

COMFORTABLE BEING UNCOMFORTABLE:
A STUDY OF ATHLETE AND DOPING CONTROL OFFICER RELATIONS

by

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Abstract

The Canadian Centre for Ethics in Sport (CCES) employs stringent doping control protocols to: “advocate for sport that is fair, safe and open; and [to] protect the integrity of sport” (CCES, 2011e, para. 3). As a result, Canada’s elite athletes are required to disclose their daily whereabouts to ensure that they can be located to provide urine or blood samples in full view of doping control officers (DCOs) at any time, with no advance notice (CCES, 2011g). The doping control process impinges on personal privacy (Kayser, Mauron, & Miah, 2007), violates autonomy and the right to self-determination (Hanstad & Loland, 2009), involves the policing of athletic bodies (Park, 2005) and positive doping results may destroy an athlete’s career (WADA, 2009f). As a result, athlete and DCO relations can be awkward and in some instances very adversarial, yet no research exists that specifically addresses this topic. The purpose of this research was to determine how athletes and DCOs understood their relations and which elements of those relations were the most contentious. In order to unpack the apparent unbalanced power relations between athlete and DCOs, I drew on Foucault’s understanding of power and his concepts of discipline, panopticism, and governmentality. Data collection consisted of 20 interviews, 10 with Canadian Olympic swimmers and 10 with Canadian DCOs. The findings revealed that athlete and DCO understandings of doping control relations differed only slightly, but contention arose when there were inefficiencies in the doping control process or rule confusion. Similarities in athletes’ and DCOs’ understandings were attributed to Foucault’s governmentality and the workings of disciplinary power, as athletes and DCOs had internalized and normalized CCES’s guidelines. Furthermore, contention in doping control relations was related to Foucault’s understanding that power is both repressive and

productive. Points of resistance were mobilized in athlete and DCO relations when they were not accompanied by knowledge forms that justified doping control procedures that were highlighted as a hindrance to performance, inconvenient and a violation of personal integrity. Future research is required to determine whether these patterns exist in other sports and in other countries.

Preface

This dissertation is an original intellectual product of the author, Daniel G. Thorpe. Ethics approval for this research was obtained from The University of British Columbia Behavioural Research Ethics Board; certificate number H13-00563. Original approval was obtained on March 18th 2013.

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Chapter 1: Introduction

Since Canada's 'national embarrassment' in 1988 when Ben Johnson's Olympic Gold Medal in track and field was rescinded due to his disqualification following a positive drug test (Walker, 1988), Canada has been in the forefront of the anti-doping movement (Canadian Heritage, 2001; Dubin, 1990). To ensure that a similar scandal would never reoccur, as athletes, coaches and trainers may utilize banned substances to enhance their chances of winning to reap substantial economic, social and personal gains (Ehrnberg & Rosen, 2009; Kayser et al., 2007), a national anti-doping organization was established in 1991 (Government of Canada, 1991). This organization, known today as the Canadian Centre for Ethics in Sport (CCES), seeks to: "advocate for sport that is fair, safe and open; and [to] protect the integrity of sport" (CCES, 2011e, para. 3) because the notion that no one should have an exclusive advantage is fundamental (Hanstad & Loland, 2009).

In order to accomplish this mission, Canadian athletes competing at the international level, the vast majority of whom have no history of doping, are subject to the highest level of anti-doping regulations (CCES, 2012). Elite athletes are policed (Park, 2005) as they are required to keep the CCES informed of their daily whereabouts to ensure that doping control officers (DCOs) can locate them at any time to provide blood or urine samples in full view, 365 days of the year, with no advance notice (CCES, 2011g; WADA, 2009f). Moreover, there is no limit to the number of times an athlete can be selected for doping control inspection (WADA, 2009b), and in some instances athletes spend hours under the surveillance of DCOs waiting to complete the process. In addition, the consequences of doping control can be quite damaging as a positive test result or the

evasion of DCOs can result in a tarnished reputation (ASADA, 2010), a lengthy ban from competition, or the end of one's athletic career (WADA, 2009f).

I became interested in this topic while working as a co-op student with the Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games' (VANOC) anti-doping program that relied heavily on CCES staff and policy. I witnessed the doping control process numerous times, including a notable testing mission where DCOs and I arrived at an athlete's residence early in the morning and we were required to wait some time for the athlete to retrieve his and his companion's clothes prior to beginning the doping control protocol. I can attest that despite CCES's commitment to the values of respect, fairness and excellence (CCES, 2011j), athlete and DCO relations can be awkward and in some instances very adversarial. Consequently, I became interested in how athletes and DCOs understand their relations with one another.

Most of the existing literature in the field of anti-doping has investigated testing techniques from a natural science perspective (e.g., Lasne, Martin, Martin, & De Ceaurriz, 2009; Rupert, 2009; Wang, Fedoruk, & Rupert, 2008). In addition, various social science researchers have explored the development of anti-doping policy at the international level, specifically the development of the World Anti-Doping Agency (WADA) and the *World Anti-Doping Code* (WADC) (Elbe & Overbye, 2013; Hanstad, Smith, & Waddington, 2008; Hanstad & Loland, 2009; B. Houlihan, 2002; Overbye & Wagner, 2013; Park, 2005; Waddington, 2010; Wagner, 2011). Others have advocated for alternative forms of policy, criticizing the international prohibition against performance-enhancing drugs (PEDs) as impractical and lacking in sufficient moral justification (Kayser et al., 2007; Kirkwood, 2009; Stewart & Smith, 2008). Research has also explored why athletes' choose to dope

and their attitudes towards doping and doping control (Alaranta et al., 2006; Backhouse, McKenna, Robinson, & Atkin, 2007; Bloodworth & McNamee, 2010; Breivik, Hanstad, & Loland, 2009; Elbe & Overbye, 2013; Hanstad & Loland, 2009; Huybers & Mazanov, 2012; Overbye & Wagner, 2013; Pappa & Kennedy, 2013; Stewart & Smith, 2010; Striegel, Ulrich, & Simon, 2010; Thomas, Dunn, Swift, & Burns, 2011; Weaving & Teetzel, 2008). In addition, Jackson and Ritchie (2007) examined the marginal role that athletes played in the development of Canadian anti-doping policy and Thibault, Kihl, and Babiak (2010) determined the impact of athletes on anti-doping policy discourse remains unclear. A gap however, exists in the literature as athlete and DCO relations have yet to be studied.

