people's individual perceptions. The value of qualitative interviews to operationalise a research hypothesis and ask deeper questions is demonstrated in the literature. For example, Numerato (2009) used ethnographic interviews to explore the significance of sailing as a social practice in the post-Communist Czech Republic, and later to explore match-fixing and corruption (Numerato, 2016). Using qualitative interviews, Mugford et al. (1999) explored athletes' perceptions of the effectiveness of sporting organisations' responses to doping based on earlier work of Donovan and Egger, who used a knowledge-attitude-behaviour (KAB) model that examined several factors including perceptions of legitimacy of anti-doping framework (rules, bans, tests). The focus of Mugford et al.'s (1999) research was on evaluating a doping deterrence program. In contrast, this research project used qualitative interviews to gain insight into the views of the legitimacy of the anti-doping fight from athletes, support personnel and sporting administrators across the sportsnet. Overbye (2016) used a mixed survey / qualitative design to explore Danish athlete thoughts on doping. Pioneering work in the area was undertaken by Mazanov et al. (2015), who explored

the lived experiences of athlete support personnel in Australia – finding that while there was broad adherence to anti-doping ideals, particular problems (process, whereabouts, and equity) meant that some questioned the effectiveness, and thus the legitimacy, of anti-doping measures. Similarly, Gleaves & Christiansen (2019) provide a meta-review of athlete attitudes to anti-doping, finding that while athletes are generally supportive of the current anti-doping system, there are concerns about the consistent and equitable application of rules, due process, and opportunities for athletes to participate in the decision-making process.

A semi-structured interview guide was developed, based on the literature review on anti-doping regulation and attitudes to anti-doping regulation in sport. In line with best practice interviewing, the interviewers used the semi-structured interview guide to prompt data collection (Hennink, Hutter & Bailey 2011). Questions were asked in an open and empathic way and probes were used by the interviewers to motivate the interviewee to elaborate on certain aspects of their responses. The interview guide is included for reference in Appendix A, noting that questions were amended and tailored to the role and experiences of each of the individuals interviewed.

The target population for this study included athletes, support personnel, and administrators across Oceania. Our recruitment focus was on Olympic sports, complemented by professional sporting codes, as these are also subject to the WADC. We used a range of recruitment approaches to identify potential participant groups and to source interviews within those groups. Some participants were sourced via the research team's networks, as well as through snow-ball referrals and unsolicited approaches to sporting organisations and athletes via email. We used the generic contact details on websites related to sports and sporting organisations and associations in Oceania and sent individual email invitations to these initial contacts. Once responses were received, interviews were conducted via Zoom, or Microsoft Teams, with only one interview conducted in person. The original intention was to interview all participants in person; however, the emergence of Covid-19 meant that data collection was conducted online. Where necessary, follow-up emails were sent to secure more participants across a wider range of sports. Where possible, interviews were conducted by two members of the research team, although some were attended by only one research team member. Participation in interviews was voluntary and, with participant consent, interviews were audio recorded. Interviews were transcribed by the research team using the Zoom transcription tool or the online transcription tool Transcribe by Wreally. All transcriptions were checked against the audio recording for accuracy and de-identified by the research team. The project was conducted with ethics approval granted by the Human Research Ethics Advisory Panel A: UNSW Canberra (HC17431). In line with that approval all quotes used in this report have been de-identified to ensure anonymity.

The shift to online interviews only because of the Covid-19 pandemic meant the research team had to reflect on the challenges to data quality this presented. In line with Boland et al (2021) we found that technical issues were a key barrier. This was exacerbated by the patchy and unreliable internet services that operate across the Oceania region. We used

Howlett (2021) and Roberts et al (2021) to prompt our reflections on how we might engage our participants and what challenges to the research may occur as a result of technologically mediated interviews as opposed to face-to-face interactions. While there is some initial research indicating that the quality of data generated via online interviews is weaker (Reñosa et al., 2021; Krouwel et al., 2021), on reflecting between this project and the team's previous research on athletes and support personnel we did not find any differences in terms of data volume, quality, or codes.

5.3.3 DATA ANALYSIS

A qualitative, grounded theory approach was used in the research (Grbich, 2007), together with inductive, iterative thematic analysis. Even though not all authors were present for each interview, we used an iterative approach to discuss both the interview process and the transcribed interviews, which enabled us to thematically group the data, as detailed in this report (Flick, 2002; Lieblich et al., 1998). Although we approached the data with a broad framework informed by the existing literature, this was modified with themes as they were identified (Neuendorf, 2017; Stemler, 2001). To do this, we used an inductive analysis (Patton, 2002), that allowed themes to be identified from the data, but through an iterative process (Braun & Clarke, 2021b; Srivastava & Hopwood, 2009; Trainor & Bundon, 2020). This type of iterative process involves multiple (re)interpretations that help to develop a stable understanding of the core "themes". Following Braun and Clarke (2006, 2013) thematic analysis was carried out in the following steps:

- i) Transcription of data
- ii) Coding aspects of the data in a systematic manner and collating data relevant to each code
- iii) Collating identified codes into preliminary themes
- iv) Reviewing themes across the data set
- v) Undertaking ongoing analysis to refine and define themes
- vi) Selecting extracts that best illustrate the themes

The strength of this approach to analysis of interview data is that it provides a rich description of the data set (Braun & Clarke 2006). More importantly, this type of grounded research approach is crucial to give voice to the participants and allow them to frame the problem/issue using their own words and understanding. In fact, for this research, participants are *interlocutors* who help the researcher understand their worlds. This is an accepted approach in anthropological research and has proven advantageous in empirical studies focusing on the relationships between culture, science, and law in action (e.g., Montoya, 2011). While qualitative research that relies on interviews and discourse analysis can never be objective (e.g., Hardcastle & Hagger, 2011; Llosa & Tittler, 1990), this grounded, inductive and iterative process allowed us to make robust claims about the validity of the data and assess our hypotheses against the participants' lived experiences. In this case, the overarching focus of the analysis was based on the key research question:

- *How do members of the sportsnet perceive the legitimacy of the anti-doping fight?*

A key point to note here is that perceptions of legitimacy of the anti-doping fight imply that, in some form, there is an 'acceptance of anti-doping'. At its simplest, the acceptance of the anti-doping regime is the willingness of a person (and the organisations they are part of) to comply with and support WADA, the WADC, their NADO and their sport codes and policies on doping. This willingness to accept is affected by several factors, as noted above, but we explored whether that willingness to comply was related to individuals' perception of doping in terms of the consequences for them and their sport. This view would be based on their perception of why anti-doping is needed, which is a combination of rules of the game, whether it's perceived as bad for the sport, health impacts, funding and fairness, and consequences of not having anti-doping policies. This acceptance (or not) is then driven by their "motivational posture" (Braithwaite, 2011; Braithwaite & Braithwaite, 2001; Braithwaite et al., 1994), which is a long-established way of understanding how/why people comply with regulation (e.g., tax laws, OHS rules). In short, people can be resistant, disengaged, accommodating, or be captured with the regulatory model. The motivational posture model gives several well validated concepts to frame the type of engagement people feel with anti-doping. We expect to find people that fit into each category, and their varying types of compliance (or rejection) will be moulded on the perception of why anti-doping is needed.

To further consider the implications for anti-doping governance, this main research question was underpinned by three hypotheses. First, we anticipated that perceptions of the legitimacy of the anti-doping fight would, in turn, influence acceptance of and thus compliance with anti-doping regulations. The levels or dimensions of acceptance could range from active support through to passive compliance. Drawing on Donovan et al. (2002), we hypothesised that a range of factors would influence acceptance of anti-doping and the anti-doping governance framework:

- a. the individual's position in anti-doping networks (e.g., athlete, administrator, coach)
- b. the "culture" of the sport in which the individual is most invested as a firsthand participant
- c. Socio-cultural values (e.g., communal, religious, etc.)

Second, we anticipated that participants' perceptions of the legitimacy of the anti-doping fight, and acceptance of the anti-doping regulatory framework would be made up of their:

- a. view of the fairness of the anti-doping framework
- b. belief in the management of anti-doping testing and education via WADA, RADOs, and NADOs
- c. belief in the outcomes of anti-doping activities, specifically the effectiveness of deterrence and punishment
- d. perceptions of the cost of regulatory compliance versus the damage doping in sport does
- e. degree of support, which first depends on acceptance - support relies on the internalisation of the values of drug-free sport

Third, we anticipated that there would be cultural variations on the question of legitimacy, support and acceptance of anti-doping regulation and governance.

The value of grounded theory with an inductive and iterative analysis, described above, is that, using semi-structured interview questions, we were able to explore not only the cross-cultural differences in terms of perceptions of legitimacy of the current anti-doping framework, as demonstrated in the sporting contexts, but also a detailed consideration of the factors that influence acceptance of anti-doping. The next section discusses the themes identified in the data in response to the primary research question, and the extent to which the data supports, or refutes, the hypotheses noted above.

6.0 RESEARCH FINDINGS

Participants from all stakeholder groups expressed strong views about the importance of clean sport and generally positive perceptions of the legitimacy of the current anti-doping regulatory framework. However, most felt that the prevalence of doping in the Oceania region is low and, if it occurs at all, would be inadvertent. Nevertheless, five key areas and associated factors that could negatively affect perceptions of the legitimacy of anti-doping governance and the organisations responsible for administering the rules are identified. These are outlined here, followed by an in-depth discussion of those themes drawing on participant comments. The key themes we identified from the data are:

1. Perceptions of doping prevalence
2. Anti-doping education
3. Anti-Doping Support in the Oceania Region
4. Anti-doping rules – impediments to compliance
5. Perceptions of WADA

Doping and using substances, such as supplements, to enhance performance is not perceived to be prevalent in the Oceania region. We do not make any claims about the veracity of this assumption; however, it is a widely held view and has implications for the implementation anti-doping regulations, and the educational framework to support them. The view that doping prevalence is low means that sporting organisations and administrators tended to take a more holistic approach that incorporated broader issues of athlete welfare as well as anti-doping requirements into their educational initiatives. In particular, a central and recurring issue highlighted by participants is the need for an anti-doping system with a tailored approach that is cognisant of, and relevant to, the diverse cultural context of the Oceania region. This tailored approach must be applied to educational material, resources and information as well as the testing process. With the prevalence of doping perceived to be low, participants indicated that such a culturally tailored strategy needed to take a more holistic perspective to consider issues that impact individuals in the sportsnet over and above anti-doping requirements. Stakeholders support anti-doping policies and current regulations but contend that a regulatory approach with a narrow anti-doping focus means that other areas in which athletes require support, such as protecting athletes from injury, preventing physical abuse, mental health support, corruption and gambling, are neglected. For many participants, these issues are seen as equally, if not a more significant threat to sport, athletes and others in the sportsnet than doping.

6.1 PERCEPTIONS OF DOPING PREVALENCE

All participants interviewed emphasised that, to their knowledge, it was rare to know of athletes from Pacific Island areas who discuss or who have access to banned substances. Consequently, it was widely believed that doping was not a major threat among athletes in the region, and any infringements that did occur would be accidental.

... and I think, quite frankly, our guys are a lot more concerned about, you know, building themselves naturally. I don't see much of our guys, sort of talking about how we can illegally

boost the athletes and that kind of stuff. So, unless it was something that was done accidentally that would be, then, the issue. But, yeah, for us it's highly frowned upon and discouraged at any time.

Participants generally felt that doping was not occurring in the region because it was unlikely that athletes would be able to access prohibited substances or supplements that might be readily accessible in other nations.

Despite the view that doping was not an issue, there were recurring expressions of concern about contaminated supplements, which participants felt contributed to why many athletes choose to avoid taking them. One reason for this is that the cost of prohibited substances or supplements such as protein powder and creatine, puts them out of reach for athletes in the Oceania region.

Now, I don't trust supplements of any kind, okay. The only supplement I trust is a thing called food.

So, no then I think one of the best things about being in the Islands is access to those things is, I mean, it's expensive to get formulas, it's expensive to get protein powders, it's expensive to get these things. So, for our average players, it's just not attainable ... they all work on eating healthily and keeping fit. I do think that money and the lack of money in the islands is probably beneficial to not having access to these things.

There was consensus across all participant groups that doping is not occurring in the Oceania region. Any positive results that may occur are viewed as due to inadvertent, or accidental use. There are a range of factors that may contribute to these types of events, which we discuss in later sections of this report.

6.1.1 SUPPLEMENT USE AND ACCESSIBILITY

Across Oceania, there is an increasing trend to promote a healthy diet and nutrition, as opposed to turning to supplements to enhance performance. This focus on clean eating and mindful consumption is also considered to reduce concern about anti-doping processes and contribute to perceptions of low doping prevalence, because athletes feel that they are successful in avoiding anything that may put them at risk of returning a positive test.

... for us in the Pacific... a lot of our athletes are not into those supplements where they need to go ahead and perform in an elite level, we're still sort of trying to get there. So, our nutritional focus is really more about better nutrition, eating right foods for the right time, sort of timing your diet. But in the context of supplements that would come up as a positive test - I have never experienced that in the Pacific in general.

[Supplements are] kind of expensive and I kind of think that I feel like I'm doing well with just eating real food. I don't really understand the need, so much. Like, I think if you can just feed your body with good real food, I don't really see the point in giving your body extra stuff that it doesn't need. Probably the closest to a supplement I have is electrolytes... I'm kind of proud of myself for just building myself naturally. I would prefer to get to wherever I get knowing that I've done it all myself, rather than to use something and know that I'll need to depend on that or that I have to have that to be where I am.

Concerns surrounding contaminated supplements were recurrent, hence why many participants choose to avoid taking supplements. One participant, however, recommended a solution to the problem of contamination:

It'd be great if WADA could come up with a protein supplement or something like that where you could say 'all right, this is safe'. All they tell you is 'don't take supplements because they're high risk.

Although improving performance is a key concern for athletes in the region, as elsewhere, participants described how this was achieved through good nutrition and healthy practices. However, for athletes in the Oceania region, high costs of fuelling their performance not only means that supplements or prohibited substances, are out of reach, but that access to quality nutrition is also problematic.

Nutrition is a big issue, you know, because they can't afford it. So now, you know, that's the other issue as well with supplements. It doesn't really happen too much because it's very rare that they can actually afford to buy supplements. So, it's literally what they can afford to eat, and a lot of the athletes do not have proper nutrition, and that's a big area that we need to work on.

I kind of think it's a little bit of the lifestyle as well. It's not really, I can't comment too much because obviously I've been in [country B] for quite a while now. But I know from friends, it's also like taking supplements ... it's not really something that you've really been brought up with. Like we go back to things being expensive and things being even hard to get in the [regions]. Like, it's not that easy to just get some protein, it's kind of you get some protein chewy, have some fish, you know, it's kind of different. Yeah, so it's a little bit cultural as well, but information I feel like is hard to come by and not always really the main priority either.

The last comment also highlights how issues around information and education, aligned with the cultural contexts of the region (see section 6.2), may also play a role in perceptions that doping prevalence is low. More importantly, however, participant comments show that while clean sport and a sound anti-doping regulatory framework are important, issues around athlete welfare, sourcing and providing the nutrition needed to sustain performance are a more significant issue across the sportsnet. As this participant went on to say:

We were talking about a program last year, but I'm not sure what's happened. It seems to have dropped off a bit. But nutrition is a real issue for those athletes who were trying to push up, you know, into the Olympics and stuff like that with their teams. They need support, and they need support on a sort of an Olympic cycle basis, not just the six weeks before the competition, and that's not really readily available. Which again is an issue. It's an affordability thing. It's literally an affordability problem.

As this indicative comment shows, resourcing and support for athletes, not limited to considerations about anti-doping, are some of the pressing issues of concern across the sportsnet in the Oceania region.

6.1.2 LEVEL OF COMPETITION

As well as issues complicating access to good nutrition to support performance, this indicative comment (above) emphasises the barrier presented by a lack of resources and facilities. This not only applies to anti-doping education, but also to reaching, and sustaining, Olympic, levels of performance. Other participants also felt that the barriers to performance presented by a lack of technical (sporting infrastructure and facilities) or support for athletes' physical preparation (e.g., accredited coaches, medical / physio support) were so significant that doping was not seen as something that would make a difference to performance. For this reason, they felt that athletes in the Oceania region are unlikely to be 'tempted by doping':

I think we don't have a high enough level to be tempted by doping because we have already so much to improve for technical side and physical preparation that I don't think doping will make a big difference.

Yeah, it's a combination of us being a Pacific Island, so we're not really, it's not part of our culture. I don't know if that's the right word. It's just harder to get. Affordability is another issue ... most of my athletes can't even afford sneakers, so to purchase supplements, you know? But it's definitely something they should know about because behind closed doors you don't know what anybody's doing.

Like discussions around a culturally tailored anti-doping education program, participants discussed the way that culture played a role in keeping doping prevalence low. Participants acknowledged that this was a complex and multifaceted issue, noting that while culture created a disincentive to dope, this sits in tension with other pressures that, for some, may incentivise doping. Notwithstanding this point, which we discuss shortly, participants pointed out that the pressures faced by athletes in the Pacific Islands differed from the types of pressures athletes confront in larger countries such as Australia and New Zealand. In the larger countries, athletes face performance pressures, such as improvements in terms of endurance and a culture of 'being the best'. For example:

We did a philosophy unit and I went like "oh, winning is not everything" but it's portrayed as everything in our sport and it's definitely, I think detrimental to people's, perhaps, wellbeing ... here in Australia winning in an Olympic sport is valued more. Like, your performance determines your worth within the club.