The purpose of this research was to examine athlete and DCO relations from the perspectives of these key social actors. The following three research questions guided this study:

1. How do athletes and DCOs understand their relations?
2. Which elements of doping control relations are the most contentious?
3. How is Foucault's understanding of power reflected in athlete and DCO relations?

Foucault's understanding of power and his subsidiary concepts of discipline, panopticism, and governmentality were utilized to inform my analysis. The adaptation of these concepts elicited an enhanced understanding of athlete and DCO relations as Foucault's understanding of power enabled me to unpack the tactics (discipline and panopticism) utilized by DCOs to mobilize power over athletes. In addition, Foucault's (1991) concept of governmentality, which he defined as the art of government, allowed me to examine how the CCES and WADA use policy to direct both athletes and DCOs thereby shaping athlete and DCO relations.

1.1 Significance of Study

The main contributions of this research are two-fold. First, findings from this research provided a voice to both athletes and DCOs who are under-represented groups in decision-making as doping control policy has been determined by those in various sport governing bodies (Jackson & Ritchie, 2007). The collective voices of athletes and DCOs, even though there may be differences within and across both groups, could inform how policy-makers could improve doping control policy and in turn, enhance the process for both athletes and DCOs. Second, this project addressed a substantive gap in the literature, as academic researchers have yet to consider relationships between athletes and DCOs and investigate the stories of those who carry out and abide by doping control policy that has been said to violate privacy, autonomy and the right of self-determination (Hanstad & Loland, 2009).

In Chapter 2, a detailed review of the substantive anti-doping literature and my theoretical framework are presented. The qualitative methodological approach that involved 10 interviews with elite Canadian swimmers and 10 Canadian DCOs is presented in Chapter 3. My findings and related discussion is provided in Chapter 4 and conclusions and suggestions for future research are included in Chapter 5.

Chapter 2: Literature Review

In this chapter, I first set the context by describing the current doping control process followed by an account of how doping control policy has evolved in Canada. Next, I examine how other researchers have studied doping control to illustrate how my study begins to fill a gap in the literature. Third, I develop the theoretical framework that assisted with my analysis.

2.1 The Doping Control Process

The current doping control process employed by the Canadian Centre for Ethics in Sport (CCES), International Federations (e.g., FINA) and as outlined by the World Anti-Doping Agency (WADA) consists of five phases: athlete selection, athlete notification, sample collection, sample analysis and results management (WADA, 2010b). Each phase is outlined in the pages to follow. As I am interested in athlete and doping control officer (DCOs) relations, my research predominately focuses on the phases of athlete notification and sample collection, during which athletes typically interact with DCOs.

2.1.1 Athlete selection

Doping control is conducted in two situations: in-competition and out-of-competition. It is deemed in-competition if the testing is associated with a particular event, such as following a final at a Canadian Olympic and Paralympic Trial. Any other form of doping control is deemed out-of-competition, such as prior to or following a training session (CCES, 2011g). The manner in which athletes are selected for doping control is dependent on the situation. In competition an athlete may be selected randomly, based on one's finishing position, or for any particular reason. Outside of competition an athlete may be selected for any particular reason, at any time, with no advance notice. As a result, in-

competition testing typically occurs in a doping control station at the competition venue, whereas out-of-competition testing typically occurs at an athlete's residence or training location. To enable effective out-of-competition doping control, elite athletes who are competing on senior national teams, may be included in a registered testing pool (RTP) and are thereby required to submit what is known as whereabouts information (CCES, 2011f; WADA, 2010b). This information that is collected by the CCES includes: personal information (e.g., name, sport, contact information), daily overnight residence (e.g., address of home, hotel or other lodging), training locations and times, training camps and competitions and other regular activities (e.g., work and/or school). Furthermore, a specific group of athletes (high performance athletes selected by the international federation) must include a daily 60-minute time slot for testing between 6:00 a.m. and 11:00 p.m. at a particular location (CCES, 2011i). Such information must be submitted quarterly using an online system coined ADAMS (Anti-Doping Administration and Management System) and can be updated as required. Failure to provide correct and timely whereabouts information can result in an anti-doping violation (CCES, 2011h).

2.1.2 Athlete notification

The process for athlete notification is the same for both in- and out-of-competition doping control. If selected, a DCO or chaperone (individuals who assist DCOs in the surveillance and notification of athletes) will notify the athlete that they have been selected and inform them that they are required to provide urine and/or blood samples (WADA, 2010b). The DCO or chaperone will then inform the athlete of his/her rights and responsibilities and present the athlete with a notification form that he/she is required to sign. Following the notification, the athlete is required to immediately report to the doping

control station. Athletes may request a delay for a number of reasons including: taking part in a medal ceremony/press conference, performing a warm down, requiring medical treatment and completing a training session. Upon notification, athletes are required to stay within sight of a DCO or chaperone until sample collection is completed (CCES, 2011g).

2.1.3 Sample collection

During sample collection, athletes are first asked to present valid identification to confirm their identity. If an athlete is required to provide a urine sample, a DCO or chaperone of the same gender as the athlete will witness the passing of the sample (WADA, 2010b). To ensure an unobstructed view, the athlete will be required to disrobe from mid-torso to mid-thigh. The athlete must remain in sight of a DCO or chaperone until a valid urine sample is provided that meets the requisite volume and is not too diluted. Once a valid sample is collected it is split into A and B samples. If an athlete is also required to provide a blood sample a phlebotomist will draw the required A and B blood samples. For both urine and blood collection, each sample is sealed in tamperproof containers under the direction of the DCO (CCES, 2011g). Throughout the process, unless assistance is required, the athlete is the only one who selects and handles sample collection equipment. To conclude the process, the athlete will be required to review and sign the doping control form and once it is completed, the athlete and DCO are then free to leave. The samples and paperwork that do not disclose the athlete's identity are subsequently sent to a WADA accredited laboratory, while additional paperwork is sent to both WADA and the CCES (WADA, 2010b).

2.1.4 Sample analysis

For both urine and blood samples, upon arrival at the lab, the A sample is opened and analyzed while the B sample is securely stored. Typically, the sample is analyzed to: “look for unnatural ratios between biological constituents in a single sample or for direct chemical evidence of known doping agents” (CCES, 2011b, para. 2). In addition, the CCES, in conjunction with WADA, have established a new form of detection strategy known as the Athlete Biological Passport (ABP). The ABP consists of a series of longitudinal tests to establish a reference range for biological variables found in individual athlete’s urine or blood (e.g., testosterone over epitestosterone ratio, red blood cell count). Using the ABP, doping violations can be detected by any deviations in the athlete’s biological profile, even if the specific illicit tactic or substance remains unclear (CCES, 2011b). In both standard and ABP analysis strategies, if the A sample reveals an adverse analytical finding the B sample can be analyzed to confirm the result (WADA, 2010b). Samples can be stored for eight years with the potential to be re-tested as new analytic testing methods and strategies are developed (WADA, 2009a).

2.1.4 Results management

Once the samples are analyzed, the results are reported to the CCES and copies are sent to WADA to ensure accountability. When an adverse analytical finding is detected athletes’ have the right to attend the analysis of the B sample, a hearing and an appeal, prior to any anti-doping sanction (WADA, 2010b). The CCES has outlined mandatory sanctions for certain violations but also maintains: “a large degree of flexibility to decrease or increase the sanction depending on the unique facts of each case and the results of evidence-based tests” (CCES, 2011a, para. 9). For example, a first time violation for

presence, use or possession can result in a ban of two years, but the penalty resulting from a second violation ranges from a ban of eight years to life. In addition, an athlete may be disqualified from previous competitions resulting in the forfeiture of medals and prizes (CCES, 2011a).

The standardized phases of athlete selection, athlete notification, sample collection, sample analysis and results management are seen as essential deterrents that enable athletes to participate in drug-free sport (WADA, 2010b). The rigorous doping control process currently employed in Canada is relatively new and has evolved over the past 30 years. The development of doping control in Canada is described next as a historical overview provides a context in which to examine athlete and DCO relations.

2.2 A Brief History of Doping Control in Canada

From the 1930s through the 1960s, as untimely fatalities suggested severe risks and leading campaigners argued that ‘artificial stimulation’ undermined the values of sport by creating an ‘unfair’ influence on athletic performance (Dimeo & Hunt, 2014), international sport federations began to ban doping: “the practice of enhancing performance through foreign substances or other artificial means” (WADA, 2010a, para. 1). The International Olympic Committee (IOC) published the first list of prohibited substances prior to the 1968 Olympics in Mexico City. However, as drug detection strategies were primitive and unreliable, for several decades ‘cheaters’ were unlikely to be caught (Voy & Deeter, 1991). It was not until the early 1980s that a more reliable testing method for steroids and stimulants was introduced and several doping-related disqualifications subsequently occurred (Voy & Deeter, 1991; WADA, 2010a). Governments, including those of Norway, West Germany, the United Kingdom and Canada, began to establish policies and devise

acceptable practices and procedures to eliminate doping in sport within their national borders (B. Houlihan, 1997; IAAF, 2007).

Canada adopted its first anti-doping policy in 1983 (CCES, 2011d; Jackson & Ritchie, 2007). From 1984 to 1989, 25 Canadian athletes tested positive for performance-enhancing drugs (PEDs) (CCES, 2011d), yet all these positive tests paled in comparison to Ben Johnson's single doping violation in 1988. As Semotiuk (1994) explained:

The men's 100-meter race, featuring a classical confrontation between Canada's Ben Johnson and Carl Lewis from the United States, was the premier event of the 1988 Seoul Summer Olympic Games. Ben Johnson won the sprint in a world record time of 9.79 seconds and the celebration began in Canada. Canada's elation turned to bitter disappointment in less than 24 hours when it was revealed that Ben Johnson had tested positive for a banned performance-enhancing substance. (p. 365)

Ben Johnson tested positive for stanozolol, an anabolic steroid, and was stripped of his gold medal on the highest stage in international sport. According to widespread media accounts, the result shamed and horrified the nation (CBC Digital Archives, 1988). In order to appease the public, an extensive investigation known as the Dubin Inquiry was commissioned by the federal government in 1988 to investigate the use of drugs and banned practices as a means to increase athletic performance in Canada (Bergsgard, Houlihan, Mangset, Nodland, & Rommetvedt, 2007). Based on a recommendation offered by the Dubin Inquiry, an independent anti-doping agency, the Canadian Anti-Doping Organization (CADO), was created to manage domestic anti-doping efforts. This organization, later renamed the Canadian Centre for Drug-free Sport in 1992 and finally, the CCES in 1995 (Jackson & Ritchie, 2007) became: "responsible for coordinating the development and implementation of programs for anti-doping in areas of testing, research, education and appeals/arbitration" (Minister of Fitness and Amateur Sport, 1991, p. 5).

In 1999, Canadian doping control was further amended due to the establishment of WADA. WADA, established as a response of the IOC to a doping scandal at the 1998 Tour de France in cycling (Hanstad et al., 2008), was a joint initiative of the IOC and international governments with a two-fold mandate: “to protect the athlete’s fundamental right to participate in doping-free sport ... and ... ensure harmonized, coordinated and effective anti-doping programs at the international and national level” (WADA, 2009f, p. 10). In order to accomplish its mandate, WADA has worked towards the eradication of doping by establishing the *World Anti-Doping Code* (WADC) and five international standards: *Prohibited List, Testing, Laboratories, Therapeutic Use Exemptions* and *Protection of Privacy and Personal Information*. Within these documents, WADA outlined a comprehensive anti-doping program with: “regard to detection, deterrence and prevention of doping” (WADA, 2009f, p. 10).