I feel like in terms of culture ... I mean there's a lot more of a family sort of base to it. It's like because it's so small it's the whole country backing you and it's the coolest feeling. Like, it's more than just you, it's putting [country A] on the map ... I kind of feel, and compared to like some of the [country B] athletes I know, [country B] I feel has quite a winning culture, it's like if you're not winning you kind of aren't that important ... other countries have more people to choose from, they've more competition, they have more facilities and that's not really an excuse, I still think that we can do it, it's just kind of like for me representing [country A] it's more of a family. Then you go overseas and it kind of feels like a little bit more money based and celebrity based like it's a bit more status ... But, although I feel like if I did win that would be, I would be the first famous person [in the region]. I mean it's a bit of fun, there's similarities along with all of them, but it definitely does change, I feel like when you get to an international level it's a little bit less family, it's a little bit more people are out for themselves.

Some participants felt that doping prevalence was low, across the Oceania region, because athletes from these nations were not as heavily represented in high-level international competitions and were primarily amateur, unpaid athletes. This meant that performance pressure, and associated financial incentives associated with high-level competition were not factors that might incentivise doping behaviour.

Yeah, I think also Oceania, you have a small catchment of athletes, elite athletes, and so there's not too much pressure there to compete other than one or two others and I guess with the risk of attempting the dope is very low, because the outcomes that come with it, it's not worth what we're trying to achieve here in the small islands. I guess ethically, that's why people don't do it.

... we don't really have a lot of people in our country involved in doping, because, I think, the reason being that, you know, in many instances we don't really take part in, one or two international competitions, like the [Games] and the Commonwealth Games, Olympic Games ... most of the athletes are all amateur, at least they are not paid for their participation. So, really, there's not much doping involved in our athletes ... from past experience, we have not seen any of our athletes been disqualified for doping. They've been able to qualify to various competitions.

There's no pressure whatsoever. Part of it's because of the culture within the islands, and the other part is that it's just not at the advanced level. So, there's not ... you don't look for a career in [sport A], they just do not have the base numbers of [athletes] or the local infrastructure like they do have for [sport B] or [sport C]. So, [sport C] is a bit different, you can see that sport you've got [country A] and [country D] secondary schools looking for athletes from the Pacific nations to come over for a few years and that's potentially where there could be issues on the doping side of things, but not for [sport A], the numbers are just not there.

Participant comments emphasised that the resource constraints and associated limitations on being able to support athletes in international or Olympic level competitions, which contributes to perceptions of low doping prevalence. Added to this, the cultural context and influence of strong cultural norms also play a part in perceptions of doping prevalence, or that may influence doping behaviour, either positively or negatively.

6.1.3 CULTURAL AND FINANCIAL INCENTIVES

Whilst participants generally felt that the performance pressure did not present an incentive to dope in the same way as higher-income, Western nations, the cultural context of the Island nations sees performance pressure manifest in different ways. In particular, elite athletes are embedded in a cultural context that sees elite sporting success as a high-status activity, including as a way to create a better life and pressure to care for family.

Participants discussed the way that, in many of the Pacific Islands, sport is seen as “a way out”, a way to create a better life for athletes and their families.

Look, in [country] sport's often just the pathway out ... quite frankly. Particularly [sport], it's regarded as a pathway out. It's a recognized pathway and a lot of young [country] men see that as their best hope of getting into a career that will sort of lead to some wealth and stability for their family.

Elite sporting success is also perceived as a high-status activity, which attaches not only to the athlete but also to their family and wider community, as one participant noted:

I have to say this right up front, is that sport is seen in this country as a means to advancement. So, for example, [sport B] of course, you know, if you can get into the national team and then you are achieving something. Sports outside of that is not seen any other way. So, every time you join a sporting federation and you train and you work towards something, it's to, in most cases here, for advancement, advancement of education, advancement of your status in the country, and what it can bring towards you. Secondly to that, I would say it's about country pride, about national pride and doing something to be seen for your country, for yourself. And then the third one, it would be about respect.

This can create pressure for athletes and could incentivise doping to enhance performance, which in turn would increase their chance of securing financial stability, to care for themselves and to fulfil family obligations.

I had a discussion with a doping control officer on this particular... and she said to me that if you were to visit the places where these girls come from, where really, you know, the aim in life is to get married and there's nothing else, she said you could understand perhaps why they do ... she goes "it's not right but you can understand perhaps why they do this fast track, 'take what I can because that means I'm going to be rewarded financially'".

Prioritising commitment to family in island nations is important, and there is a strong cultural expectation of remittances and 'sharing' of success. Financial rewards for elite athletes may be a motivation to dope to enhance performance; hence increasing chances of securing financial stability to care for themselves and their family. This issue highlights the need, not only for stakeholders, but also for family and communities to be educated on the dangers and consequences of doping in sport.

However, there were diverse views and not all participants agreed that sport is always perceived as a career opportunity. Strongly held cultural norms about family and a commitment to caring responsibilities means that sport may not always be perceived as a career option, particularly for women and girls.

When we talk about the Islands because they live, the culture is different. So, once you reach a certain age and unless you're a really go, you know, sort of person, then, you know, your job is pretty much look after the family, look after the extended family. They live in intergenerational things. So, you might have three generations, literally living in one house and that's really extended, could be 20 to 30 people in a home and unlike us where, you know, your kids have a bedroom and you have a bedroom. There, it could be mum and dad, grandpa, grandpa-, anybody, under the age of 10 or 12, or 15 - they all sleep in the lounge room lined up from the door, right through. So, that's how it is.

I think the other thing is, in terms of culture, I think how internally our relationships are within our families and culture is very, very different as I'm sure it is everywhere else. So, for us sport isn't a priority in any household, maybe up until recently ... and how it's been really seen out there something really great ... but of course I struggled with the same thing ... always family and education first. So when you're trying to sneak your sport in there it's not really received well ...

Despite this diversity of views, participants were generally in consensus that cultural norms around the shame and ostracism that athletes would encounter if they received an ADRV meant that doping would be unlikely. The widely held view amongst participants is that doping prevalence was perceived to be low, if occurring at all, due to significant shame that would attach to an athlete who was found to have doped.

And also, our girls still go to church and still active within their church communities. Once again, if you're an elder in a church and you've just tested positive for drugs and whole world knows about it, everyone in the country knows about it, just the shame attached to why don't you listen to God?

Loss of the opportunity and to travel, pride in the sport and how much time that they, or their families have put in - their financial loss. All of those things. So, the Islands that comes down to shame. Shame is a big deal and the shame of not being involved, or being publicly revealed to have been using, something like that, regardless of what it was because even marijuana in [country] is still illegal. So, marijuana use, illegal, there's ice ... illegal and the stigma attached to drug use is massive.

Participants also indicated that the strong cultural norms that prioritise community or family membership and create strong social bonds also played a role in discouraging doping behaviour. These strong social bonds are particularly evident in team sports that demand and foster trust between team members, as well as an expectation and reliance that everyone on the team will follow the rules. This was described by participants as a strong motivator for athletes to stay clean, as one participant suggested: "if one of our players was to come up and fail, it affects the whole team." There are also implications here for the WADA and anti-doping governance, as this participant went on to suggest that the WADA should do more to promote the idea that one athlete's decision to dope is a failure for the entire team as encouragement for athletes to avoid PEDs. Taking a more team focused and social bonds approach to deterrence is likely to have good traction in Oceania due to overarching cultural rules regarding the primacy of the group and community membership.

6.1.4 RECREATIONAL DRUG USE

Participants generally felt that doping was not a pressing issue in the region, with more significant concerns raised over the prevalence of recreational drug use among athletes. Some participant comments emphasised strong cultural norms around shame and stigma, and the potential for doping to reflect badly at the national level. For example:

... we were not worried about doping in terms of enhancing drugs, performance enhancing drugs, but we were concerned about the use of other recreational drugs and athletes, whether they should be allowed to go and represent our country on an international stage and have the potential to bring the country into disrepute, or our sport into disrepute.

I think, for most guys here, if I could be quite frank, you know, they're more the fear of taking drugs, like marijuana is probably more at the forefront of their mind as an athlete, as opposed to protein powder after the heavy weight session.

Marijuana is a lot more available here than ever used to be. It's supposedly highly illegal, but it's becoming that the way that marijuana has infiltrated its way into the society here, it's a

lot bigger and brighter than it ever was - and probably more accessible. I have one friend whose son has been dabbling in it, and another member of the group that's been dabbling in it, but they've both been sort of pulled out and they've both been, by their, by their families not by the Federation at this stage. It wasn't really at Federation level.

A culture of alcohol and drug consumption among athletes was also identified as a problem for some nations:

I think it's more than recreational stuff. Obviously, the doping and the kinda like when you test positive for marijuana and stuff like that, that's obviously, and in [country] we have a really bad culture of that. So, our drink culture and our drug culture is quite bad, especially in athletes. So, I feel like we're kind of a bit more relaxed on that side mainly because of our culture. But then when you get to international competitions and we get busted for it, because obviously the rest of the world isn't like us. We shouldn't be, that's bad on our part.

Yeah, because I've definitely seen people who, because obviously, I actually organised our [sporting competition] last year and I saw quite a few people who tested positive for [stuff that they shouldn't have tested positive for] but because it was seen as like, oh, it's a teenager trying out recreational drugs, we let it slide. But if they've done that an international competition, I think unfortunately because we passed that and we didn't tell them like "that's bad you shouldn't be doing that", then they've gone to international competition, they've done that and they've been busted. So, I feel like our education, or educating them on what they should or shouldn't be doing, may play a part as well.

There are implications for anti-doping governance frameworks here. Some participants discussed the way that local athletes, who may test positive for recreational substances at home but not be penalised, would then face harsher penalties should they test positive for recreational use in international competitions.

Obviously, the doping and the kinda like when you test positive for marijuana and stuff like that, that's obviously, and in [country] we have a really bad culture of that. So, our drink culture and our drug culture is quite bad, especially in athletes. So, I feel like we're kind of a bit more relaxed on that side mainly because of our culture. But then when you get to international competitions and we get busted for it, because obviously the rest of the world isn't like us. We shouldn't be, that's bad on our part.

This emphasises the importance of a more tailored anti-doping education strategy that acknowledges the cultural and social context that are part of athletes' everyday lives in the Oceania region. As well as including a focus on recreational drug use, this should recognise the important role that some cultural practices may play and the tensions that can result for athletes' compliance with anti-doping rules and regulations, as stipulated in the Prohibited List and the WADC.

Across the participant groups, doping in the Pacific Islands is perceived to be less prevalent and less of an issue mainly due to accessibility as well as strongly held cultural values and norms. However, this does not mean that a robust anti-doping framework is not seen to be important for the region, or that support for athletes to understand and avoid ADRVs is not valued or provided. Rather, this emphasises the need for anti-doping education, which participants also stressed as a high priority and an area requiring some attention. For example, one participant believed athletes from larger countries, such as New Zealand and

Australia, are less easily coerced into taking performance enhancing substances, whereas athletes in the Pacific Islands are more easily coerced due to a lack of understanding surrounding the severity of consequences. We discuss participants views on anti-doping education in the next section.

6.2 ANTI-DOPING EDUCATION

The WADA describes education as a “core component of any anti-doping program,” and advocates a holistic approach that incorporates athletes, their families, support personnel and coaches, as well as personnel working in Anti-Doping Organizations (WADA Education and Training, State of the Tropics, 2021; n/d-b). Education is defined in the WADC as: “to raise awareness, inform, communicate, to instil values, develop life skills and decision-making capability to prevent intentional and unintentional anti-doping rule violations” (WADA Education and Training, n/d-b). To this end, the first International Standard for Education (ISE) was developed in consultation with stakeholders and came into force on 1 January 2021 (WADA Education and Training, n/d-b). Adopting the ISE is a mandatory element of the World Anti-Doping Program, and has three main objectives:

1. Establish mandatory standards which support *Signatories* in the planning, implementation, monitoring and evaluation of effective *Education Programs* as stipulated in *Code Article 18*
2. Define terminology in the Education field, and provide clarity on roles and responsibilities for all *Signatories* responsible for planning, implementing, monitoring and evaluating Education Programs
3. Help *Signatories* maximize the use of their resources by:
 - a) Requiring *Signatories* to establish an Education Pool that shall at a minimum, include Athletes in the Registered Testing Pool and Athletes returning from a sanction
 - b) Encouraging *Signatories* to cooperate with others and coordinate their education activities to minimize duplication
 - c) Encouraging *Signatories* to consider the benefits of educating a wider population through Values-Based Education programs to instil the spirit of sport and foster a clean sport environment
 - d) Encouraging *Signatories* to engage and leverage the resources and expertise of others, including governments, researchers and educational institutions (WADA ISE, 2021b, p. 4)

With education, underpinned by formal rules and requirements, an integral part of WADA’s anti-doping governance framework – including evaluation of educational programs, it is relevant to consider the views of participants from Oceania about anti-doping education.

The ISE came into force after data collection for this project had commenced and was nearing completion. Despite this, participant comments highlight some key areas that require attention, and that are relevant to WADA’s ISE objectives and to support sporting organisations and nations in Oceania inform and educate their sporting populations. Some key questions to be addressed here include whether athletes, and other individuals in the

sportsnet, have knowledge about anti-doping rules or the overarching governance framework that is responsible for maintaining clean sport, including knowledge about WADA and the WADC. Learning more about this then leads to a consideration of where and how they source such information, and any barriers or impediments to anti-doping education, which is a key theme as described by our participants. We first discuss awareness or knowledge of the broader anti-doping governance framework and anti-doping rules before moving to consider the gaps, or barriers identified in the data.

Generally, most participants from all stakeholder groups indicated that they had some awareness of WADA and anti-doping rules and had received, or are aware of, educational initiatives underpinned by a commitment to 'clean sport.' Some participants had a detailed understanding of the regulatory context, while for others their knowledge was less well formed. For example:

Look, it is very highly regulated and that regulation really starts with the World Anti-Doping Code that's established and maintained by the World Anti-Doping Agency. That then flows through to a national level. So here in [country], we have the [anti-doping strategy], and then obviously [NADO] is a signatory to the World Anti-Doping Code ... Then the national sporting organisations ... have their own anti-doping policies which are required to be compliant in two directions ... So WADA's got that sort of three-tiered framework with the Code, then the mandatory standards, and then the guidelines for best practice.

Most of our athletes who participate regionally and internationally are very familiar with the process in competition, as well as out of competition testing ... We have a WADA group in [country] ... I am not familiar with the other groups ... So, I know [country] has a commission and I'm sure that other countries have a commission, I'm just not familiar enough to say "yes, they do have one". I'm pretty sure it's part of the Oceania National Olympic Committee process that we have to have.

So, my experience with the anti-doping is not really that much ... we have a general understanding of what we need to do for anti-doping ... our obligation to carry out everything that is required by the Oceania Regional Anti-Doping.

Participants' comments indicate that there is a broad awareness of the anti-doping regulatory framework, anti-doping requirements and process in the Oceania region. Most administrators or coaches interviewed were aware of and understood anti-doping processes and felt that both support and anti-doping education are readily available to athletes. In contrast, athletes' were more likely to believe that support and anti-doping education is lacking, and their knowledge of the rules is more limited, with some unaware of central elements of the framework, such as the Strict Liability principle. This dichotomy may be, in part, because athletes report not being provided with the necessary guidance on where or how to find support. Notwithstanding this point, all participant groups identified athletes' lack of knowledge of anti-doping rules as a risk, despite their exposure to anti-doping education. This is particularly the case for testing, with participants indicating that athletes do not learn about this unless they reach the elite level of competition or travelled to international championships or competitions.

There are a range of elements that participants indicated prevent, or limit, the efficacy of anti-doping education and the capacity of sporting organisations to align with the mandatory elements of the ISE, as noted above. As well as cultural mainstreaming other barriers in relation to anti-doping education include limitations in delivery of educational material or resources due to financial, budgetary constraints, as well as geographical location and internet access. These barriers are discussed in detail in the next section.

6.2.1 CULTURAL MAINSTREAMING

Cultural mainstreaming is a significant barrier to anti-doping education, with a focus on language barriers and access to culturally relevant resources, as well as in relation to anti-doping rules and testing. We discuss cultural mainstreaming and anti-doping testing and rules in section 6.4, but here we focus on anti-doping education.

A widely held view across all stakeholder groups is that to enhance perceptions of WADA as an effective, global, regulatory body, anti-doping educational materials and other relevant information must be tailored to the country or region, as there is currently a cultural disconnect. As this indicative comment reveals:

Again, I think it's just the lack of knowledge and education on a lot of things, like again here, our culture plays a big role in that and I think what we try and do is try and take something from, of course, the bigger countries and put it on us here but really it's difficult for us because we're not really the same, I think, the understanding isn't there first but also because of the lack of knowledge and awareness ...

Although participants agreed that education is being delivered to athletes, existing materials that are sourced through ORADO or the WADA website often do not consider cross-cultural perspectives, or the unique circumstances of athletes across Oceania. Materials that fail to consider cross-cultural perspectives typically are not perceived as relevant by their intended audience, which means that athletes, and others for whom anti-doping education is important, fail to engage with the information provided. For all participants, the need for culturally tailored educational material, with more engaging content and modes of delivery that recognise and are designed to engage with diverse learning styles of nations in the Oceania region were cited as significant barriers to anti-doping education.

A key barrier identified by participants is that educational materials supplied by ORADO, NADOs and Federations, or available on the WADA website, are primarily in English. For example, the ISE is currently available for download from WADA only in English, French, Russian and Spanish (WADA ISE Resource description, 2021a). Provision of educational material in English (the language most mentioned by our participants), creates a language barrier that manifests in several ways. From an educational perspective, language barriers make comprehension of important information difficult for athletes and support personnel for whom English is not their first, or primary, language.

I think the staff that gives us the presentation does a wonderful job at dumbing it down for them. I don't mean that in a bad way, just ... we have a language barrier, so some of our children aren't necessarily proficient [in] English ...

So, we're all doing the courses online. I think they're fantastic, but I also think they might be geared a little bit towards more educated minds, somebody that may not have such a good understanding or comprehension of English, and here it's either English, French or [language], and I know that French is available, but there's no [language] available on the anti-doping website.