Currently, the CCES manages the *Canadian Anti-Doping Program* known as the CADP. Compliant with all international standards and the WADC, the CADP outlines how doping control is to be carried out within Canada (CCES, 2011c). Approximately 450 doping control personnel (CCES staff, DCOs and chaperones) administer the CADP and over 500 athletes competing on senior national teams are subject to the highest level of doping control rules and procedures (CCES, 2012).

Despite Canada’s involvement in the global commitment and refinement of anti-doping policy, challenges remain in achieving WADA’s mandate of doping-free sport. As reliable testing techniques are developed for established substances (e.g., anabolic steroids, narcotics and stimulants), various athletes, trainers and coaches have moved to substances and methods that are more sophisticated and difficult to detect (e.g., micro doses of

erythropoietin, peptide hormones and gene doping) (Baumann, 2012; Kirkwood, 2009; Waldie, 2012). As demonstrated by Lance Armstrong, the infamous cyclist who completed over 500 drug tests without being officially charged with a positive test despite admitting to using the banned substances of erythropoietin, testosterone, cortisone, human growth hormone and performing blood transfusions (Albergotti & O'Connell, 2012; Møller & Dimeo, 2013; The Associated Press, 2013), it seems inevitable that doping control personnel will remain a step behind those who dope and those who encourage or facilitate doping practices amongst athletes.

2.3 Anti-Doping in the Academic Literature

After examining the anti-doping literature, five main areas of research were evident: scientific testing techniques, international policy development and implications, policy alternatives, athlete attitudes and psychological determinants, and athlete involvement in anti-doping policy. Each area is briefly reviewed below followed by an explanation of how my study adds to this body of work.

2.3.1 Scientific testing techniques

The majority of the scholarly work examining anti-doping has been conducted by researchers working in the natural sciences to determine what substances enhance athletic performance and the scientific techniques that can determine if and when an athlete has used a prohibited substance (e.g., Lasne et al., 2009; Rupert, 2009; Wang et al., 2008). For example, Rupert (2009) reviewed the genetic- and molecular-based testing strategy known as transcriptome analysis. As reliable and valid sample analysis is critical to the implementation of current anti-doping policy, WADA argued that this kind of research

must be sustained to thwart ongoing attempts by athletes, trainers and coaches to avoid detection by using increasingly sophisticated substances and methods (WADA, 2011a).

2.3.2 International policy development and implications

The development of international anti-doping policy has also been subject to academic inquiry. Specifically, research has examined the creation of WADA and WADC (Elbe & Overbye, 2013; Hanstad et al., 2008; Hanstad & Loland, 2009; B. Houlihan, 2002; Overbye & Wagner, 2013; Park, 2005; Waddington, 2010; Wagner, 2011). For example, Hanstad et al. (2008) used Elias' game model to analyze how the IOC sought to monopolize the development of WADA. Their work chronicled how this effort was undermined as pressure from international governments, including Great Britain, USA, Canada, Australia, New Zealand and Norway, resulted in the creation of an organization that has significant independence from the IOC. Wagner's (2011) work also investigated the birth of WADA. He examined how different attitudes towards doping in sport held by Fédération Internationale de Football Association (FIFA) and International Association of Athletics Federations (IAAF) impacted each organization's involvement in the establishment of WADA. His analysis revealed that FIFA was reluctant to accept anti-doping initiatives because they considered doping to be a problem outside football, whereas the IAAF was a key: "institutional anti-doping entrepreneur" because they considered doping to be the greatest problem facing athletics (Wagner, 2011, p. 464).

In addition, scholars have investigated the implications of doping control policy (Elbe & Overbye, 2013; Hanstad & Loland, 2009; B. Houlihan, 2002; Overbye & Wagner, 2013; Park, 2005; Waddington, 2010). Houlihan (2002) performed a policy analysis of the draft WADC and found: "an over-reliance on sanctions and under utilizations of strategies

that aim to manage compliance” (B. Houlihan, 2002, p. 188). As a result, he suggested that the impact of the WADC may be limited.

In one study that is closely linked to mine, Park (2005) utilized the Foucauldian concept of governmentality to analyze the background, structure and policies of WADA. He concluded that WADA’s strategies of out-of-competition testing and the development of new detection technologies produce disciplined bodies as they: “seek to shape athletic conduct by working through their desires, aspirations, and beliefs” (Park, 2005, p. 179).

Other related studies examined athlete perceptions of doing control policy. Based on an online survey completed by 400 elite Danish athletes, Elbe and Overbye (2013) reported that a third of respondents experienced stress due to difficulties providing a sample, one in seven felt their personal integrity had been violated because someone was required to watch them urinate, and nearly a quarter of athletes felt their privacy was infringed upon when doping control was completed in their homes.

Athletes’ perceptions of the WADC and its implications were also investigated through examinations of the athlete whereabouts system (Hanstad & Loland, 2009; Overbye & Wagner, 2013; Waddington, 2010). Handstad and Loland (2009) examined: “the key objections to the system and, more specifically, objections connected to ideas of justice and athlete’s autonomy and right to self-determination” by means of a survey completed by 236 elite Norwegian athletes (Hanstad & Loland, 2009, p. 3). Overbye and Wagner (2013) contributed the points of view of 645 elite Danish athletes to the discussion of the legitimacy and institutionalization of the whereabouts system. The results showed that the system interfered negatively with athletes’ everyday life and the athletes’ trust in the system to catch doped athletes was remarkably low. Despite these findings, both Handstad

and Loland (2009) and Overbye and Wagner (2013) concluded that the principles of the whereabouts system were widely accepted and were a required extension of current anti-doping policy. Alternatively, Waddington (2010), through a review of previous studies and media reports, examined the impact of the whereabouts systems on elite athlete and WADA relations and concluded that it had alienated a large number of athletes thereby deteriorating the relationship. He also questioned whether this negative consequence was worth the cost of implementing the detection system (Waddington, 2010).