Low levels of general education in some Pacific Islands means that, even if individuals have a basic level of proficiency in English, or other languages, comprehension of complex anti-doping information is low. This view was widely held by participants, including those who made positive comments about the information and support they received from Oceania RADO (ORADO) or resources available through the WADA website.

I'm not really sure on the education side of things because, you know, most of the time our athletes, most of them are grassroots people, they are not well-educated people, so they would not be able to go through any educational programs, in order for them to be educated the importance of doping. In our school curriculum too, we don't have those kinds of arrangements. Sport is not a big activity in the schools as well, so we don't have that arrangement put into place of educational arrangements for doping, anti-doping and stuff like that.

But no, the information is there now, no excuse, doing great, a fantastic job. But again, it comes back to how we translate that so that our athletes in country can understand it, like [respondent 2] was saying most of our athletes are not so academically savvy.

In some Oceania nations, participants indicated that language is not a barrier because “we can say everything in [language] and educate people and then we can also read it in English, so it's not a big issue for us, especially English language ... Everyone is bilingual”. Although reflecting the diversity of views of participants across the region, this view was not widely held, with most participants, across all stakeholder groups, indicating that the lack of information and educational materials in language created obstacles and limited the efficacy of educational programs.

The lack of information and education in language is particularly problematic when trying to convey complex medical terminology, such as about prohibited substances in the WADC. This makes it difficult for athletes and others in the sportsnet to properly identify products to avoid, as these comments show.

I think in our case, all the English documents should be translated. I mean because it's really hard. It's really, really hard for our athletes to understand. To understand especially the technical terms and the wordings that are used ... it's really hard to make the [country's athletes] understand because of the language barrier. Like, you know, to translate it [WADC] into, in our language what kind of things, it's really difficult because we don't have that. I think it's the language, it's, it's quite hard to translate the specific terms into our language to make everyone understand.

We find that language is a big barrier, everything's in English and they're not attune to medical jargon, we have to find easier ways.

Translating information and material into the local language is thus a key area that participants indicate requires a greater investment in both time and resourcing, as we discuss shortly.

Some sporting organisations are providing anti-doping educational material and information. However, this often lacks detail about how to practically apply this information to help athletes understand when, or whether, the product names on complex lists are the same or different to products or substances that may be commonplace in their everyday context. As this comment illustrates:

They do, they send out quite a few, like pieces of information and just like a reminder of rules and that sort of thing, and I kind of go over them but I've got to say, when you read the list of banned substances it kind of doesn't mean a lot to you. It's like a whole lot of long words that just go "okay. All right, and where can I find these things? Like, is this in everyday food or...?" So, I haven't found it, I've got to say I feel like, I mean I have been competing now for four years, internationally, and probably the best thing that I've gotten in terms of like education wise has been at [international championship]. But before that, and even now I don't feel like there's been a lot of support in terms of actually kind of understanding it fully.

Information that is accessible in language and that also provides practical guidance is important so that sporting organisations can effectively support athlete compliance and to avoid unintentional ADRVs.

Finally, language barriers are exacerbated when material for education sessions is provided and delivered in English by individuals who may not have a strong grasp of that language. This, combined with low English literacy skills, not only inhibits audience engagement, but raises the issue of translation difficulties and an associated negative impact on comprehension and understanding. For example:

And the information is getting out, it seems like there's enough information getting out but I don't think it's really at the National Federation level. They'll have workshops at all of our [sport] competitions, where you can send your athletes to go to the workshops. But in many instances, those are pretty much useless because they don't really understand the complexity of the medical terminology and stuff like that ... English is their second language. So, I would say education seminars and stuff like that are somewhat a waste of time when they have big events because nobody really understands, you know, unless you have a good grasp of English and in many instances, the people giving the lectures aren't, English is a second language for them, for their own self, you know?

We do teach, and all those mentors who are here who have been trained to deliver anti-doping courses, some, yes, they have a good command of English, but then, when you have a targeted audience that are just from the outer islands, English is still quite foreign to them, but they understand more in our context in [country language]. Then you've got someone who delivers who can't speak fluent [country language] or some part of [country language], they get confused.

Considerable effort is made by sporting administrators to translate information and provide training sessions in the local language, as this participant indicated:

We do it ourself in [language]. But it's the only way our guys will learn ... we simplify the language, and then we use that to deliver. So, we have, I think, our guys have also had some handouts done in [language] ... the trainings are done in [language] and it just makes it so much easier for the athletes ... It's a bit bloody hard to do that. All those technical terms you wouldn't know what to tell the athletes. We simplify things and say "look these are the". Like, some of the things that we've done is deliver some trainings into the schools, and this was part of our training of the athletes. Trying to translate some of these words that are used often has been an exercise that was very funny, but it was very effective, this translating them. So, we've got our own words for these terms. It's been a good exercise, at least it's helped the athletes to learn some of the terminology that's used in anti-doping and also share that ... Some of the more common drugs. And then, some of the terms used on the kind of doping activities, you know the hormone growth all that kind of stuff. We had to translate them and find some simpler words to use.

As this comment suggests, translation of materials into local language is a complex and time-consuming task, but one that improves audience engagement and comprehension.

Despite this, there are also several issues that can arise and that further emphasise the value of increased support from organisations with higher-level governance responsibilities, such as ORADO or WADA. One is the potential for errors to slip into the translated materials.

Currently we only have our ADRVs in [national language], and that's it. So, that's something. Everything else, we have to translate, depending on the level of the group that we're teaching, most of it has to be taught in [national language]. And then that creates a problem because sometimes things get lost in translation and it's a very difficult thing.

So, it's doing the courses together, I think, and then having somebody sitting there and relaying that information back to them. But, I'm not sure. Like I said we're just sort of getting onto these courses and things. I found them great, our athletes have found them great but that's not accessible, I don't think, to everybody here in [country B].

Further, as these comments suggest, a reliance on others to relay, reinterpret or translate information presents a risk of misinterpretation, or simply that not all details on rules, regulations, testing protocols or prohibited substances are reported. This can place athletes at a higher risk of inadvertent doping and incurring associated penalties, as this participant stated:

The problems as such as the are in [country] with the anti-doping or doping; I don't think a huge, if there is an issue it's usually inadvertent. It's usually not understanding or not knowing what the rules are and that can be athletes and support including medical. They're not always fully aware of what the issues are either. So that's what leads to breaches of the rules or regulations, if you like.

Translating information into the local language raises resourcing issues, both in terms of staff expertise and capacity but also the costs of translation activities, which can place a further strain on already tight administrative budgets. This is particularly the case because overcoming cultural mainstreaming of educational resources extends beyond translating material into the local language. Rather, educational resources and training initiatives must be tailored to account for the different cultural approaches to learning in the Oceania region. Participants noted that information 'flows' in a different way in Pacific Island

nations, and also described the different learning style of athletes in their region, and how taking this into consideration can have an impact on engagement.

We also reckon, because very few of us, very few Pacific Island countries have adopted the Convention [UNESCO International Convention Against Doping in Sport] it's made it slightly more difficult to compare or progress, and meeting the Australian and New Zealand standards are pretty different from the Pacific way of life and culture, and how information flows in the Pacific Island countries.

Well, we provide them with the links to go online, but like I said before, our people are more kinaesthetic and kinaesthetic type learners, whilst they're not very hot on the reading ... I guess maybe if they're going to do anything else is doing the videos properly ... or whatever, of you know, the testing process and that kind of stuff. And that would make, you know, I think that would provide a lot more engagement, a means of engagement because our guys are very visual.

... and maybe even like some, like it would be cool to have almost like weekly videos or something to keep you connected as well. And it's a more visual way of learning which I think a lot of us probably would take in a bit better. And having them more consistently, it's something that you can kind of share with the younger ones as well and explain it better, and also kind of keep you knowing what you have to do, and asking the right questions as well ... Yeah, different means of communication and then being a little bit more consistent as well. More like creating a bit of a culture ... So, like it's out there all the time ...

So, I think the thing is that we need to have bilingual courses as well, or some of the materials, and probably more easier flow charts in terms of learning. I guess it's different for everyone in different environments, but when you come to countries like ours and throughout the Pacific that are isolated and the main language is [language] and not English, it becomes a task for the actual lecturers or mentors. But we're getting there, there's a lot of positivity as well, and probably the messages to be, I think it's our interpretation of how we see it like, "don't do this, don't do that" and you're guaranteed the [regional identity] are going to go and do it, because that's how they think.

When ORADO and NADO go out and do education, they have to find the closest terminology in our language, predominantly the [language]. To make reference to that ... they would also have to find images to show what that substance they have, you know, it would be learning by sight. And yeah, so that's the barriers that we have, especially if we have to go way down to grassroot level, so those entering into sports.

Providing culturally tailored educational programs requires an investment of funds to develop not only the content, but also the expertise and capacity of individuals to deliver the programs. In the Oceania region, the funding and staff to do this are, in many cases, simply not available.

One consequence of a lack of more accessible education and information, both in terms of language and culturally relevant modes of delivery, as raised by participants, is that there tended to be almost a naivety among athletes as to the dangers of doping, or even how to avoid incurring an inadvertent ADRV. In part, this may also be because of the widely held view that doping prevalence in the region is low as discussed in section 6.1. For example:

And I think it's like the culture here, you know, sometimes I don't know if it's just the Pacific Islands but sometimes people are like “oh, something’s wrong with you” and somebody's like “yeah I had the same thing you can take my medication” no, you cannot.

Culturally, they’re probably not aware of it ... here, there’s a lot of athletes when they get injuries and are sick they go off to the local pharmacy here, which is great, they can almost put anything over the counter, but they're not aware of what's actually the substances inside of that medication, it's going into the body, how it’s going to affect their chances of qualification or further down the line ... They're quite unaware of what’s going in to their body.

So, fully aware of drugs in sport, but now it's just been that sort of next level careful in informing the athletes here about what they can and can't take and it's not just a matter of “hey, your buddy gives you a protein shake and you have no idea of what's in it”. So, it's those sorts of things that I think the education for our athletes probably needs to improve a little bit here, is it's knowing what you're taking and having understanding and not just trusting somebody is giving you the right thing.

However, culturally tailored educational initiatives should not only be directed at athletes and support personnel, but also endeavour to counter strong cultural norms that prioritise the influence of the family. Tensions, and the potential for ADRVs can arise because the good intentions of athletes' families to support them in their training may not align with anti-doping regulations.

So, within [country] coaches and families have a large input into the athlete, and their training, what they eat, where they go, what they do. Quite often it's in conflict with each other and ... while we do anti-doping education to our athletes, the general spectrum of educational levels is not there, is not high enough to sometimes understand that a doping infraction can occur as simply as taking a cough medicine ... these are some of the issues that we have here ... is that in the Islands you do tend to self-medicate. They don't necessarily go to the doctor, they can go to any shop here and buy whatever they need ... they can go to the chemists for antibiotics as well as all sorts of other things.

There is a need for anti-doping material to be tailored to be relevant to context of the specific nations in which they are being distributed, including practical application in everyday situations. This type of approach would include providing educational materials and information translated into the local or regional language, and diverse materials designed to suit varying cultural learning styles. This would ensure that content is sufficiently communicated to athletes, and help to aid comprehension of the information presented, which in turn would support compliance.

6.2.2 RESOURCE AND EXPERTISE LIMITATIONS

Participants appreciate the value of education and described a range of strategies used to overcome the challenge presented by language barriers and culturally appropriate approaches to training initiatives, which we discuss shortly. However, implementing these strategies adds a further layer of complexity to their administrative workload, not limited to anti-doping work, and that already experience significant resourcing constraints. In the context of anti-doping work, participants described a lack of capacity with few staff with the expertise to tailor educational materials and training to the local context. Participants in the

Oceania region commented on the lack of individuals with the necessary qualifications or expertise to provide anti-doping education or who were knowledgeable about regulatory framework, including testing protocols. For example:

Another factor is that we have got lack of facilities, a lack of expertise, especially in the areas of experts who know about, or who are experts in testing or who have complete knowledge about the WADA regulations and the [IF] regulations, that's another factor ... Right now, our objective is to get somebody in [country] who has complete understanding about the WADA Codes and the [IF] Anti-Doping Codes.

A lack of expert knowledge about anti-doping rules, in conjunction with a lack of culturally relevant educational materials and modes of delivery or funding to translate those materials, means that athletes, and others in the sportsnet, may not have relevant and up-to-date information. For example, one participant described a situation where, in a smaller nation, coaches and managers often fail to provide sufficient education on testing processes and rule violations to their athletes:

... a lot of things I didn't realise, I found out later on, in terms of when things are in possession or if a coach gives you a certain something at the end of the day it's my responsibility ... if I get sanctioned ... I don't know about everybody else, but for us we really have little knowledge on a lot of these things unless we are lucky enough to go and experience them.

At times sporting organisations in Oceania face the twin dilemma of providing resources to develop their sport, which is perceived as a more pressing concern, with resources for anti-doping education an important, but less, immediate issue.

We are working in the area of promoting anti-doping and its education, but you see, we cannot just promote a code anyhow, we need experts who need to do that. And definitely, you would understand the situation of [country] and its ... sporting bodies, [sport] is struggling in the country. So our aims, objective is more to promote the sport at this time ...

In any case, the lack of resources in terms of facilities coupled with a lack of expertise and specialist personnel remains an issue, which is exacerbated by language barriers and lack of culturally relevant educational materials, modes of delivery and content.

Well, you've touched on a very valid point for us as far as we're concerned. The facilities we don't have, the personnel, the specialist personnel we don't have. I mean to give an example, just for us in [country], me trying to find a sport psychiatrist or sport psychologist ... it's pretty much impossible and ... although we've had offers from overseas, they are foreigners. They don't speak our language, they don't understand the way our people tick. So, this ain't gonna work because if they come here speaking English, one of us has to be involved to translate which then takes away the confidentiality, and this is a struggle for us. So yeah, it's the expertise is what's lacking for us in the Islands ...

Many individuals involved in sporting administration, primarily for sporting organisations but also in some cases for NADOs are volunteers. These voluntary roles include general sporting administration, as well as those more involved with anti-doping work and that also incorporates educational activities. Volunteer administrators are often overwhelmed with developing their sport and ensuring that appropriate processes are in place to support

athlete welfare, such as preventing injury. This limits their capacity to consider taking on extra tasks, including adding anti-doping education into their responsibilities.

To be honest, we're actually in the process of maturing ourselves as an organisation, because it's completely volunteer-led, most people obviously have busy careers and trying to sort of jam this in whatever spare time they have, it really has withered over the last few years ... we're now looking at ways where we can help assist the coaches so that we're improving athlete welfare ... we're starting to bring these things back in now and the anti-doping education sounds like it would be a good thing to slot into our program. It's not something which we do because we're really scrambling to build things back up at the moment.

In some cases, participants indicated that there is support available from either IFs, NADOs or ORADO. However, even with this support, the problem of limited personnel and lack of expertise meant that broader anti-doping educational work is often not prioritised.

There is support available, we just have to apply for those things. The problem is that our team is extremely small - it's only me, and my [workers] who are not confident in teaching, and it's a volunteer position and I work full-time, so I have to decide what's important. Either I teach them or I put all my time into developing resources. So, at the moment it's about getting the information out there and trying to reach as many groups as possible.

As noted earlier, language barriers make effective delivery of educational material difficult, and this is exacerbated by a lack of personnel who may not have the required knowledge, or confidence, to teach others.

Compliance with anti-doping requirements, although acknowledged as important and necessary, nevertheless constitute a significant administrative, and financial, burden across the sportsnet in the Oceania region. Again, like education discussed above, there is a view that the culturally specific experiences and challenges faced by the ORADO are significantly different in comparison to other RADOs. This included comments that sporting organisations monitored by the ORADO faced higher compliance costs in comparison to other regions, with calls for greater support from the WADA to help meet these requirements.

I know that WADA has three tiers ... and [country] and most of Oceania sit in the third tier. So, that means that we are not required to compile most of the compliance things that a tier one, like [country B], or [country C], or [country D] are expected to do. However, we pay, it's a lot of money that we pay to our Regional Anti-Doping, and our Regional Anti-Doping has an enormous area to cover, and their role is very different to a Regional Anti-Doping within the Asias, or the Americas or the Africas. So, I think we need more help from WADA.

Across administrators interviewed for this research, from different types of sport, the value of moving beyond a reliance on volunteers to perform key roles was widely discussed. Participants indicated that employing dedicated, full-time staff with a focus on anti-doping work would require financial assistance from their national government. However, they acknowledged this was unlikely with most governments sports budgets fully committed with no capacity to increase existing levels of support or to allocate additional resources to new areas. For example:

That would, number one, mean employing somebody full-time for that position, currently we're all volunteers and nominated to those positions ... We would need to have some financial assistance from government, which most governments in Oceania are struggling to fulfill their own sporting budgets without helping towards an independent NADO. We don't have the people, the human resources to carry out these things.

For this reason, participants stressed the need for more involvement from the WADA, which was not limited only to financial assistance. Rather, administrators from the sportsnet also suggested that the WADA's compliance requirements were out of step with the administrative and financial context of nations and sporting organisations in the Oceania region. For some participants, because most nations are reliant on volunteers to fulfil administrative and other support roles, the WADA's 'push' towards establishing independent NADOs in each country is unrealistic.

From a personal point of view, I think if it would have ... if they [WADA] could have more discretion and be less rule-bound in the sense that requiring us to always comply with everything. But look I understand that we're ... a tier 3 so we have a lesser standard to apply to, but even that is difficult ... they should actually change tact [*sic*], rather than expecting each country to have its own NADO, to literally put some more resources in to have a regional NADO which might work more effectively, who knows ... I suspect that they don't have enough flex to do that. Their aim or their goal is that every country has to have its own NADO which, you know, they've achieved to a certain extent ... but I said to them, I think most of them in the Pacific exist in name only. And they're all volunteer driven. So, if you haven't got enough volunteers, how the hell's it going to happen? So, if they can put more money in and we could get full-time people involved then that might be different. But I don't think WADA's got pots of money either ... No, it's just impossible. I mean like everybody on the ORADO board ... is essentially a volunteer and ... all got full-time jobs. Okay, so to expect ... to dedicate the time and energy and effort into doing it properly is impossible, we need full-time people whose job it is to do it.