2.3.3 Policy alternatives

In accordance with Houlihan's (2002) critique, several authors including Kayser, Mauron and Miah (2007), Kirkwood (2009), and Stewart and Smith (2008), argued for a harm minimization strategy because: "the ethical foundation of the war on doping consists of largely unsubstantiated assumptions about fairness in sports and the concept of a level playing field" (Kayser et al., 2007, p. 1). In addition, they predicted that athletes will continue to dope despite current policy because their chances of winning to obtain fame and fortune overshadows fears of being caught. The authors feared that in order to avoid detection, athletes will resort to riskier and less tested substances thereby increasing their health risks (Kirkwood, 2009; Stewart & Smith, 2008). It has also been argued that current anti-doping practices impinge on personal privacy and anti-doping efforts are costly and directly impact only a small proportion of the international athlete population (Kayser et al., 2007). The authors advocated for a harm minimization doping policy where athletes' use of known and tested substances would be supervised by physicians who are: "concerned with managing the negative consequences of use rather than the act of use itself" (Stewart & Smith, 2008, p. 290). They suggested that such policy, as an alternative to

the current prohibition on doping, would result in reduced costs for administrators and reduced risks for athletes (Kayser et al., 2007; Kirkwood, 2009; Stewart & Smith, 2008).

2.3.4 Athlete attitudes and psychological determinants

In addition to examining policy, several researchers have attempted to uncover athletes' attitudes towards doping and reasons for taking PEDs (Alaranta et al., 2006; Backhouse et al., 2007; Bloodworth & McNamee, 2010; Breivik et al., 2009; Elbe & Overbye, 2013; Hanstad & Loland, 2009; Huybers & Mazanov, 2012; Overbye & Wagner, 2013; Pappa & Kennedy, 2013; Stewart & Smith, 2010; Striegel et al., 2010; Thomas et al., 2011; Weaving & Teetzel, 2008). Alaranta et al. (2006) attempted to: "clarify the beliefs and attitudes of elite athletes towards banned substances and methods in sport" (p. 842), through a structured questionnaire completed by 446 elite athletes in Finland. They found that 30% of athletes reported that they personally knew athletes who had used PEDs and 15% reported they had also been offered a banned substance. Their research also discovered that only: "6.5% of respondents believed that their sport is internationally doping free" and males were at a higher risk of using a banned substance than females (Alaranta et al., 2006, p. 844). Although their work is relevant as it suggests that doping is common in elite sport, they did not provide explanations for their findings. Possible explanations for the gender differences could be that more male than female athletes are risk takers when it comes to unsanctioned activities (Kokotailo, Henry, Kosciak, Fleming, & Landry, 1996) and they have more to gain financially than female athletes due to the patriarchal norms associated with athletic performativity (Dunn & Zuk, 1996).

Alaranta et al.'s (2006) work is an example of one of the 103 articles included in Backhouse et al.'s (2007) comprehensive literature review on attitudes, behaviours,

knowledge and education of drugs in sport that was submitted to WADA. Tentative findings of the review included that negative attitudes towards doping prevail among athletes but specific groups may be complicit in the use of PEDs if they lead to increased performance, financial gain and reduced pain/injury. Athletes had positive attitudes towards drug testing and support the prevention of drug use while sub-groups of athletes raised concerns regarding the validity, integrity and efficacy of the anti-doping testing system. Finally, elite and college athletes lacked a basic awareness of testing procedures (Backhouse et al., 2007). Despite these findings, the authors concluded that: “the weak evidence base undermines strategic planning and limits the capacity to target appropriate and efficacious education programmes to abate doping in sport” (Backhouse et al., 2007, p. 2).

Other researchers have continued a wide array of projects in this field and several of these findings have been reaffirmed. For example, Stewart and Smith (2010) used qualitative in-depth interviews with 12 elite athletes and found that attitudes towards doping were contingent upon the legality of the substance and the resulting social impact. Permissible substances that enhanced performance or expedited recovery were considered legitimate, whereas if a similar substance was included in the WADA prohibited list, it was considered illegitimate (Stewart & Smith, 2010). In another study, Bloodworth and McNamee (2010) held 12 focus groups with 40 athletes spanning 13 sports in the United Kingdom to investigate their attitudes towards anti-doping policy. They concluded that the athletes did not see their own national doping control system as a problem but expressed a fear of other countries’ anti-doping practices. The athletes reported injury recovery and economic pressures as the main incentives for doping, while the shame associated with incurring a doping infraction was the greatest deterrent (Bloodworth & McNamee, 2010).

Similarly, the work of Huybers and Mazanov (2012) based on data collected from 259 elite Australian athletes, concluded that athletes were more likely to dope: “if convinced by a coach or senior athlete of disproportionate immediate gains to performance with little or no consequences” (p. 322). They also found that athletes would be less inclined to dope if it was thought to result in death, no financial gain, or only maintained performance (Huybers & Mazanov, 2012). The work of Pappa and Kennedy (2013) revealed the roles of support staff in doping when they investigated the views of 13 athletes who admittedly used banned substances. They reported that doping was normalized as part of their competitive sport and involved participation by their coaching staff. However, the: “athletes maintained that they alone were responsible for the decision to use PEDs” (Pappa & Kennedy, 2013, p. 1). The authors used Foucault’s concept of governmentality to explain the apparent contradiction by: “suggesting that athletes’ internalization of responsibility for doping is part of the art of governing competitive sport” (Pappa & Kennedy, 2013, p. 1). Athletes understand themselves as personally responsible because they are unable to identify the responsibility of the institution, since the power is invisible and pervasive (Pappa & Kennedy, 2013).

Several authors have confirmed that most athletes were in support of anti-doping programs (Breivik et al., 2009; Elbe & Overbye, 2013; Hanstad & Loland, 2009; Overbye & Wagner, 2013; Stamm, Lamprecht, Kamber, Marti, & Mahler, 2008). For example, studies conducted by Stamm et al. (2008) and Breivik, Hanstad, and Loland (2009) compared elite athletes’ attitudes towards anti-doping policy with the general public in both Switzerland and Norway respectively. The findings illustrated that both elite athletes and the general public supported a comprehensive doping control strategy and that elite athletes often held

less liberal attitudes toward drug use in elite sport in part because of the anti-doping ethos and effect of the idea of a 'true and clean' sport (Breivik et al., 2009; Stamm et al., 2008).

Concerns about the effectiveness of doping control were also highlighted in the work of Striegel et al. (2010) when they found the prevalence of doping in elite sports to be more than eight times higher than the frequency suggested by official doping tests. The researchers came to this conclusion by comparing the results of doping control tests completed in Germany from 2003-2005 (n= 25,437) and interviews and questionnaires (n=1606) with members and junior members of the national teams (Striegel et al., 2010).

Weaving and Teetzel (2008) supported Backhouse et al.'s (2007) conclusion that athletes demonstrated a deficiency in knowledge related to anti-doping procedures following interviews with 38 Canadian university student-athletes. They determined that there was considerable room for improvement in anti-doping education and a perceived lack of testing in Canadian Interuniversity Sport (Weaving & Teetzel, 2008). Additionally, based on a survey of 1007 elite Australian athletes, Thomas et al. (2011) determined that credible information concerning illicit drugs remained inaccessible and that the Internet may be an effective means to educate athletes. The authors also stated that such information needed to be delivered in a relevant and specific manner (Thomas et al., 2011).

2.3.4 Athlete involvement in anti-doping policy

The final area of anti-doping literature included in this literature review examines athlete involvement in the development of anti-doping policy. A study by Jackson and Ritchie (2007) found that athletes were not significantly involved in decision-making with CADP, as policy had been determined by those deemed to be 'experts' (e.g., administrative staff of national sporting organizations). The authors contended that a democratic deficit

exists because: “athletes remain disenfranchised participants in international sport; there are few mechanisms through which they can negotiate the conditions of their working lives” (p. 408). They suggested that the CADP should be re-evaluated to ensure athlete-centeredness, a process that places primary emphasis on the consideration of athletes’ needs and directly involves them in decision-making (Athletes CAN, 1994), so that relevant possibilities for change can be illuminated (Jackson & Ritchie, 2007). Their work was supported by Houlihan’s (2004) examination of athletes’ civil rights in relation to WADC. He found that athletes were relegated to the margins of decision-making during the development of WADC as: “sport policy is generally made for, or on behalf of, athletes, rarely in consultation with athletes, and almost never in partnership with athletes” (p. 421-422). He further criticized the involvement of athlete commissions in sport policy discourse as being tokenistic (Houlihan, 2004). More recently, Thibault et al. (2010) have revisited these criticisms and determined that athlete involvement in the management of sport policy had increased in recent years. Their analysis of international sport governance included an examination of WADA’s 18 member athlete committee that was established in 2005 to: “represent the views and rights of athletes worldwide, while providing insight and oversight into athletes’ roles and responsibilities as it relates to anti-doping” (WADA, 2013b, para. 2). Thibault et al. (2010) suggested: “that the presence of athletes around the decision-making table indicates that they are having a growing influence on policy making and that representation is a necessary first step to more involved decision-making and voting rights” (p. 277-278). They concluded however, that the level of effectiveness or impact of athlete involvement on decision making and policy discourse remained unclear (Thibault et al., 2010).

In summary, the topic of anti-doping has been studied by researchers from a variety of perspectives. The diversity of research indicates that there are contentious issues requiring further investigation, as current policy violates athletes' rights to privacy, autonomy and self-determination; it is not achieving the desired outcome of the eradication of doping, and athletes who are key stakeholders are not sufficiently involved in the development of anti-doping policy. My research aimed to contribute to this growing body of literature by interviewing the two key social actors, athletes and DCOs, so that they can voice their opinions, experiences and possible recommendations for change in athlete and DCO relations. The following section discusses the theoretical concepts that assisted with my analysis.

2.4 Theoretical Framework

I drew most heavily on the works of Hanstad and Loland (2009), Overbye and Wagner (2013), Pappa and Kennedy (2013), and Park (2005) who had adapted Foucauldian concepts to their respective studies on doping control. The ideas of Michel Foucault (1926-1984), who was regarded as one of the most influential thinkers of contemporary times (Markula & Pringle, 2006; Miller, 1993; Mills, 2003; Olsen, 1999), have been adapted in many fields of study including anthropology, history, sociology, English studies, gender studies, politics, queer studies, indigenous studies, management, economics, pedagogy, psychology, kinesiology and cultural studies (Markula & Pringle, 2006). Foucault's theories have been celebrated for illuminating: "the different ways in our culture that humans develop knowledge about themselves" (Foucault, 1988, p. 17-18). He urged his readers to not accept knowledge at face value, but to question the assumptions underlying its construction (Foucault, 1988; Kendall & Wickham, 1999). In order to

accomplish this goal, Foucault developed an alternative understanding of power and: “an arsenal of subsidiary concepts” (Rabinow, 1984, p. 12) including: discipline, panopticism, and governmentality (Foucault, 1977; Foucault, 1991). I aim to draw upon these concepts in my research because I see them being connected to doping control policy and relations. Descriptions of these concepts are found in the following sections along with a discussion of some of the limitations of adapting Foucault’s work to my research.

2.4.1 Power

Foucault’s understanding of power is central to many of his works and as a result, it is nearly impossible to study the subject of power without coming across his name (Sadan, 1997). Foucault recognized the need to clarify how he understood power as he felt commonly held definitions were: “apt to lead to a number of misunderstandings... with respect to its nature, its form and its unity” (Foucault, 1978, p. 92). His understanding differs from the common legal, liberal, and Marxist interpretations of power in several aspects.