For the administrators across the sportsnet interviewed for this research, this places an unrealistic expectation on those volunteers. In addition, it also means that it is very difficult to fulfil the necessary general administrative work associated with a sporting organisation or a NADO, with implications for the quality of the design and delivery of anti-doping educational programs.

The need for greater investment in developing the capacity of sporting organisations is not isolated to administrative roles, but it extends to other support roles that are essential to develop athletes and to continue to build the various sports in the region. For athletes, the lack of high-level, appropriately trained and accredited coaching staff (and other more technical resources and facilities) was a higher priority issue. In fact, this is the first issue that athletes discussed in terms of their views and perceptions of why some athletes might use PEDs, or about the prevalence of doping in their region. For example, as current and former athletes commented:

For example, for me personally, I don't think doping enhance my performance in [sport A] because what we'd like ... is technical preparation and ... because we don't have enough high-level coaches for training partners. So, that will be the first thing that we will have to have before being tempted by doping for physical performance.

It all comes down to human resourcing, basically, where that resource comes from, and what their background is. They could have no experience in coaching and just experience in the sport, and be more experienced than those currently present and get elevated to coach

....

In theory, coaches need to have their level one but that is not regulated. We, [national sport org], are looking at rolling that out but don't know how to mandate it or how to regulate it.

Developing the organisational capacity of sporting organisations in the Oceania region and moving away from primarily volunteers to employ professional staff is difficult because local administrators, coaches and other support personnel are not available, or lack the training or qualifications required. As a result, for many regions and particularly for remote islands support personnel are brought in from other countries. This can raise issues related to cultural fit, which is exacerbated by low levels of education in the target audience, as these participants noted:

I think one of the hard things in a country and like countries in the Pacific, is there is a disconnect in language and education style between people who come from overseas and seek to educate people, and the way that people are educated in the Pacific. It would be more useful to train a local, and to provide some sort of course that qualifies them to take that position, and for them to have the role of pushing that as an agenda within the sport, than to have someone come from overseas and do one off workshop and then they leave, and no one is maintaining or following through on any of those protocols.

I think the other thing ... it's about the level of education now people have here. In the region it's quite difficult, especially when they're coming from lack of human resources to develop their own athletes within their own societies or their own communities, you're always going to have that lack of understanding and lack of education and that's not in a negative sense, it's just that they're also dealing with bilingualism as well.

In some instances, lack of resources or funding means that dedicated medical or other support (e.g., physio, sports psychologists, etc.) staff are not available for athletes to consult for correct information. This means that there can be a greater reliance on local general practitioners (GPs) who may not be familiar with prohibited substances, or rules under the WADC. There is a strong cultural overlay here also, with athletes, and others in the sportsnet, expecting, and trusting, their doctor to know about anti-doping and prohibited substances. However, health authorities in some parts of Oceania may not always be aware of or may not have access to correct and up-to-date information or are not familiar with the anti-doping context and requirements for elite sport. As these comments show:

... the athlete might go to the doctor and assume that the doctor has all the knowledge needed but the doctor might not know everything about the prohibited list, but the athletes will follow what the doctor says because they're the holder of that ... knowledge.

My doctor who I work with, he knows that I compete internationally and so I do ask him questions ... I guess now that I think about it, he probably doesn't really know, but then I mean, I kind of trust his opinion.

Again, I think that certain people have, in this country, certain people have a ... what's the word? If you go to the doctor, your doctor must know what they're talking about ... I think a lot of it is the lack of understanding that doctors do not know everything when it comes to

prohibited drug use ... And not only that sometimes the doctors themselves, the medical fraternity here don't understand that just because the competition maybe two months away, or a month away that they still are not allowed to take those medications. That's a big problem. It's not intentional doping, it's unintentional doping and that comes from a lack of education within both the athlete's side and the medical fraternity side.

Reliance on local GPs who may not have sufficient knowledge to guide athletes about approved substances under the WADC has significant consequences for athletes. One participant who worked in an administration role described an incident in which an athlete tested positive for banned substances as their GP had given information from an out-of-date list:

We've had one case where one of our athletes went to see the doctor who was aware of the list of prohibited subjects or substances and unfortunately, he was reading off an older version. So, when [athlete] went in to see this doctor, he prescribed the certain painkiller or whatever it was, and [athlete] ended up testing positive which then meant [athlete] was suspended. So that's again, that's one of the lessons that we've learned about making sure we keep everybody up to date, as far as the prohibited substances is concerned.

Some participants noted having done their own research after speaking with their GP as they had concerns that they may have been provided with incorrect information. Other athletes reported that they avoid taking medication altogether as they have been too concerned, even after looking up WADA banned list because the complex language and long list of substances means that it is too difficult to navigate and understand.

Like, here, because they don't, and it's not their fault, it's just we're in the Islands and we'll just do what's best. Here, it's like "just have this, it's good for you. Do this. Go to the doctors" what I've learnt over the years is as the WADA list comes out, I sort of have to go through that list myself and it's really, really long and I really don't know what half of it means. So, at the same time for my sake, because I was lucky enough to know the violations, I'll take it to my doctor, and she goes through it because we don't have a team doctor who can sort of advise us. I think getting advice here in our region is quite tricky and not really recommended because a lot of them don't know ...

Participants generally agreed that ORADO provides valuable support across Oceania. ORADO has been proactive in implementing anti-doping programs throughout the region and training local stakeholders to be able to continue educating sport personnel in their local areas, as one participant discussed:

We have trained educators in [country], they were trained by the ORADO guys, which is based in [inaudible] ORADO. So, they, they've been to [country] several times in the past and delivered these trainings. So, they have identified educators and those guys are also now part of our [NADO], our [NADO], so that's what we do when we want to do all these trainings - we engage them, and they come in, and we deliver those. We've also had trainings done with our voices of the athletes and they've also been trained on how to deliver these skits, and so they're also part of the process.

Minimising communication gaps can guarantee information consistency; therefore, it is essential for stakeholders to feel they have built a strong network with sport organisations.

As one participant suggested, ORADO have built confidence in stakeholders allowing them to liaise with the organisation without intimidation:

I was really glad we have a regional body and maybe it's because I think that obviously they're chosen for the specific areas and they're not as intimidating. I think because I love to ask a lot of questions but sometimes when I'm intimidated, I really won't say anything which is not really good sometimes. So, just seeing in terms of our regional body – Oceania Regional, it's like oh wow, we've got our own anti-doping organisation that when I feel like I really don't know anything I can just... approach.

ORADO and NADO they do education and they started to go into the communities, only at the request of either [country A NOC] or at our sports development - through our sports development unit. It's part and parcel of programs, whether it should be introduced or not. Basic information is just spoken to them about the... restricted drugs that athletes should watch out for.

This participant continued to highlight how communication barriers prevent information from reaching grassroots levels, resulting in lower-level athletes being less informed when entering elite sport. With greater efforts by National Federations to ensure anti-doping information is being effectively distributed to grass-root levels, athletes entering elite sport will be well-equipped (with doping knowledge), having the potential to reduce doping and attitudes towards doping.

Some participants noted that the perception that the prevalence of doping is limited means that is not necessarily cost effective for WADA, IFs or other sporting organisations to invest resources into localised anti-doping activities such as testing. This not only means that focusing on testing at international competition or training events is a better use of resources, but that ensuring that the information and resources are provided by the relevant IFs is an opportunity to build their organisational reputation. As this participant explained:

... and it also reinforces the individual organization, their stance on it as well. There is a pile of paperwork that the [IF], just reams of it, down to, if you're going to your doctor, if you're going to a tournament in Geneva and you get sick, you need to go see that Medical Center. So, it's very well done from that point of view.

For other participants, the extent to which support for anti-doping education, testing or other compliance related activities is provided is heavily influenced by the internal politics, for example:

From my personal experience I will say it entirely depends on who is at the head of the organisation at the time. So, the person who was running, who was in charge of the entire groups that travel to the games, was extremely proactive in making sure that that education and opportunity for learning about drug use in sport was available ... But that's the first time that that's happened to me on an international trip. And that was about who there is in charge.

Concerns were raised over the leadership in the Olympic Committee as many participants expressed their frustration over what they perceived as either an inability, or refusal to shift long-held views. From this perspective, there is a view that resistance to change is because

the composition of governing groups resembles a 'boys club', or because they are accustomed to operating their own way, which is often out of touch with the contemporary sporting landscape.

I would say in the Olympic movement as a whole, there's a transition of age group. So, you have the good old boys club that's been in power for so, so long and they don't really understand it ... they don't really, would not understand what a clean sport and why it's important, so [sport organisation] right now, we're going through hell with all of them right now and hoping that we're not kicked out of [competition] because of our crazy International Federation.

According to one participant, sport organisations in smaller regions contribute financially to their RADOs which is often difficult for many to keep up with. To help with compliance, it was suggested that all NADOs in the Oceania region become independent in the sense that they take on full-time employees, rather than volunteers. Further, government support is currently limited due to financial obligations that are not able to be met: 'most governments in Oceania are struggling to fulfill their own sporting budgets without helping towards an independent NADO.'

The comments of our participants indicate the high value placed on clean sport and recognise the importance of and seek to comply with anti-doping rules and regulations. However, the range of demands on administrative and support personnel, as well as the time and financial constraints, coupled with the perception that doping is less of a problem in Oceania (as discussed in section 6.1), means that anti-doping and initiatives to educate athletes to avoid ADRVs are a lower priority. The resourcing constraints faced in the Oceania region are further exacerbated by the geographical and technological limitations experienced in the region.

6.2.3 GEOGRAPHICAL AND TECHNOLOGICAL IMPEDIMENTS

The current anti-doping regulatory framework, as developed by WADA for implementation by sporting organisations, RADOs and NADOs is multi-faceted with a range of standards and rules that are applicable in different ways to different members of the sportsnet. For example, athletes and support personnel (e.g., coaches, medical support staff) must comply with anti-doping rules and ensure prohibited substances as articulated in the WADC are not used. Administrators must adhere to a range of standards, such as the ISE noted above, as well as other administrative protocols. In either case, compliance is mandatory. However, an important compliance barrier in the Oceania region is the widespread lack of access to reliable technological infrastructure (i.e., internet access, WI-FI, computers, and smart phones). For many, athletes and administrators, access to technical infrastructure is limited (for example in terms of bandwidth and cost), particularly in remote areas. As well as compounding the difficulties facing administrators, the lack of access to technological infrastructure is a significant barrier to developing and delivering effective, culturally tailored and engaging anti-doping education. This also puts athletes at a disadvantage, in terms of anti-doping compliance requirements, such as preparing and submitting whereabouts details, as well as in accessing anti-doping education, particularly as many of

the educational tools are web-based. Although nations in the Oceania region are experiencing technological advances and improvements, this presents the WADA with opportunities for greater engagement and support at the regional level.

I think it's just their culture that you know, like they're that far behind in, in what, what the rest of the world is sort of been doing ... but their technology is coming up, they're doing some great things with technology and stuff like that, but it's still getting that group of people to educate the athletes to understand what drug, anti-doping is and so forth ... so I think there's an opportunity there for WADA to do that and if presented well I'm sure they'll get results.

I don't know that everyone really realises these sorts of things, even when I talk to people back home, they'll be cutting in and out. Like, I can see you clearly and I hope that you can see me clearly but back home it's not that at all, like you just see a blurry image and every so often it might go clear, it might not. Being able to actually communicate and find things out, I mean even looking things up on the Internet takes so much longer. And some of the [outer regions of country] it's harder again and finding people who are knowledgeable about the subject because, you know, there's not a lot of people as well. So, then you don't often find ... you know, I know almost every athlete that's come out of [country] so you've only got those people to kind of work around and often you're all being brought up in a similar way, so you don't really get a different opinion or different views, you all kind of know similar things and that's all really.

Importantly, the quality of technological infrastructure is not the same for all nations in the Oceania region, with some enjoying high quality access. For example, UNESCO notes that in 2013, despite some leveling of the disparity between countries over time, the Solomon Islands (8%), and Papua New Guinea (6.5%) continued to experience extremely low connectivity (UNESCO, 2015, p. 694). Further, the standard and availability of technological infrastructure is linked to the broader economic context of the respective nations in the region.

Participants comments also indicated that the geographical location of Island nations in the region made it harder to access banned substances, or supplements, in comparison to other nations, such as Australia or New Zealand. As one participant noted: "we don't have access to a lot of those things that are performance enhancing. So, I think just to even get it into the country would be hard." In these areas, rather than a primary concern over PED use, the more pressing issues is the use of recreational drugs, which is a broader societal issue and emphasises the need for a more holistic educational approach. The geographical location of some of the Island nations, with complex supply chain and logistical constraints, also plays a role in perceptions that doping is not prevalent in the region. Some support personnel interviewed indicated that this is itself a risk because lack of access may reduce the possibility of doping, but also means that doping, and anti-doping education, is not taken seriously or seen to be relevant to the local context. Another risk flows from this, as anti-doping education that is not perceived as relevant places athletes at greater risk when they travel to international competition and training where they are also exposed to easier access to prohibited substances.

6.2.4 COACH EDUCATION

As we have discussed, there is widespread consensus across the sportsnet project about the importance of anti-doping education, and support for anti-doping regulations but with a number of barriers, or impediments identified. A specific challenge, that links directly with resourcing and expertise constraints identified above, relates to the role of coaches in disseminating information. Notwithstanding the issues around culturally tailored content, discussed above, participants indicated that online and hardcopy materials are issued to sport clubs. However, the responsibility then resides with those clubs, and their coaches and other support personnel to ensure that athletes are up to date and educated about the current anti-doping requirements. As well as the resourcing and expertise constraints already discussed, the knowledge and education levels of coaches is highly variable and this impacts on the way in which doping is discussed.

Yeah, the presenter gave each of the Australians and New Zealand coaches a group of the Island coaches to work with because they were so far behind in their ability to understand current coaching strategies and techniques, that he couldn't manage the large group that he had to do it himself. So, we had a group of five or six coaches, with about four or five star three coaches that we, we had to work with and their knowledge and limitations were quite noticeable. Very lovely people and that, but when you work with them, and you provide the information to them, they do acknowledge it, it's just the lack of information that they, they tend to get, I think. So, if WADA was to put some plans into it and some packages I'm sure, if presented in the right way, it would be successful.

I don't think we actually have in my sport any official training for coaches on how to teach kids about doping and all that stuff. I had to do it myself when I was an athlete because I knew there was stuff that I took that was on the list. But if I hadn't known that I would've been busted at a competition for something that I needed medically.

There are a number of factors that contribute to this. As discussed, many of the individuals in sporting administration and support roles are volunteers, and this can also include coaching staff. The generally smaller sporting population also means that there is a much smaller pool of athletes, with implications for Island nations to develop and send teams to international events, Commonwealth or Olympic competition. A smaller pool of Olympic level athletes may also make it difficult to attract and pay professional coaching staff with the relevant expertise, both in terms of coaching accreditation but also to effectively communicate anti-doping information and support anti-doping education.

Also, I think people here are really struggling to be coachable, in terms of learning what's out there for my athlete and because everything is voluntary it's going to be whenever they feel like they can input or give effort when they have it or when they feel like it. Also, things will get really personal because it's really small here, everything's volunteered and people get a lot of benefit from when things go well and that sort of gets lost – the athlete gets lost in that translation, which I can attest to.

But like I said, again, from the coaches ... It all comes down to human resourcing, basically, where that resource comes from, and what their background is. They could have no experience in coaching and just experience in the sport, and be more experienced than those currently present and get elevated to coach.

Yeah, I feel like it's just in our region it might be ... funding in terms of our coaches are mostly volunteers, so they'll just do what they can and of course, when I was training in [country B] the coaches there also went through their own, they have their certificates that they go through, and they learn all these different things. I was lucky, my coach in [country] managed to go through it, even though not as the top ones there but she would get a few little things that could equip her to take me to these types of competitions and make sure that I'm aware of like that I need to pack my own bag and this, there's so much more components in it that we really don't have here in terms of education for the coaches that trickles down to us, obviously, at the end of the day.

This last comment emphasises an important point raised by athletes across the sportsnet, who often felt that they are not given important information (on anti-doping) by coaches or those in administrative or other support roles. Some athletes indicated that coaches and administrators, including upper management, should be more involved and engaged in educational program, with one participant explaining that coaches often hear about new information through the athletes. This is particularly important because, as some participants indicated, education about the physical effects of supplements is low, with athletes often reliant on coaches for advice on the correct and safe use of these products. If coaches are placed in this position, due to lack of resources or other issues as discussed in this report, this means that more attention, and support, is required for them to stay up-to-date with anti-doping rules and to develop more effective ways to communicate this information to athletes.

I have made it a point to deliver trainings, besides management of the teams and stuff like that ... So, whilst we have a lot of them who can access the Internet, a lot of them don't like reading. So, this is part of our job, is to try and simplify what's online and give it to them in a way that they understand. We know also that a lot of the management themselves didn't know anything about anti-doping and what, -and to stay on top of what is now legal or illegal as the years go by. So, this is part of what we do, as education wise and creating awareness.

I think a lot of the outreach at the moment, well for us, is done with the athletes and very little is done with the coaches and the team managers. So, I think if everyone is included in this awareness that will be really good.

Some participants indicated that, in some sports, even though coaches are providing anti-doping information, for some international athletes this can be limited. Further complicating this is, again, athletes' perception that doping is not prevalent in the region or that their particular sport is unlikely to be subject to testing.

Yeah, so that's like a national level. We have a lot of international athletes who don't get much education around that sort of thing. They are taken by coaches and the coaches run everything and athletes just do as they say. And a lot of the athletes who were at the Games, were unconcerned because they didn't consider their sports to be high risk for being tested. So, they would have considered, let's say, doing whatever because they thought, "oh, we're in a sport that's not necessarily at risk of being tested on a high percentage, so what are the odds?" They didn't take that seriously.

Coach education and knowledge, and consequently support for anti-doping and for athletes' anti-doping education is highly variable across Oceania. This disparity in knowledge is a key risk for anti-doping, and that there are particular times in an athlete's preparation and

performance cycle where this can be heightened. There was general consensus, and awareness, across participants that athletes could be tempted to dope to recover from an injury. Although noting that the pressures to perform are experienced and perceived differently across the Oceania region in comparison to other countries, this was nevertheless acknowledged that PED use to recover from injury to meet performance expectations and goals is a primary factor that could incentivise doping behaviour. There is also a cultural overlay here, with coaches playing a significant role in either discouraging, or inadvertently, encouraging doping behaviour. As one athlete participant noted:

It is a big task, yes, and the other thing that we have here is that this is a society that is a hierarchical society where, you know, the person in charge is the ultimate, has the ultimate say and sometimes the coaches inadvertently steer people in the wrong direction ... For example, if we have weight bearing sports and there is an injury to maybe a muscle or a ligament, a quick fix is a shot into the joint without really thinking about, number one, is that the correct way to go? And that's very easily done here because the coaches want performance, they expect the athletes to keep training, and they don't want them to have any time off for injuries. So, they minimize that downtime inadvertently, sometimes not doing the correct thing.

This emphasises not only the importance of culturally tailored and engaging anti-doping education for athletes, but also ensuring that coaches are brought into any anti-doping educational strategy. Importantly, across the Oceania sportsnet, rather than limiting efforts to a narrow anti-doping message, a more effective approach is to develop a broader educational strategy that incorporates individual mental health and well-being, including for coaches. This is particularly important as the coaching role becomes more professionalised, and requires coaches to interact and engage with diverse stakeholders, which has implications for their interactions with and ability to support athletes to improve performance.

I personally think it's the athlete mental well-being and also coaches well-being. I think, not even just my sport, but I think in total we don't... because coaching has become quite more professional. It used to be you just kind of volunteered for it and now it's becoming these people are paid, they have to have all these qualifications. But we're not really looking at how we can help them as people. We're still seeing them as just those kinds of robots that run everything. But they need to do the work life balance. Obviously, dealing with parents is an issue, dealing with clubs and organisations, and I feel like that kind of breaks down and then that flows through to the athletes ... And my look on it is that we're not treating coaches like people and we're not helping them deal with that, not just how to plan the training and what skills you need to do, but rather the psychology side of it and how we can support them as coaches so that they can support their athletes. And obviously there's a flow through where coaches who have controlling strategies, athletes are more, they're less happy, they're not enjoying their sport, they're obviously going to do dangerous stuff, or just going quit or anything like that ... Yeah, I think that's really what's going to be the biggest impact to my sport.

Despite these challenges, participants are supportive of anti-doping requirements and regulations. Although there is a widely held view that the system needs improvements to account for the culturally specific context of the region, individuals across the sportsnet are

supportive of, and seek to comply with the WADA, NADOs, the WADC, as well as their respective sport's codes and policies.

6.2.5 ATHLETE ENGAGEMENT

Athletes' lack of knowledge and understanding of anti-doping rules is described by participants as a risk. One of the reasons cited by participants for this is that athletes are not exposed to anti-doping education, or to testing protocols, until and unless they reach elite or international competition or championships. While this, in part, reflects constraints around resources and expertise, it also suggests that sporting organisations are making efforts to align with the ISE, which includes as a third objective:

- a) Requiring Signatories to establish an Education Pool that shall at a minimum, include Athletes in the Registered Testing Pool and Athletes returning from a sanction (ISE, p4)

However, an educational approach with a focus on athletes who are either at or working towards the elite level, sits in tension with other ISE objectives, namely:

- c) Signatories to consider the benefits of educating a wider population through Values-Based Education programs to instil the spirit of sport and foster a clean sport (ISE, p4)

Many of the participants interviewed emphasised the values-based nature of their educational strategies. Importantly, rather than a narrow focus on anti-doping education, the objective of these values-based approaches is to discuss issues around health and welfare, including alcohol and recreational drug use. This is because these are issues of concern in the region, and because anti-doping specific education may not be relevant to all contexts. Added to that, perceptions that doping prevalence is low in the region means that anti-doping rules and regulations are discussed less at the lower levels of sport.

I don't think a lot of people know about, you know, anti-doping and stuff like that. And because a lot of people are not involved in drugs and those kind of things. So, there's not really much discussions on this particular subject matter ... At the moment it's not ... or that kind of thing that people talk about. So really, you know, like other countries there's a lot of talk on the doping, anti-doping and stuff. Not in [country] because I think people just rely on our natural talents to participate in any competitions.

But as far as sort of everyday, it's almost like it is talked about, it is discussed. It was probably the most put in the players faces or to the forefront, I think, when they were going (that I've seen), when they were going to the Pacific Games, two years ago and they had to sign all the forms, and they had to go to a training session about if they were pulled out to do a test, how it would work, what their rights were. I think that was a bit of an eye-opener for them ... But it's not a huge culture here and I think ... sometimes talking about things too much can create the issue.

Even when anti-doping education may form part of a more sport-specific educational and outreach program, delivery is complicated by the geographically dispersed nature of some Oceania nations. In some areas, delivery of educational strategies and outreach programs are not necessarily achievable, particularly in more remote areas that have limited access to resources and support personnel. Notwithstanding these challenges, some schools are

beginning to implement anti-doping education in their curriculum, although this was discussed more often by participants from more developed countries.

I think that a lot of the anti-doping messages for school athletes or development athletes come through the school system themselves, and that's part of the education system. Like, partial care, those education days where everyone goes into the library and sits and listens to someone talk about "eh, this is the ... look at, look at Sue, who won a gold medal and then got stripped and all of her teammates hated her".

We've kind of gone off talking about the "do not do this, do not do that" only because we seem to see a pattern where our athletes tend to do it when you tell them not to do it. So, we've come up with trying to just change our messages where we're advocating for positive messages. Yeah, it's kind of worked in a way with some of our, and we're trying to start from grassroot levels right up to our primary school and our elite athletes as well. More on the food approach, first food approach concept as opposed to our athletes taking up supplements. Being more aware of what's available on the WADA website. So, we've been encouraging our athletes to go on to ADeL, get the free information that's available. Yeah, that's it, just the basics. It's mainly just in the process of testing.

In the smaller Island nations, participants indicated that a significant barrier to further developing a values-based approach is that anti-doping education is targeted at Olympic or Commonwealth Games sports, and then only available to athletes at the elite level.

Yeah, as [position] of our particular national federation, I had to push for that to be incorporated into the club or into our team education prior to traveling to [country]. So, as per my knowledge, anti-doping education had not actually been a part of that sport up until this point.

Well, the thing is, if we're talking about elite athlete development, those guys are also very aware of the anti-doping rules. Yeah? So, it's the other guys who are just the local players who don't really worry too much about anti-doping ... that's spoken of, but they don't really take much notice of it. It is the elite athletes who have been exposed to the processes and procedures that are far more alert to what is permissible and what isn't.

This is a widely held view and is seen as problematic because it means that some sports are neglected, presenting a risk for athletes and for non-Olympic sports, such as some forms of football. In addition, limiting anti-doping education to more elite levels means that new, or junior athletes are ill-informed about anti-doping rules and testing protocols, making them vulnerable to ADRVs when they reach international competitions.

Contributing to this, a commonly held view expressed by many participants is that athletes, and other support personnel, who are well equipped with anti-doping knowledge and who travel for international competitions, often tend to stay overseas, either to compete or to train. This means that there is less support, or shared knowledge, available for local athletes, which is exacerbated by a 'sense of elitism' as opportunities do not trickle down to athletes and administrators at lower levels of competition.

No, they haven't- they only educate prior to the actual National Games and I was just having a talk to [respondent 1] and saying we really need to start moulding them, probably at club games as well, one or two ... some of the sports so they can be conditioned to understand this is how you practice, even if it's just a dummy run or something. But I think that it should

be outreached at a lower level in terms of club games and competitions, not all the time, but certain games they'll take out one to test or two, just so that they can get used to it when it gets to a national level and also regional level that they know what they are required to do. Basically, they need to understand that it's a responsibility and it's a shared responsibility, not only with them but all those involved in their journey as an athlete.

Um, I would say not very knowledgeable. It's only those guys that ever get selected for the team [country], but a lot of the sports they don't really do much as far as educating the athletes about doping ... They just don't see it as being important, and they think that it's, if they're playing here in the local arena, that it doesn't really apply to them. Unfortunately, it's some of those guys who play locally get identified and picked up to play internationally and, yeah. So, they come with bad habits and it's our job to break those bad habits.

In contrast, often grassroots athletes, including from remote regions, who can compete for their sport at national or international elite competitions are more likely to receive better anti-doping education at training meets and camps.

I know our State Member Associations do put a lot out about that to our athletes and it's in there. And also, within their registration form and so forth, when, when they sign up. So, they're pretty well aware of it. And even in our training camps, and that, we do talk about it and educate the athletes to be aware of it, because when they transfer from, say, a state athlete and they do go into a high-performance athlete environment they need to understand that there is testing and what goes along with that testing. So, there is some educational discussions on that during our camps and presentations, basically.

I mean I know enough about the training to know there's training given on that and those issues. I know that when we get national teams together for regional competitions, they do get sessions on supplements and what to look out for, what's in the prohibited substances list. So, they get that basic information yes.

However, athletes often have trouble in learning and comprehending anti-doping policies, rules and regulations. There are several factors that contribute to this situation. For some, training meets, and camps could be their first interaction with anti-doping rules in such a formal way. Low levels of literacy combined with complex rules and regulations, compounded by language barriers can place these athletes in a vulnerable position.

Yeah. It's also whether they're in an Olympic sport or not. So, our [sport] athletes must do the anti-doping education through [international sport association]. So, an online course that educates the athlete and the administrators on everything to do with anti-doping ... I did it and the other athletes in [sport] did it ... I think it was quite easy to do. Easy to understand and logical from my point of view. But because I have multi-national education and background, that does make sense because I understand action and consequence within a regulatory body. But other people might not understand that and think it's a waste of time.

So, more of the education has come around when I've gone to World Champs events and the World Anti-Doping associations are there, and you do like the quizzes and you find out more then. Like, even when I first got drug tested, that was my first real experience of "oh wow, okay. This happens." Yeah ... I didn't even know how it happened, or what you did, or where you went. It was just "oh, okay" ... it was my first international competition as well, when I first went, and with people that kind of barely spoke English, they kind of did but kind of didn't. And I was by myself, and it was just like "oh, just head to a room and take the sample", and it was very bizarre. Like, no one had ever told me that that's how it happened,

before. So, it was quite scary to be honest and probably something that I've warned others about, like especially the younger ones coming up that don't really get, you know, you don't really get too many drug tests before that.

As we have discussed, doping is not considered to be a significant issue in the Pacific Islands, particularly for smaller countries who feel they are more 'disconnected' from doping due to their size and geographical location. This contributes to a view, as reported by our participants, that PEDs are less available, and are unaffordable, which may also influence athletes' perception that doping does not relate to their experience and anti-doping education is less relevant to them. This can mean that athletes pay little attention to anti-doping education, which can have consequences for those who participate in international competition. For example, understanding about anti-doping protocols in relation to testing and the whereabouts requirements regimes is poorly understood. One participant indicated a lack of serious consideration from athletes when attending an anti-doping education course:

So, I've sent, in some of these classes where we had the [country A] games, we had the mentors for anti-doping come in with the [country A] Medical and Anti-Doping Committee and they took the course. They taught and when you're talking to a bunch of outer-islanders they're just "ha?" and they just laugh. They don't understand. Luckily, some of us were there from the National Olympic Committee, and we were quite capable of speaking in [country A language], so we had to explain to them this is quite serious. They said "oh no, it doesn't happen here", we do know it happens here, if you're tested you need to understand the procedures, it's for your own safeguard.

As the previous statement indicates, athletes' perception that doping does not occur or that is limited in the region, undermines their engagement with anti-doping education. Added to that, some athletes, when they think of 'drugs' or 'doping', often think of marijuana, cocaine or other recreational drugs, and fail to realise that drugs and doping can refer to everyday medication that can be bought over counter or could be in food. Athletes may interpret anti-doping education as only relevant in terms of doping as strategic and intentional, which they may feel is not an issue in their region or their sport. This means that some athletes overlook the significance of anti-doping education. As this athlete indicated:

And so, it happened in an umbrella situation with our National Olympic Committee, where they did a blurb about it, and why it was interesting and why we pushed it on our team, was that it was not taken seriously at that level ... I think because it hasn't necessarily been an issue in our country to date. So, we don't have any exposure or particular athletes that have struggled with it, or much to that effect, news is quite national, it's not super international, and so we won't get much coverage of it happening in other sports on a larger scale.

This last comment also emphasises the way that the geographic location can influence perceptions of doping, either positively or negatively. The key point here, however, is that lack of engagement with anti-doping education means that athletes can be at risk of accidental doping, and incur associated sanctions and penalties. As this participant went on to note, lack of engagement with anti-doping education is particularly problematic for 'first-time' international competitors and is exacerbated by a lack of understanding that recreational and PEDs are captured by anti-doping regulations.

With most of the team it wasn't necessary, in terms of pressure, because the majority of them were first-time international competitors and so they didn't, like I say, necessarily take it seriously. And that's not just the anti-doping, it's the entire rigamarole of what an international level competition actually is ... And the drug use might be more habitual and recreational rather than anything else but when they're confronted with anti-doping and drug use regulations at that level they don't really, or aren't able to sort of see how that should really affect them in the long term.

Earlier we discussed the importance of culturally tailored doping education that acknowledges the learning environment in the region. As well as these issues, athletes interviewed for this research indicated that the content often fails to account for the performance pressures and training demands that they face. This means that athletes can be time poor, and often physically and mentally drained, which makes engaging with educational sessions that are long, or poorly developed difficult. For example, as these administrators observed:

I always come away with the feeling that they're not 100% invested in it. It just seems to be too long, and especially when I guess these athletes have a lot of other things on their plate as well. It seems to be too long ... and I guess the feeling was, it's just a little bit of a drag for them to listen to. But then in saying that, and watching them, we had no one on their phones or anything like that, they were looking at the presentation. They don't seem to be too engaged, for example, if the workshop leader was asking them a question, there's not too much interaction there. So, it's more someone just standing up and talking to the players, rather than getting an open kind of dialogue.

Look the education has to be done one to one ... You know, how many seminars have I've sat in, and I'm thinking to myself, "okay, well, I actually haven't learned anything". Athletes go to these seminars because they are obliged to go to the seminars, okay? How useful are they? That's a huge question mark.

I think it definitely gets the message across, but I think it could be made more efficient. I just remember it is seen as not something that you're jumping out of your seat to do. On top of, you know, training, five, six hours a day, the last thing you want to do is sit in on an hour workshop. So, I guess, making it more accessible to a time when athletes feel that they are more engaged in the process, so whether it be more online learning or videos.

Some participants did indicate that athletes do take anti-doping education seriously, despite some challenges with the administrative aspects and paperwork. However, this view was not widely held and often reflected an individual coaches own personal approach to coaching and management. A more widely held view, and particularly from those in administration roles, is that anti-doping education is unappealing to athletes, who often appear to be disinterested in the material, as noted above.

Participants indicated that changing teaching strategies has proven to be a way to successfully engage athletes and keep their attention focused. Using technology and social media, and mobile phone apps appeals to athletes, and particularly younger athletes. Often, athletes make suggestions for changes to anti-doping education that are more appealing, relevant to their context and that will capture and hold their attention. For example:

[NADO's] Facebook page has just been bombarded with a lot of information, and it's from these young ones that taught us, "you should do this, you should put up this, you should do this." So, we're trying to work with our young athletes here to try and find an easier way to get the message across, as opposed to just giving them a link, for WADA or ADEL.

Content relevant and engaging videos are the best. Personal testimony, I think, is really important and keeping up with what's going on with young people and what they find engaging and important is really, really important to education. And so, if you're trying to use methods that you think are effective, you need to be scaling them down to the market, like you need to be in amongst the market, what do you like. Like, get shit on TikTok. Like, that'll reach people now ... Pay promotions through social media. With personal testimony, people care about people, they don't care about what's right and wrong.

Reflecting a growing emphasis on broader conversations about athlete health and welfare, over and above anti-doping, some coaches reported using education about drug use and testing as way to rehabilitate those at risk.

That helped us to work with some of our athletes who were either sort of drug-use adjacent or ignorant to the effects of any sort of drugs on their bodies. Or who had gone even further than that and they've been able to be brought back into the sport socially or otherwise through that education and through the process of having been drug tested, etc, for sport ... Because we're quite a close-knit community, that's fairly obvious when someone is using because of, obviously the changes in behaviour and some physical changes as well. So, the athletes within our sport who we identified as having issues, they were confirmed by the drug testing and then from that we tried to work out how to support them going forward ... which is why some of them were stood down from travel within the elite group but they were still a part of trainings, they were still a part of the wider group, they were still a part of 'XYZ' but they weren't allowed to travel as a part of the competitive crew ... just so that they could understand that basically that they were a liability and that there's a consequence for what they were doing because it does affect their punctuality, it does affect their output, both physically and mentally, it does affect their team members because we're a team sport. The run-on effect of their choices needed to be made clear.