First, Foucault characterized power not as a commodity or a privilege that can be held or acquired, but as a pervasive element in all social relations (Lovell, 2011). He viewed power as a series of tactics and strategies that: “structure the field of other possible actions” (Foucault, 1978, p. 208). The terms tactics and strategies were utilized to differentiate whether or not the action was intentional (Cousins & Hussain, 1984; Heller, 1996). Tactics are the intentional actions carried out by individuals and groups, whereas strategies are the: “unintentional but institutionally and socially regularized” (Heller, 1996, p. 87). Foucault argued against the assumption that governments, social institutions, and dominant individuals/groups hold power because they represent: “only the terminal forms

power takes” (Foucault, 1978, p. 92). Foucault (1978) asserted that they are influential not because they have power but because they have transformed (through the use of tactics and strategies) the workings of power.

Second, Foucault viewed power not only as repressive but also as productive. He contended that what makes power accepted: “is simply the fact that it doesn’t only weigh on us as a force that says no; it also traverses and produces things, it induces pleasure, forms knowledge, produces discourse” (Foucault, 2000, p. 120). Simply put, individuals obey when power gives more than it takes.

Third, Foucault understood power and resistance as being mutually constitutive because: “where there is power, there is resistance, and yet, or rather consequently, this resistance is never in a position of exteriority in relation to power” (Foucault, 1978, p. 95). He argued that points of resistance can be found throughout a network of power relations and these relations shift when points of resistance mobilize individuals or groups in a distinct manner (Foucault, 1978).

Additionally, Foucault (1977) identified an indissoluble link between power and knowledge in his infamous book *Discipline and Punish* when he argued that:

... we should abandon a whole tradition that allows us to imagine that knowledge can exist only where the power relations are suspended and that knowledge can develop only outside its injunctions, its demands and its interests... We should admit rather that power produces knowledge (and not simply by encouraging it because it serves power or by applying it because it is useful); that power and knowledge directly imply one another; that there is no power relation without the correlative constitution of a field of knowledge, nor any knowledge that does not presuppose and constitute at the same time power relations. (p. 27)

This link between power and knowledge is pertinent to Foucault’s understanding of power as relational tactics and strategies are accompanied by forms of knowledge that justify

their very implementation (Lovell, 2011). In this way, the accepted 'truths' in fields of knowledge like doping control dictate which actions are probable and improbable.

2.4.2 Discipline

Foucault's analyses of power moved beyond an articulation at the theoretical level, as he also identified empirical modes of power involving specific tactics and strategies (Lynch, 2011). The mode of power he investigated in the most detail was his concept of discipline. In his historical study of punishment, he traced the disappearance of public torture and execution in the 17th and 18th centuries in favour of imprisonment. In prisons, as opposed to experiencing pain and death, prisoners were subject to organized space with: "habits, rules, orders and authority" (Foucault, 1977, p. 128), similar to what can be seen in a sporting arena (Markula & Pringle, 2006). This form of control or punishment increased docility and productivity among subjects, resulting in what Foucault termed disciplined bodies (Jette, 2009). Foucault explained that discipline is achieved through techniques of surveillance including hierarchical observation, as well as techniques that instil the habit of self-surveillance. This entailed normalizing judgements that impose homogeneity but simultaneously: "individualizes by making it possible to measure gaps, to determine levels ... and to render the differences useful by fitting them to one another" (Foucault, 1977, p. 184). He explained that the combination of these techniques leaves subjects with a desire to be normal by segregating and correcting what has come to be seen as the abnormal. Foucault stated that the combinations of these techniques have moved beyond the prison setting resulting in the creation of disciplinary society or what he calls panopticism (Foucault, 1977; Markula & Pringle, 2006).

2.4.3 Panopticism

In order to further articulate his concept of discipline, Foucault utilized Jeremy Bentham's architectural design of the Panopticon. He described it as a central tower with blinded windows surrounded by a building divided into cells, with each cell having two openings, one that illuminated the cell and the other that was open to the central tower (Foucault, 1977). Within each cell, prisoners are positioned to be visible by the supervisor in the tower. Foucault (1977) explained how the architectural design of the Panopticon maximizes disciplinary power because those contained in the cells are individualized and know that they are visible, but are unable to tell when they are being watched. As a result of these conditions, those contained within the cells regulate their own behaviour in accordance with the behaviour desired by the supervisor. When the inmates monitor their own behaviour, they become their own supervisors and an expensive system of supervisors is no longer required; the Panopticon becomes an efficient mechanism of power (Markula & Pringle, 2006).

Foucault coined the term panopticism to label similar mechanisms of surveillance and discipline that moved beyond the prison context to include embodied practices. He claimed that the omnipresent gaze became a: "function in a diffused, multiple, polyvalent way throughout the social body" (Foucault, 1977, p. 208-209). He argued further that we now exist in a disciplinary society as a result of the: "growth of disciplinary institutions (e.g., schools, hospitals, jails, factories, gymnasiums), the de-institutionalisation of disciplinary methods (e.g., surveillance cameras in city streets), and the gradual state-control of disciplinary technologies (e.g., government control of the police force)" (Markula & Pringle, 2006, p. 43).

2.4.4 Governmentality

In a series of lectures delivered at the Collège de France from 1977 to 1984, Foucault posited that discipline and panopticism are components of a larger, complex web of power relations that he termed governmentality (Foucault, 1991). He defined governmentality as: “the conduct of conduct” (Foucault, 1982, p. 220-221) and: “the art of government” (Foucault, 1991, p. 92) because it consists of an ensemble of procedures, analyses, reflections, calculations and tactics that aim to: “regulate the population not through coercive means but by providing guidance on how individuals should conduct themselves” (Jette, 2009, p. 32). It is by allowing citizens to be free within specific limits that individuals take responsibility for their own actions within these predetermined boundaries in accordance with the guidance provided by government (Foucault, 2007).

Through a historical analysis of modern European government from the 17th century to the present, Foucault discovered that the need for effective government emerged as a result of the rise of the political economy in the 18th century. In order to grow the economy, Foucault stressed that modern government recognized the need to focus attention on the population with the primary goals of securing: “the welfare of the population, the improvement of its condition, the increase of its wealth, longevity, health, etc.” (Foucault, 1991, p. 100). Simply put, the concept of governmentality is not related to suppressing the individual’s ability to take action, but rather to directing that action in a specific manner in order to achieve these desired outcomes.