This type of approach is intended to help athletes improve decision-making, not limited to anti-doping but also in the context of their community life, health and welfare. Importantly, coaches and administrators indicated that, despite their best efforts and strategies to enhance anti-doping awareness and education, some athletes refuse to accept advice, or do the opposite of what is being taught. For some coaches, this emphasises the need and benefits of shifting away from an authoritarian 'don't do this' approach to a more athlete-centred model of teaching:

[S]ome of our messages that we've been giving out to our athletes have always been about 'don't do this, don't do that', but in actual fact they end up doing it. And I'm thinking like if we were to change that concept to doing 'we should do a lot of this, eat a lot of this', maybe the athletes might change their way of thinking and start looking at those positive stuff and start doing it. As opposed to what they used to do when we used to say "don't do this, don't do that, don't eat this," ... We seem to just tell everybody 'Here's the website, go on here and you'll find information there' without breaking it down - breaking down where to find a particular piece of information.

We also try to teach them about TUEs and encourage them to make sure that their doctors are well aware of what the prohibited drug use list looks like, and we provide all of those, we

provide anything that they need in order to do this. However, a lot of our athletes do not take on that advice.

Sporting administrators, coaches and other support personnel agreed that changing athlete perceptions and influencing their decision-making about avoiding PED use is difficult. In some instances, participants felt that rather than discuss long-lasting health impacts, a more effective way to enhance athlete engagement is to focus on potentially career ending competitive consequences (e.g., bans and penalties) as well as the social consequences drawing on strong cultural norms around shame and ostracism in the community. As this participant discussed at length:

Where to start, long ha? I think it depends on the audience, as far as how you deliver a message about fair play and cheating. In fact, maybe just start with one of the lessons that we learned ... in the early days of developing an anti-doping program in [country], was: it's pointless to talk about effects on health at an elite level. Elite athletes don't, they're already compromised, their health's already compromised in so many other ways that saying if you cheat, you're going to make your health worse - that doesn't cut through it all. So, my sense is it is about what cheating will do, if you cheat what are the effects it will have not just on your life, but on those around you, those who support you. Particularly, if you're talking to younger athletes, what will this mean for your mum, or your dad. If you're caught cheating, how will that make you feel? ... And of course, it's always the cost benefits, if you can educate athletes on the basis that the disadvantages of cheating outweigh the possible advantages, I guess that has some cut through.

In this regard, an approach that participants indicated is highly effective in improving athlete engagement is to provide real-life examples, including insights from athletes who had experienced an ADRV and the consequences for their careers, and personal life. Other participants also emphasise the value of hearing the personal testimonies from athletes, not only about any experiences of doping but their accounts of what it means to participate in sport at the elite level. As these participants stated:

As far as the delivery method of education, there's nothing better, there's no better way of educating athletes that have someone who's been involved in doping and has suffered because of it, out there giving the message. So, I know in [sport A] there's two really great examples that come to mind: there's [athlete] who was a ... professional [athlete] who really spread his message far and wide and had a lot of impact. And right here in [country] [athlete] tested positive ... and he's really provided a very strong message, he's one of the [NADO] athlete ambassadors. To hear the pain that those athletes go through and what it actually does to their life is so effective. It's much better than someone like me standing up and talking about why you shouldn't do this, if you can get a real athletes voice it's very effective.

The old stuff used to be, going back up a while ago, and what it was is more, the first time is not so bad, but you know, we're were pumping it into them all the time, so like, it probably got too repetitive for them. So, I think one of the last ones that had [athlete] and a few of those sort of people in there and I thought that that was a good one, and the attendance and the attention level was much better in those, in those ones, yeah.

So, education does work if you talk to them about it but too often they shut down because you're just going on and on. So, there's a really happy medium. We, with our [athletes], we've got a couple. We've got one of our senior [athletes] who had two years of his life that

was totally wasted because of drugs. He'll come and talk to them and give real life experience.

The good thing the senior players pass on that education to players who are 16, 17, 18 years of age who are about to go and have their first adventure playing in [Country A], playing in [Country B], playing in [Country C], playing [Country D], Junior Tournaments. See, if you're going to the Junior Olympics, you still getting tested no matter if you're 16 or 17-year-old player, you're still get tested, and this is why.

Some participants felt that, in some cases, athletes may be under the misapprehension that claiming ignorance is a way to avoid severe consequences, if they should return a positive doping test. As one participant stated:

I think ignorance is a pretty mighty tool in the [region] and if you can claim ignorance, then, for some reason, that's a thing ... Yeah... don't educate yourself then you can't get caught.

Adding to this, it often be difficult to determine whether athletes are aware of the rules and regulations but are claiming ignorance to avoid sanctions and penalties. Participants in coaching, support or administrative roles all recognised that this places athletes in a precarious position, as this is not a defence that would 'hold up' in international competition. As another participant indicated, the anti-doping regulatory processes are reliable enough so that suitable penalties can be applied, even if the athlete claims ignorance.

[T]he processes, are good enough now, where, if someone has gone down to "I'm just a stupid person" road, there's enough knowledge enough processes in place to go "Yep, what they did was illegal and we're going to ban them for 12 months. And what they did was just a case of just sheer stupidity".

In other cases, participants reported that athletes may assume that they are competing 'clean' because they have taken a substance at the direction of their coach, but have later returned a positive test. The significant influence of the coach, and athletes trust that they will 'do the right thing by them' can also be problematic even for athletes who are mindful of what they are consuming, who regularly check products against the prohibited list, or avoid products if they are uncertain. This may reflect a lack of athletes' understanding of the Strict Liability principle, which does not consider athletes who may have been unknowingly and deliberately doped by others as free from penalty. In any case, the power and influence of a coach, combined with strong cultural norms about respect for elders and those in authority makes this a risk area for athletes in the Oceania region. This emphasises the importance not only of a culturally tailored anti-doping educational program, but also one that keeps athletes engaged and aware of the different ways that an ADRV could occur - especially as deliberate doping is not considered a primary concern in many Pacific Island countries.

6.3 ANTI-DOPING SUPPORT – IF, NSO, RADO, ORADO, NADO

As the global regulatory body, the WADA liaises with many sporting organisations, International Federations (IFs), Olympic Committees, RADOs and NADOs in an effort to

mandate and implement anti-doping rules and regulations. WADA's responsibility in education is to both "regulate anti-doping policy as it relates to education" and "enable the development of Anti-Doping Organisations" (ADOs) (WADA Education and Training, n/d-b). The support WADA provides ensures harmonisation across sport organisations and stakeholders. Support for the WADA and their approach was highlighted throughout the interviews:

WADA do some really great things. I think the Independent Observer Program at major events has really helped instil confidence in athletes and provided a huge impetus to anti-doping in the country in which that major event has been held, whether it's Olympics, whether it's Commonwealth Games. Regardless, I think the fact that they come in and they independently observe the anti-doping program is really an excellent thing that WADA do. One of the criticisms of WADA, which I'm not one of the critics here, is that they don't do any testing, that they're this World Anti-Doping Agency set up that doesn't actually do any testing. I can understand how that's a natural response from people, I do think, however, that the fact that WADA develops other organisations that can coordinate testing programs is the right approach for them. I think the work they do with the regional National Anti-Doping Organisations is really excellent. I think their compliance program is good to hold national organisations, international federations, and labs to account. Well, just their oversight of accredited laboratories is a huge benefit.

I think they do a great job actually. I've gone to a lot of competitions and wherever I've gone, I've seen like a WADA booth or something about anti-doping. And there's always someone there that's like, you know, whether you're in a rush or you're really busy and you don't have time to stop and go over everything it's just like they're either giving you something or giving you a little piece of information or just something really important that you can take away from whatever time you have. Yes, I think they do a really great job at raising awareness.

Many sporting bodies in the Oceania region lack resources and therefore are heavily reliant on the ORADO for support with anti-doping activities, including testing and education. Participants did not describe this support as extending to the provision of translated materials, but did describe support from other organisations involved in sporting administration and regulation. For example, some described support from the IOC to translate policy or general funding from a national government program, or taking advantage of funding initiatives from organisations such as UNESCO that could also be used to support anti-doping work. For example:

In terms of the materials, like the translated materials, no, we haven't got any materials that are translated into our language. We haven't got any support yet, but I think there should be support if we raise it up. Like I know the IOC, the Anti-Doping Organisation is, I think they're just waiting for us to raise it up, and I think they'll be able to support if we do our own translation, if someone can do the translation for us, but we haven't raised it up to them for the support.

We have something called a NAP in Oceania, it's the National Activities Programs, where we can get, we could say "look we're going to put \$10,000 into this", but UNESCO has really opened up a funding stream specifically to address this and that's the one that I think we're just getting ready to apply for. So, UNESCO does have an information, education program that's directed to developing information in your own languages.

Opinions on ORADO were primarily positive because they provide support in the form of expertise and are easily approachable. A key objective of the Regional Anti-Doping Organization (RADO) Program created by WADA is building the capacity of member countries' human resources (WADA RADO Program, n/d-c). Emphasising the importance of this objective, one of the strategies described in the *2021 – 2025 RADO Program Strategy* is to “Ensure the RADOs develop a system to build capacity among member countries' testing and education personnel,” including recruiting, training and engaging Education Officers (WADA 2021-2025 RADO Program Strategy, n/d-a, p. 8). Although one participant raised concerns surrounding the expertise of ORADO staff, the majority of participants considered ORADO to be valuable and supportive. Among athletes, coaches and support personnel, ORADO was commended for providing sufficient education and initiating training programs designed to empower athletes.

We're getting all the help from our regional organisation, the ORADO – Oceania Regional Organisation, which helps us, small nations like us, in, there will be like the centre. Like, we do the test-, they will train us, we contact them and they will help us with everything to WADA, to the World Anti-Doping.

Despite the predominance of positive opinions on ORADO, one participant expressed concern over ORADO volunteers.

I mean like everybody on the ORADO board ... is essentially a volunteer and we've all got full-time jobs ... to expect us ... to dedicate the time and energy and effort into doing it properly is impossible, we need full-time people whose job it is to do it.

Further criticism surrounded ORADOs lack of communication, or following up with regions they have educated in, including education in conducting testing. For example, ORADO had trained one person in a smaller region, to be able to undertake testing, however, since training the individual, ORADO had not followed up/checked in with the tester.

Participants believed there is a need for better communication between NSOs and IFs in order to secure more funding for volunteers to start being paid for their time. As one participant noted “most governments in Oceania are struggling to fulfill their own sporting budgets”, let alone allocate funds to anti-doping. Volunteers don't have enough time to invest in learning anti-doping rules and assisting athletes as many have other paid work commitments that limit their time. This time / funding barrier is a real problem:

A lot of the sports responsible roles in the country are done through volunteers and that could be a huge hindrance to them wanting to push out or do this and with that comes the component of funding - who's going to fund them if they have to do it. As I said, I feel that they're under-resourced, in terms of funding and in terms of people to action what they can do.

The lack of strong governance frameworks, experienced and paid staff and communication between organisations poses a risk to anti-doping initiatives.

6.4 ANTI-DOPING RULES – IMPEDIMENTS TO COMPLIANCE

Like anti-doping education, participants across the sportsnet understand, and support, the need for anti-doping rules and protocols to support athletes to participate and to promote clean competition. As one participant indicated, “we accept all, you know, there needs to be more systems in place so that our athletes can be free, can participate freely”. However, there are a number of issues that have the potential to impact on capacity to comply with these. We discuss the issues about anti-doping rules as identified by participants in this section.

6.4.1 FIT FOR PURPOSE WHEREABOUTS SYSTEM

The athlete whereabouts system is predicated on a well organised athlete support system, education in its use and internet access. These requirements make it difficult to use effectively in Oceania, for a range of reasons.

Again, the cultural overlay of the region plays a role here, with planning far ahead difficult to manage in the context of ‘island life’ as this participant noted:

[on whereabouts] It's a challenge. Like it's because our guys don't like planning, don't like thinking ahead, what they have to do, you know, several weeks down the line ... the communication I have is always through their management, and it's the management to the athletes and then that takes forever to get that information back.

I'll touch on that one ... and I'm speaking on the [sport] athletes specifically, doing that Whereabouts on the app, I think it's quite confusing. They don't quite understand that you have to give every single day where you're going to be, and then it's like “but wait, I don't know where I'm where I'm going to be next week” and that sort of, you know, we've got to give a whole quarter, ahead of a quarter sort of thing.

The existing process requires athletes to submit their information for whereabouts online through the Anti-Doping Administration & Management System (ADAMS). This assumes that all athletes who are expected to submit their whereabouts have easy access to the relevant technology (computers/smart phones) and infrastructure (internet) required to do so. As we have discussed, lack of access to, or reliability of technological infrastructure is a barrier to anti-doping education, and this is no less the case in terms of accessing ADAMS. Added to that, in some cases lower literacy levels also has an impact on athletes’ ability to complete these forms, which may mean a heavy reliance on other support personnel for assistance. This can place athletes at risk, particularly as anti-doping rules are predicated on athletes’ personal responsibility for compliance and avoiding an ADRV.

Although the whereabouts rule is in place to bolster confidence in drug-free sport, and participants are generally supportive of this, concerns arose over privacy and ensuring that the correct protocols are followed to protect athletes’ personal information. One participant described how they have encountered errors when completing the whereabouts forms online, forcing them to restart the process, which leaves them feeling frustrated and stressed. Although these types of issues can be exacerbated by low levels of literacy (as discussed in section 6.2.1), poor telecommunication technology is also significant here:

... compliance challenge of doing something like athlete whereabouts is really difficult for your athletes ... and that's a combination of the technology and also just knowing what they're going to be doing X number of months in advance.

For like Whereabouts, getting on the system is just a nightmare trying to register our athletes ... and then once we're in there, it's just a matter of letting the athletes know to get into the system and do it themselves. But initially, getting into this Whereabouts system is just a nightmare for us.

Now, the rules of compliance, of being in an area at one hour during the day and those kinds of situations, especially... it's getting better, but the ADAMS Whereabouts was so ridiculous, I mean it would take forever. The app was just non-functional half the time, and you would press submit, and something wouldn't happen, and [inaudible] you didn't submit this or submit that. So, I always carried hard copies of everything that I do just in case and I've had to use them on several occasions. So yeah, I would say that when it comes to those kinds of non-compliance where the person just wasn't there, there should be a caveat where you're "okay, here's your 24-hour window. You have this much time to go down to this doctor and give them a sample." There should be something to protect the innocence of athletes that surely, they're not, they're athletes, they're not administrators and managers, they're going to make mistakes when they're 17, 18, 19 years old.

Demanding training schedules means that athletes are already under pressure to perform, and obligations to complete forms and make sure details are correct adds a further level of stress at an already stressful time. Importantly, athletes and others in the sportsnet acknowledge and accept that this is part of the responsibilities of elite competition but note that there are times when athletes may require some additional support to complete these tasks accurately.

There were times when we had to fill in our whereabouts during really heavy training blocks, where you are pretty much in a seat racing kind of scenario so, kind of, your heads on the chopping block in a way, so, extremely stressful times and then adding this massive burden. Like I'd be in tears sometimes tears filling it out, it'd be that stressful.

Participants also noted that there can be a lack of support or awareness of the different training requirements and schedules across sports, which may not be as easily predictable as they might be for athletes in more professional, or well resourced countries.

It's just a matter of understanding the sport and it's going to change in every sport. So, they [those scheduling doping control] have to understand the sport that they're testing and be sensitive to everything from travel schedules to competition times, not just the day of but, you know, the day before, and in certain situations you have certain practice times. So, you have 20 teams there, 30 teams there at a competition, and you have a practice time and if you missed that practice time, you miss the practice time - you can't reschedule it. So, you know, and you miss that that practice time, then you put the athlete at a deficit in the fact that he does not, he misses his training schedule. So, they need to understand the flow of the sport and understand when they're testing ...

Lack of reliable access to technology, as well as difficulties in predicting future training schedules were barriers to compliance and place athletes in the Oceania region at risk of an ADRV.

6.4.2 PROBLEMS WITH THE WORLD ANTI-DOPING CODE

Participants agreed on the importance of the World Anti-Doping Code (WADC) as it ensures that doping policies and regulations are consistent and across public authorities and sport organisations globally. A major concern with the WADC is that it can be difficult to navigate and comprehend. Information is only provided in English, French and Spanish and, like translation of anti-doping educational materials, translation of the Code is both challenging and time-consuming (as discussed in Section 6.2.2).

Participants also commented on the frequency of updates to the WADC. In one instance, a participant explained they believe the frequency of the Code updates to be insufficient. The rapidly changing environment in sport – including changes in performance standards, technological advances and social attitudes, means that updating the Code every four years fails to capture or account for PEDs or techniques that emerge during that time:

... updating the Code every four years in this environment, no, it's ridiculous ... it's such a fluid environment ... Things are changing all the time, so no that's not enough unless there's some sort of, I guess, amendments that are there to be adhered to, even though there's only one major one every four years but it just doesn't sound enough.

Participants generally understood and supported the need for the Prohibited List and the WADC, or similar documents. However, there was a view that the particular issues of Oceania are not addressed in the Code and that a one-size-fits-all approach is problematic, especially as doping is perceived to be a minor issue in the region:

I understand that the reason is so that everybody follows and abides by the same code of ethics and the rules. However, one size doesn't fit all and I think for small island nations, like within Oceania, where our drug incidents is extremely low to nothing, some of the regulatory parts of the Code are quite difficult for countries to adhere to.

One of the areas that participants indicated is difficult in terms of compliance is Therapeutic Use Exemptions (TUEs). The complex nature of anti-doping procedures means that athletes are often unaware of the correct processes surrounding TUEs, where to find information, and who to ask specific questions about prohibited substances. One respondent mentioned that they would just avoid taking medication if they found it too difficult to navigate the prohibited list, suggesting that this could be indicative of how many other athletes feel and act.

Respondents also indicated that the tools provided to explain the Prohibited List, and the WADC are not helpful. Responses on this topic indicated that streamlined functionality is required to make the WADA's online tools and resources more user-friendly.

... it is difficult. I really can't figure it out most of the time ... I think to be honest at first I was kind of confused going through the list like how to go about looking through the list, I don't know if they have it now but a search box, you just put in your medication and see which they probably do have, I think we've gotten some advice from ORADO for us to check.

The Code [is] being updated all the time, look, unless you're somebody who sits down and reads, it's a minefield. I think, you know, sometimes simplicity is the best form of getting

your message across. Let's not make it that you need to have a double university degree to actually understand it.

Across all the participant groups interviewed, the prohibited list is described as difficult to comprehend. Although respondents found it important to be able to access the WADC and the Prohibited List, they find these documents difficult to navigate.

6.4.3 CULTURAL INFLUENCES

Participants expressly discussed the way that the cultural traditions of the Pacific Islands are not reflected in the policies, procedures and regulations established and imposed by WADA. While consuming products like kava may put athletes at risk of testing positive, culturally significant drinks or foods (like betel nut) are often used in cultural ceremonies (e.g., the Samoan 'ava ceremony), or are common practice in the region. Yet, culturally significant traditions are not considered by WADA, for example:

... before we travel for competition, you need to go and visit the President or the Prime Minister and you have this traditional service to say that you're leaving. And then that's probably a place where you drink a bowl of this kava. But then, some people do it like a casual thing, so you just sit around and you drink it while you chat and tell stories. But I think the cultural thing behind it is sometimes people don't know when to stop, and so they probably drink a lot of it.

Despite this, one participant felt that cultural ceremonies were not worth consuming banned substances: "Athletes know, either you don't do and you're an athlete or you do it, you're not an athlete. It's a simple ... you know habits like chewing betel nut and kava are not cultural to the point that I will die if I don't do it." While it is possible for individuals to resist cultural expectations, this nevertheless creates a conflict for athletes and their support personnel in terms of how to navigate cultural expectations and the anti-doping message.

... in some of the Pacific Islands, we chew beetlenut ... And if you chew beetlenut, you can test positive for stimulants, and we don't consider that a performance enhancing drug, that's just part of the tradition. Like some people drink kava, coffee and tea, we just chew beetlenut. So, we're aware, based on [what] the Medical Commission and the NOC have told us what we can and cannot do so, our athletes are very, very cognizant of those things.

There are some cultural identities that I will not cross, but chewing beetlenut is not one of those things. I can always stop chewing beetlenut to make sure that I don't get tested positive. But we always have that list of things that we do, so we always write it down, chew beetlenut or I've taken a cough syrup, or I've taken Benadryl. So, there is a process before we get tested, so we always list them so if we do get tested positive it's already been told to WADA what we did take. So, our doctor will always verify that "yes, we did take this or that".

Other cultural impediments to compliance with testing protocols concern strong views around the body, and particularly in relation to reproductive areas. As these participants indicated:

Actually, there is no problem with them [inaudible] the testing. Other than the fact that culturally, sometimes it might be a little bit difficult for somebody to be an escort, to watch

them, you know, use the bathroom. That's the only part, but we're getting better at it. Other than that, no, there's no real major issue from the athletes' point of view that we have to test. My experience has been that we want to be tested to show that we're natural athletes and we want to be able to do the testing across the board, so that when we go on to the playing field, everyone is equal and the only reason why somebody beats me, in any event, is because they're better than I am, not because they use. So, most of our athletes, if not all of them that travel regionally, internationally, understand that concept of why we have a tester. So, there's not a really big issue of us complaining about why we're being tested, the only thing was the beginning when, especially the young ladies, were a little bit uncomfortable having to go to the bathroom and take a urine sample while somebody's watching them.

Look we have no qualms, when you're at that level it's part and parcel of what the sport requires and hence by that time you're just, you're just okay with the procedures. The other thing too, I meant to mention to you, the female thing about when the girls are young and the culture problem, and you know how the testing is done for the females- the boys, eh, it's not so bad, but the girls I've had things thrown at me from fathers and mothers saying "how dare you make my daughter urinate in front of a person she doesn't know. How dare her genitalia is exposed to someone we don't know. Can't you find a better system?" Now, very hard to explain to people who [inaudible 49.39] the only procedure apart from blood tests, they get. Now, when that happens everybody gets upset, you know, Doping Control Officers are abused, not their fault because they need to carry out their thing. We're abused because we allow the, we allow their daughters to be subjected to this type of testing. Why can't they pull... one woman said "why can't they just pluck a hair out of their head" and do it - they'll pluck a hair every week if they have to. So, that is a real issue in cultures where this is not...

There was one report that these cultural impediments can, inadvertently, contribute to abuse or manipulation of the system by some athletes.

They were probably just some random person that they paid to give them a sample of their urine. And because, like you say, the education around how to perform a testing was not present at all and we have an interesting cultural blackout around anything to do with reproductive areas. That means that they weren't watched while they provided the sample. So, they weren't supervised while they provided the sample, they went into a closed room. And later on, we found samples outside of the building.

This emphasises the importance of anti-doping education, but also that this education must be appropriately tailored to the local cultural context to support and complement other elements of the anti-doping regulatory framework, such as testing, so that the system can operate effectively.

Last, there were concerns over doing in home / local training facility testing in smaller communities as it can create gossip among residents. Athletes may be worried that the community will think they have been cheating.

And I think, even though the tests are random and there should be no notification as such to do the test, and perhaps they need to be taken away to a more suitable facility, rather than being tested at home within the village which could create unnecessary gossip or, you know, with people outside the family or even within the family there's all extended families, you may get three or four generations in one family talking about "why are you being tested"

and then the word cheater may come up, or you've done something wrong. So, sometimes I feel that ... to take them away and do it in a specified place may be more suitable than at home.

To increase compliance, anti-doping messages need to account for local cultural conditions and practices. When there is conflict between the rules and local traditions this places athletes and support personnel in a very difficult position. The ways to address this problem should be developed by the local communities.

6.5 PERCEPTIONS OF WADA MORE BROADLY

Working with sporting organisations and governments around the world to strengthen the fight against doping is a significant and complex task. Many participants agreed that the WADA is doing the best they can to orchestrate a collaborative campaign against doping in sport, yet they recognise that it is not always easy to do, considering the multitude of sport organisations and countries they liaise with.

I for one, I was really glad we have a regional body and maybe it's because I think that obviously they're chosen for the specific areas and they're not as intimidating. I think because I love to ask a lot of questions but sometimes when I'm intimidated, I really won't say anything which is not really good sometimes. So, just seeing in terms of our regional body – Oceania Regional, it's like oh wow, we've got our own anti-doping organisation that when I feel like I really don't know anything I can just-, I think in terms of approach. I love how it's sort of like WADA's this massive cloud that covers the different- yeah, so definitely.

I think if we didn't have any world organisation or any regional organisation and people like you working in the field, sport would not be taken seriously and people who would be getting those medals would probably be those who have cheated, and that's unfair for everybody else globally as well. So, I think the work that you're doing - big thumbs up and there's always room for improvement, but most important is that the message gets out to everyone [inaudible] process, so thank you.

Broadly, the perception was that WADA is doing well. However, there were two main areas of concern over maintaining sporting integrity, namely, state sanctioned doping and doubts about the effectiveness of education strategies.

Many participants felt that the WADA generally does a good job in providing anti-doping education, but that there are some gaps in the current approach. Educational material and online tools are available; however, these are not always accessible due to limitations in access to technology, or content that is not seen as relevant to the local context, or available in the local language. Further, although it is mandatory for all signatories of the WADC to abide by the ISE, education programs in country are often not compulsory, unless NSOs or sport institutions are implementing these types of education programs. In some cases, this may not be occurring or may be of limited depth due to constraints around resources and expertise. Additionally, delivery of anti-doping education appears to be sporadic, with some athletes only encountering, or being required to attend anti-doping education sessions just before competing in major sporting events.

... we typically would get approached or would have someone from the Anti-Doping Agency in the Oceania region come in and talk to us, I feel personally, they come in and talk to us and educate us and raise awareness more so [only] when we're in regional competitions and I think that's because we have a higher chance of getting tested at this level in this area, than we would going to, like, the World Championships or the Olympics.

I think we've got like an athlete's commission that sort of will just provide ... outreach - it's part of the voices the athletes that we have, which is great. Other than that, if they don't come out for Outreach then it's the national level that would get a presentation done, but only before we leave for competition.

Consequently, there was some doubt about whether WADA is doing enough to ensure anti-doping education is being provided in a manner that offers maximum benefit to stakeholders. Those who were critical of WADA point to its failing educational strategies, returning to WADA's lack of recognition of cultural nuances and lack of tailoring of anti-doping material. Another criticism highlighted the complexities of WADA's online tools and resources, particularly for athletes who are starting out or breaking into the elite level of sport:

... it's a little difficult for somebody who is starting out or somebody that doesn't really know information or, like I said, these new athletes that are coming through and coming up, and they want to be able to go and search a product or see if this is on the prohibited list. I don't know if there's an easier way where they can just type this in and then it pops up or break it down into this specific sport or something.

Nevertheless, many participants commended WADA on trying their best to harmonise sport, as one participant noted:

I think the anti-doping organisations around the world owe WADA a huge debt of thanks for just having that structure that really does harmonized so many things that were clearly unfair between countries and between sports prior to that.

For one participant WADA's presence is eradicating discrimination and helping to improve governance:

To [strength sport], I would say the old rule, you know, the good old boys club is slowly being weeded out, because of WADA everybody is now having to take it seriously and we have to be very careful.

International examples of what many described as state sanctioned doping is an issue of significant concern held by participants in the Oceania region. There were mixed responses about involvement of Russian athletes in the Tokyo Olympics. For example, many participants agreed that it is unfair for all athletes to be penalised based on the choices of those who test positive for doping. Some participants felt empathy towards athletes who were penalised for the actions of others who had been caught up in the country's systematic doping:

I think it's unfair to penalise an entire country of people for the actions of a group of them. Especially those in higher power who abuse their power to cheat and it's affecting the people that have done the work, really. I can't remember who allowed it, but I think they should be allowed, say if an entire country does have to be banned because of doping or

anything like that, independent people who haven't participated in that should still be allowed to compete, maybe as an independent nation, not as the country itself. Because, honestly, when you're an international athlete, you don't care if you're competing for your country, you just care that you're competing.

Interviewer: What about the Russian athletes who hadn't tested a positive still got caught up because the country as a whole was banned?

Participant: Umm, that's a bit disappointing, you know, I'm [an] athlete's person, I coach for the athlete and I work for the athlete, basically and anyone that gets caught up that has been doing the right thing, I feel for 'em and I think it's just that they get punished for someone else's mishap.

On the other hand, some participants felt that there was too much leniency in allowing individuals to compete under the Olympic flag, rather than representing Russia.

Participant: So, when it's intentional I believe that the punishment should be more severe than when it's a mistake. In their case, it was completely intentional.

Interviewer: So, we shouldn't have seen any of the Russian athletes at Tokyo?

Participant: I don't believe so. I think because it was widespread ... The doping was widespread. So, no I don't think they should have been there because it was supported by the state itself and it ran a lot deeper than just an athlete taking drugs.

Participants often noted feeling sad or frustrated when they hear of a country's systematic doping but often were empathetic towards athletes from that country who are being penalised for something they may not have been involved in. Despite this, allowing athletes from countries that are synonymous with doping as cheating to still compete was considered by many to be unfair. Although there is an understanding that not all athletes from that country may dope, it is still a loophole that allows the country to compete in a round-about way. This de-legitimises WADA's stance on anti-doping.

Participants identified a range of other issues that affected their sport in terms of fair competition and integrity. Whilst out of scope for this report, the issues identified match-fixing, abuse, gambling, gender categories, athlete well-being and grassroots development. In terms of a hierarchy of risks or threats to sport, doping was not considered the most important by any participant. This finding accords with the interview data indicating that nearly all the participants thought doping was a non-existent or minor issue in Oceania. Although participants identified the fight against doping to be important, other issues that threaten the integrity of sport and athlete well-being were regularly cited as being a higher priority.

There was a general consensus that WADA is doing the best they can with what they have to work with. It is a difficult task trying to design and manage a regulatory framework across so many stakeholders including countries, working with NSOs, IFs, NADOs, RADOs, local authorities. A suggestion was that there be more collaboration between WADA and Pacific Island universities and research departments to attract more interest in sport research within the country and to create publications that acknowledge cultural differences:

We're using overseas publications and trying to adapt it here without even realizing the culture is different and there's a lot of loopholes and potholes and everything else that we've got to jump over, the hurdles are huge.

The consensus was that WADA's anti-doping policies, rules and regulations are important to maintain integrity in sport and retain an image of clean sport. Yet, doubts were raised as to whether WADA is doing enough to ensure anti-doping education is being provided in a manner that offers a maximum amount of benefit to stakeholders. This concern centred not only around the quality of materials being provided by WADA, with a particular emphasis on a lack of cultural relevance and accessibility in local languages, but on the effectiveness of the modes of delivery of education. Participants indicated that athlete engagement would be improved by taking into account the diverse learning styles in the region, as well as incorporating social media tools, such as educational apps, and personal testimonies of athletes about their elite sporting journey including but not limited to anti-doping compliance.

7.0 RECOMMENDATIONS

This study set out to investigate how individuals in the sportsnet in different ethnic and cultural contexts understand anti-doping activities, and whether these activities are carried out in culturally attuned ways. The study focused on the less studied region of the South Pacific and sporting administrators, athletes as well as individuals in athletes' support networks were interviewed, resulting in a range of different stakeholder perspectives. Based on a qualitative analysis of the interviews, the results of the study enabled the formulation of evidence-based practical recommendations to drive changes aimed at promoting anti-doping practice in the South Pacific regional context.

These recommendations are made to the WADA in line with the underlying theoretical principle of the Shared Value Perspective, which posits that focusing on value creation for stakeholders fosters the ability to create win-win solutions for all (Hickman & Akdere 2017). In this case, the win-win solution constitutes both:

- i) support by stakeholders in the South Pacific for anti-doping in sport, and
- ii) evidence-based information for WADA to use in their advocacy for anti-doping in sport within the South Pacific region.

In conjunction with culturally tailored materials, the need to establish a shared understanding of anti-doping regulations, their implementation and the consequences for non-compliance articulated consistently in all materials across all levels of sport, not limited to elite or representative levels, was cited as important. Anti-doping education may not necessarily be passed on throughout different levels of stakeholders, exacerbated by issues associated with the time and cost of translation into local languages. Developing a shared understanding of anti-doping policy, rules and regulations will not only prevent mistakes from being made, but also ensure better communication among stakeholders.

7.1 EVIDENCE-BASED RECOMMENDATIONS TO THE WORLD ANTI-DOPING AGENCY

Based on this research, the following recommendations are made to the WADA, with the objective of maintaining support for the fight against doping in the Oceania region:

1. Development of culturally relevant, fit for purpose education and support materials:
 - a. Assistance should be provided to help NADOs translate materials into local languages.
 - b. Assistance should be provided to NADOs to help them develop culturally relevant and appropriate education materials that are relevant to the context of the country, sport and competition level.
2. Review of WADA and WADC online resources for accessibility:
 - a. Review the ease of use and accessibility of the prohibited lists and search functions related to them.
3. Integrate anti-doping education into other support measures:
 - a. Given the competing demands on time and resources and with other participation issues given higher priority than anti-doping, WADA should

consider how to make anti-doping education easier and less time / resource intensive.

- b. High level coach support provided through International Federations (IFs) and / or National Sporting Organisations (NSOs) should include anti-doping education of coaches as a mandatory component, linked to accreditation.
 - c. Regional Anti-Doping Organisations (RADOs) must take a more active role to ensure that an integrated 'support package' with anti-doping education as a central resource, is provided in the Oceania region and that it is appropriate and relevant to the diverse cultural contexts.
4. WADA must continue to aggressively pursue anti-doping actions, in particular against state-sanctioned activity, or there is a risk of under-mining the view that the system is effective.

Measures 1-3 should be developed in partnership with stakeholders in Oceania as they are best placed to understand what is required in their local context.

8.0 CONCLUSION

At present, there is less attention in academic literature to consider cross-cultural perspectives about the legitimacy of the fight against anti-doping in sport. This research set out to understand the views of stakeholders in the Oceania region on the legitimacy of the anti-doping regulatory framework. Two questions guided the research:

- *How do members of the sportsnet perceive the legitimacy of the anti-doping fight?*

This allowed us to address the issue of how do sport participants in different ethnic and cultural contexts understand anti-doping activities, and are these activities carried out in culturally attuned ways. From 29 qualitative, semi-structured interviews with 33 participants, including athletes, support personnel, and sporting administrators from across the Oceania region, the most prominent themes are:

1. Perceptions of doping prevalence
2. Anti-doping education
3. Anti-doping support
4. Anti-doping rules – impediments to compliance
5. Perceptions of WADA

Participants agreed that anti-doping education requires a more culturally tailored approach as existing education is often not fit for purpose and fails to consider the unique circumstances of athletes from Oceania. Language barriers also hinder learning, and ultimately presenting a compliance risk, as material that is distributed is usually in English and translation is a timely and costly process.

The WADA's anti-doping policies, rules and regulations are considered important to maintain integrity and retain an image of a clean sport. Despite this, there were concerns regarding the approach of WADA to education and if the resourcing was sufficient and appropriate.

REFERENCES

- Bloodworth AJ., & McNamee M. (2010). Clean Olympians? Doping and anti-doping: the views of talented young British athletes. *Int J Drug Policy*, 21(4), 276–82.
- Boland J, Banks S, Krabbe R, Lawrence S, Murray T, Henning T, Vandenberg M. A COVID-19-era rapid review: using Zoom and Skype for qualitative group research. *Public Health Res Pract*. 2021; Online early publication.
- Braithwaite, V. (2011). *Motivations, Attitudes, Perceptions, and Skills: Pathways to Safe Work*.
http://www.safeworkaustralia.gov.au/sites/SWA/about/Publications/Documents/581/Motivation_Attitude_Perceptions_and_Skills_Pathways_to_Safe_Work.pdf - accessed 20 December 2013
- Braithwaite, V., & Braithwaite, J. (2001). An evolving compliance model for tax enforcement. In *Crimes of privilege: Readings in white-collar crime*. Oxford University Press.
- Braithwaite, V., Braithwaite, J., Gibson, D., & Makkai, T. (1994). Regulatory Styles, Motivational Postures and Nursing Home Compliance. *Law & Policy*, 16(4), 363-394.
- Braun, V & Clarke, V (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Braun, V & Clarke, V. (2013), *Successful qualitative research: A practical guide for beginners*, Sage, London, UK.
- Braun, V., & Clarke, V. (2021a) To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales, *Qualitative Research in Sport, Exercise and Health*, 13:2, 201-216, DOI: 10.1080/2159676X.2019.1704846
- Braun, V., & Clarke, V. (2021b). Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern based qualitative analytic approaches. *Counselling and Psychotherapy Research*, 21(1), 37-47.
- Brissonneau, C & Ohl, F (2010). The genesis and effect of French anti-doping policies in cycling. *International Journal of Sport Policy and Politics*, 2(2), 173–187.
- British Medical Association 2002, *Drugs in sport: the pressure to perform*, BMJ Books: London.
- Connor, J. 2009, 'The athlete as widget: how exploitation explains elite sport', *Sport in Society*, 12:10, pp .1369-1377
- Connor, J., (2021). "Filing the podium: cheating, doping and corruption", in Pike, E (ed) *Research Handbook on Sports and Society*, Edward Elgar, pp 307-320
- Donovan, RJ, Egger, G, Kapernick, V & Mendoza, J 2002, 'A Conceptual Framework for Achieving Performance Enhancing Drug Compliance in Sport', *Sports Medicine*, vol.32, no.4, pp. 269-84.

Dunn, M, Thomas, JO, Swift, W, Burns, L & Mattick, RP 2010, 'Drug testing in sport: the attitudes and experiences of elite athletes', *International Journal of Drug Policy*, vol.21, no.4, 330–332.

Dvorak, J, Saugy, M, & Pitsiladis, YP 2014, 'Challenges and threats to implementing the fight against doping in sport', *British Journal of Sports Medicine*, vol.48, no.10, pp. 807-809.

Efverström, A, Ahmadi, N, Hoff, D & Bäckström, A, 'Anti-doping and legitimacy: an international survey of elite athletes' perceptions', *International Journal of Sports Policy and Politics*, vol.8, no.3, pp.491-514.

Elbe, AM, & Overbye, M 2013, 'Urine doping controls: the athletes' perspective', *International Journal of Sport Policy and Politics*, vol.6, no.2, pp.227-240.

Engelberg, T & Skinner, J, 2016, 'Doping in sport: whose problem is it?', *Sport Management Review*, vol.19, no.1, pp.1–5.

Erdman KA, Fung TS, Doyle-Baker PK 2007, 'Dietary supplementation of high-performance Canadian athletes by age and gender', *Clinical Journal of Sport Medicine*, vol.17, no.6, pp.458–64.

Flick, U. (2002). *An Introduction to Qualitative Research* (2nd ed.). Sage Publications.

Greely, H, Sahakian, B, Harris, J, Kessler, RC, Gazzaniga, M, Campbell, P 2008, 'Towards responsible use of cognitive-enhancing drugs by the healthy', *Nature*, vol.456, no.7223, pp. 702–705.

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, DOI: 10.1080/19406940.2019.1577901

Grbich, C. (2007). *Qualitative Data Analysis: An Introduction*. Sage.

Gucciardi, DF, Jalleh, G & Donovan, R 2011, 'An examination of the Sport Drug Control Model with elite Australian athletes', *Journal of Science and Medicine in Sport*, vol. 14, no.6, pp.469-476.

Hardcastle, S., & Hagger, M. S. (2011). "You Can't Do It on Your Own": Experiences of a motivational interviewing intervention on physical activity and dietary behaviour. *Psychology of Sport and Exercise*, 12, 314-323.

Hardie M, Shilbury D, Ware I, Bozzi C 2010, '*I wish I was twenty one now - Beyond doping in the Australian peloton*', Technical Report on Doping and Australian professional cycling: attitudes, issues and a pathway to a new approach, Deakin University, Victoria, Australia, 2010.

Harmer PA 2020, 'Anabolic-androgenic steroid use among young male and female athletes: Is the game to blame?', *British Journal of Sport Medicine*, vol.44, no.1, pp.26-31.

Henne K 2015, *Testing for Athlete Citizenship: Regulating Doping and Sex in Sport*, New Brunswick, NJ: Rutgers University Press.

- Hennink, M, Hutter, I & Bailey, A 2011, *Qualitative Research Methods*, Sage, London, UK.
- Hickman, L & Akdere, M 2017, 'Stakeholder theory: implications for total quality management in higher education', in *Proceedings of the 4th International Conference on Lean Six Sigma for Higher Education*, Purdue University, West Lafayette, IN, pp. 105-109.
- Houlihan B 2004, 'Civil rights, doping control and the World Anti-Doping Code', *Sport in Society*, vol.47, no.1, pp.420-437.
- Howlett M. Looking at the 'field' through a Zoom lens: Methodological reflections on conducting online research during a global pandemic. *Qualitative Research*. January 2021. doi:10.1177/1468794120985691
- Barrie Houlihan, Dag Vidar Hanstad, Sigmund Loland & Ivan Waddington (2019) The World Anti-Doping Agency at 20: progress and challenges, *International Journal of Sport Policy and Politics*, 11:2, 193-201
- Kayser, B, & Smith, ACT 2008, 'Globalisation of anti-doping: The reverse side of the medal', *British Journal of Medicine*, vol. 337, <<http://dx.doi.org/10.1136/bmj.a584>>.
- Koppell, JGS 2008, 'Global Governance Organisations: Legitimacy and Authority in Conflict', in *Journal of Public Administration Research and Theory*, vol.18, no.2, pp. 177-203.
- Krouwel, M., Jolly, K. & Greenfield, S. Comparing Skype (video calling) and in-person qualitative interview modes in a study of people with irritable bowel syndrome – an exploratory comparative analysis. *BMC Med Res Methodol* 19, 219 (2019). <https://doi.org/10.1186/s12874-019-0867-9>
- Lentillon-Kaestner V, Hagger MS, Hardcastle S 2012, 'Health and doping in elite-level cycling', *Scandinavian Journal of Medicine & Science in Sports*, vol.22, no.5, pp.596–606.
- Lieblich, A., Tuval-Mashiach, R., & Zilber, T. (1998). *Narrative Research: Reading, Analysis and Interpretation*. Sage.
- Llosha, M. V., & Tittler, J. (1990). Updating Karl Popper. *PMLA*, 105(5), 1018-1025.
- 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*, 14 106–110.
- Mazanov, J., Hemphill, D., Connor, J. Quirk, F. & Backhouse, S. (2015). "Australian athlete support personnel lived experience of anti-doping", *Sport Management Review*, 18:2, 218-230, DOI: 10.1016/j.smr.2014.05.007
- Mazanov 2015, 'Beyond antidoping and harm minimization: A stakeholder-corporate social responsibility approach to drug control for sport', *Journal of Medical Ethics*, vol. 42, pp. 220-223.
- Mitchell, D 2000, *Cultural Geography: a critical introduction*, Oxford, Blackwell.
- Møller V 2010, *The ethics of doping and anti-doping: redeeming the soul of sport?* Oxon: Routledge.

Møller, V 2016, 'The road to hell is paved with good intentions—A critical evaluation of WADA's anti-doping campaign', *Performance Enhancement & Health*, Volume 4, Issues 3–4, pp 111-115,

Morente-Sanchez, J & Zabala, M 2013, 'Doping in Sport: A Review of Elite Athletes' Attitudes, Beliefs, and Knowledge', *Sports Medicine*, vol.43, no.6, pp.395-411.

Mottram D, Chester N, Atkinson G 2008, 'Athletes' knowledge and views on OTC medication', *International Journal of Sports Medicine*, vol.29, no.2, pp.851–855.

Montoya, M. (2011). *Making the Mexican diabetic: Race, science and the genetics of inequality*. University of California Press.

Mugford, S, Mugford, J & Donnelly, D 1999, *Social Research Project: Athletes' motivations for using or not using performance enhancing drugs*, Australian Sports Drug Agency, Canberra.

Neuendorf, K. (2017). *the content analysis guidebook*. Sage.

Nieper A 2005, 'Nutritional supplement practices in UK junior national track and field athletes', *British Journal of Sports Medicine*, vol.39, no.9, pp.645–649.

Numerato, D. (2009). Revisiting Weber's Concept of Disenchantment: An Examination of the Re-enactment with Sailing in the Post-Communist Czech Republic. *Sociology*, 43(3), 439-456.

Numerato, D. (2016). Corruption and public secrecy: An ethnography of football match-fixing. *Current Sociology*, 64(5), 699-717.

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*, vol.6, no.3, pp.407–428.

Overbye, M, Knudsen, M, & Pfister, G 2015, *Anti-doping policies and reasons (not) to dope. A need for diversified prevention strategies?*, Final Report prepared for the World Anti-Doping Agency, February 2015.

Marie Overbye (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,

Patton, M. (2002). *Qualitative Research and Evaluation Methods*. Sage.

Partridge, B, Lucke, J, & Hall, W 2012, 'A comparison of attitudes toward cognitive enhancement and legalized doping in sport in a community sample of Australian adults', *AJOB Primary Research*, vol.3, no.4, pp.81–86.

Partridge, B, Lucke, J, & Hall, W 2014, "'If you're healthy you don't need drugs': Public attitudes towards "brain doping" in the classroom and "legalised doping" in sport', *Performance Enhancement & Health*, vol.2, pp.20-25.

Peters C, Schulz T, Oberhoffer R, 2009, 'Doping and doping prevention: knowledge, attitudes and expectations of athletes and coaches', *Deutsche zeitschrift fur sportmedizin*. Vol.60, no.3, pp.73–8.

Petroczi A, Aidman E, 2009, 'Measuring explicit attitude toward doping: review of the psychometric properties of the Performance Enhancement Attitude Scale', *Psychology of Sport and Exercise*, vol.10, no.3, pp.390–396.

Pitsch W, Emrich E, Kleinm M 2007, 'Doping in elite sports in Germany: results of a www survey', *European Journal for Sport and Society*, vol.4, no.2, pp.89–102.

Qvarfordt, A 2019, 'Anti-doping – a legitimate effort? Elite athletes' perspectives on policy and practice', Thesis, The Swedish School of Sport and Health Sciences, Universitets service.

Qvarfordt, A. Hoff, D. Bäckström, Å. and Ahmadi, N. 2019, 'From fighting the bad to protecting the good: Legitimation strategies in WADA's athlete guides', *Performance Enhancement & Health*, Volume 7, Issues 1–2,

Read, D, Skinner, J, Lock, D, & Houlihan, B 2019, 'Legitimacy driven change at the World Anti-Doping Agency', *International Journal of Sport Policy and Politics*, vol.11, no.2, pp.233-245.

Reñosa MDC, Mwamba C, Meghani A, et al Selfie consents, remote rapport, and Zoom debriefings: collecting qualitative data amid a pandemic in four resource-constrained settings. *BMJ Global Health* 2021;6:e004193

Ritchie, I, 2014, 'Pierre de Coubertin, doped 'amateurs' and the 'spirit of sport': the role of mythology in Olympic antidoping policies, *The International Journal of the History of Sport*, vol.31, no.8, pp. 820–838.

Roberts JK, Pavlakis AE, Richards MP. It's More Complicated Than It Seems: Virtual Qualitative Research in the COVID-19 Era. *International Journal of Qualitative Methods*. January 2021. doi:10.1177/16094069211002959

Savulescu, J, Creaney, L, & Vondy, A 2013, 'Should athletes be allowed to use performance enhancing drugs?', *British Medicine Journal*, vol. 347, <<http://dx.doi.org/10.1136/bmj.f6150>>

Savulescu, J, Foddy, B, & Clayton, M 2004, 'Why we should allow performance enhancing drugs in sport', *British Journal of Sports Medicine*, vol.38, no.6, pp.666-670.

Stamm, H, Lamprecht, M, Kamber, M, Marti, B & Mahler, N 2008, 'The public perception of doping in sport in Switzerland 1995–2004', *Journal of Sports Sciences*, vol.26, no.3, pp.235-242.

Srivastava, P., & Hopwood, N. (2009). A Practical Iterative Framework for Qualitative Data Analysis. *International Journal of Qualitative Methods*, 76-84.

State of the Tropics. (2021). *The Digital Divide in the Tropics*.

Stemler, S. (2001). An Overview of Content Analysis. *Pract. Assess. Res. Eval*, 7.

- Trainor, L. R., & Bundon, A. (2020). Developing the craft: reflexive accounts of doing thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 13(5), 705-726. <https://doi.org/10.1080/2159676X.2020.1840423>
- United Nations Educational Scientific and Cultural Organisation (UNESCO). (2015). *UNESCO Science Report Towards 2030*.
- Waddington, I. and Møller, V. (2019) WADA at twenty: old problems and old thinking?, *International Journal of Sport Policy and Politics*, 11:2, 219-231,
- Waddington, I 2016, 'Theorising unintended consequences of anti-doping policy', *Performance Enhancement & Health*, Vol. 4, Issues 3-4, pp 80-87.
- Wheaton, B. (2007). After Sport Culture: Rethinking Sport and Post-Subcultural Theory. *Journal of Sport and Social Issues*, 31(3), 283-307. doi:10.1177/0193723507301049
- Whitaker, L, Backhouse, SH & Long, J (2014). 'Reporting doping in sport: National level athletes' perceptions of their role in doping prevention', *Scandinavian Journal of Medicine & Science in Sports*, 24(6) pp. 515-521.
- Woolf, J., Mazanov, J. & Connor, J. (2016) 'The Goldman Dilemma is dead: what elite athletes really think about doping, winning, and death, *International Journal of Sport Policy and Politics*, 9, 3, 453-467.
- Working Group, 2013, *Lack of effectiveness of testing programs*, A report written for the WADA Executive Committee, Montreal: World Anti-Doping Agency, 2013.
- World Anti-Doping Agency. (2017). *WADA Ethics Panel: Guiding Values in Sport and Anti-Doping*. World Anti-Doping Agency.
- World Anti-Doping Agency 2021, 'Who we are', viewed 20 February 2021, <www.wada-ama.org/en/who-we-are>.
- World Anti-Doping Agency (WADA). (2021a). *International Standard for Education (ISE) - Resource description*. World Anti-Doping Agency.
- Zucchetti, G, Candela, F, & Villosio C 2015, 'Psychological and social correlates of doping attitudes among Italian athletes', *International Journal of Drug Policy*, vol.26, no.15, pp.162-168.

APPENDIX A – INTERVIEW GUIDE

INTERVIEWER TO PROVIDE BACKGROUND AND CONFIRM PARTICIPANT CONSENT:

“If you decide to participate, we will ask you some questions about player welfare and the regulation of sport. The discussion will be taped. We expect the interview to go for no more than an hour. Due to the sensitive nature of drug use in sport we ask that you DO NOT disclose knowledge of doping /drug use in this interview. We only wish to speak to you about education strategies and the regulatory processes of WADA and related NADOs. We, the researchers are taking particular care to ensure anonymity for all participants to allow a full and frank discussion. After the interview your contact details and all record of this meeting will be destroyed. The tape of the interview will be transcribed by a professional transcription service who does not know who you are. The original recording will then be destroyed. The transcript of the interview will then be de-identified and any information that could identify you or people and events you may speak of will be modified to ensure confidentiality. This process will make it extremely difficult for you to be subsequently identified. We ask that you only refer to individuals, competitions and level of performance in general terms. We will only be collecting verbal consent for this interview. At the end of the study the transcripts will be made available to other researchers who may wish to further analyse the interviews. You are free to stop the interview at any time and ask for the recording to be erased. Do you understand this, and do you consent to participate in the study?”

Interview Questions - General

1. What is your experience in sport?

2. How is anti-doping regulated in your experience?

- talk about supplements?
- How do athletes find out about supplements (e.g., gyms, informal, talking)?
- difference between genders/groups? Any reason why a difference?
- Testing for female athletes (at this/relevant level)?

3. What sporting culture and values inform how you ‘do’ sport?

4. What are your experiences of education around sport, doping and cheating?

- Why do athletes use drugs?
- Returning from injury, temptations?
- Experience of doping (vicarious), how make you feel?
- Cheat the system if wanted too?

5. How well is athlete welfare looked after?

Interview Questions – WADA

1. How effective is WADA?

2. New WADC, thoughts? (update every four years)

- Mention in any seminars or education programs, etc?

Interview Questions – Relevant Bodies (i.e. Sport Integrity Australia or Relevant bodies)

1. *What do you think of the new body?*
2. *How much support do you get from them on anti-doping?*
3. *Are athletes educated well enough?*
 - *Do they understand the rules?*
 - *Do they know about supplements?*
4. *What is your view of support personnel and their role in doping?*

Interview Questions – Globally

1. *Is sport fair? Is it a level playing field?*
 - *Are penalties fair?*
 - *Testing (e.g., onerous, whereabouts, gene doping), fair for athletes?*
2. *Do some countries deliberately cheat (e.g., views of countries found to be doping).*
3. *Strict liability—is this a catch/ tricky for WADA?*
 - *Dirty Olympics (take whatever and see results) versus Clean Olympics—thoughts?*
4. *What could WADA do better? What would you do if you were the boss of WADA?*
5. *What are the biggest threats (harms) to your sport?*
 - *gender/trans issues (fairness, e.g., transwomen disadvantage non-trans women) and any link (or drive) to doping*

Interview Questions – additional questions/probes