2.4.5 Limitations of Foucault

Although the adaptation of Foucault’s concepts of power, discipline, panopticism and governmentality helped me uncover and explain complexities in athlete/DCO relations,

his theory is not without limitations. Foucault argued that as power produces reality, all beliefs are socially produced; therefore, human knowledge cannot be regarded as certain. Moreover, Foucault contested the notion of an active subject because disciplinary processes confine individuals to behave in a particular manner (Manias & Street, 2000). As a result, his theories cannot presume to provide firm grounds for alternative modes of knowledge and therefore questioned the very possibility of social sciences (Callewaert, 2006). Foucault's notion of this indissoluble link between power and knowledge has led critics to claim that his work slips into relativism and nihilism (McLaren, 2002; Taylor, 1984). Simply put, Foucault's concepts help identify what is wrong but do little to inform a better course of action (Waltzer, 1988). As I attempt to invoke possibilities for change if study participants see the need for it, only adapting Foucault's theories would be problematic. While I accept Foucault's bond between knowledge and power, I would contend, in accordance with Cheek and Porter (1997), that such acceptance does not require one: "to abandon discrimination between different knowledge claims" (p. 115). Some forms of knowledge, specifically those that consider the perspectives of various stakeholders, may be considered more rational than others (Cheek & Porter, 1997; McTaggart, 1991). Furthermore, I accept Weedon's (1996) modification of Foucault's concept of the subject whereby although individuals are unable to control their overall direction, they remain able to choose among practices available to them and consider the implications of each choice (Weedon, 1996).

Chapter 3: Methodology

In this chapter, I outline my research methodology by describing the methods of data collection, sample, feasibility of the study, ethical considerations, exit strategy, data analysis, positionality of researcher, and the criteria of soundness.

3.1 Data Collection

I conducted 20 interviews, 10 with elite athletes and 10 with doping control officers (DCOs), as the primary method of data collection. The qualitative interviews enabled a detailed exploration of these individuals' perspectives about how they make sense of the doping control relations. The duration of each interview ranged from 28 minutes to 110 minutes and could be described as conversations with a purpose (Schaeffer, 1991). Where possible, the interviews were conducted face-to-face at a time and location that was convenient for the participant. In order to create an environment conducive to the sharing of information, I attempted to develop rapport with my research participants by establishing a safe, open and comfortable environment with the goals of generating trust, understanding and mutual respect (Arksey & Knight, 1999). To facilitate this process, I began each interview by briefly sharing why I am interested in the research project and actively listening throughout each interview (Bryman, 2008a; Hanna, 2012). As travel was restricted due to financial considerations, five interviews were conducted via *Skype* and five were conducted over the phone. Although participants chose the form of interview they preferred, *Skype* interviews were favoured over phone interviews in order to preserve the visual and interpersonal aspects of interaction that are beneficial in developing rapport with interview participants (Evans, Elford & Wiggins, 2008).

I conducted each interview using one of two semi-structured interview guides, an athlete interview guide or a DCO interview guide. The guides (see Appendix A and B) consisted of a number of open-ended questions that centred on predetermined topics that were directly related to my research questions. They consisted of four sections: i) background information, ii) purpose of doping control, iii) athlete/DCO relations in the doping control process, and iv) identifying contentious elements of doping control. The interview questions and their order were adjusted based on the responses of the participants (Amis, 2005; Bryman, 2008a). This approach was useful as the structure ensured that central topics were discussed while preserving: “the flexibility to develop questions as new themes emerge[d] in the course of the interview” (Amis, 2005, p. 108). In order to avoid participant confusion or misrepresentation of their thoughts and opinions, complex and leading questions were avoided (King, 2004).

In addition to the interview, each participant was asked to complete a short demographic questionnaire (see Appendix C and D), where they were asked to disclose their city of residence, gender, self-defined ethnicity, years of experience in their sport, and experience/exposure to doping control.

3.2 Sample

A purposive and snowball sampling approach was utilized to recruit research participants (Newman, 2006). The purposive sampling approach included selecting individuals based on the following criteria: i) accessibility and ii) repeated involvement in Canadian Centre for Ethics in Sport (CCES) sanctioned doping control, especially as it related to the sport of swimming. Participants were recruited through both professional and personnel networks. Upon University of British Columbia (UBC) Ethics Board approval,

contacts (three athletes and five DCOs) were sent the formal interview invitation (See Appendix E) so they could voluntarily decide whether or not to participate in the study. The CCES also posted an interview invitation in a newsletter distributed to DCOs that facilitated the recruitment of two more DCOs.

To recruit additional athletes and DCOs, those who initially agreed to participate were then asked to pass along an invitation and the researcher's contact information to other potential participants who met the study criteria. In this snowball phase of recruitment, contacts did not provide the researcher with names or any other contact information. Once additional individuals had initiated contact with the researcher, an interview was scheduled. The snowball sampling approach was successful in achieving the goal of recruiting 10 participants in each group.

As this study focused on the doping control sanctioned by the CCES, 10 swimmers who were currently or had previously been included in the CCES registered testing pool (RTP) participated. These individuals were selected because they were subject to the highest level of doping control rules and as a result, were exposed to doping control more frequently than other athletes. Although doping scandals are not as prevalent in swimming as they are in other sports like track and field or cycling, these athletes have a vested interest in doping control relations as the risk of doping in swimming remains high and they are therefore subject to frequent testing. From the systematic doping strategies utilized by East Germany's swim team throughout the 1960s to 1980s, the doping scandals surrounding the Chinese swim team in the 1990s, the ban of 1996 Olympic gold medalist Michelle Smith de Bruin of Ireland, and most recently the speculation around Chinese swimmer, Ye Shiwen, after her unprecedented and unpredicted performance at the 2012

Summer Games, Olympic swimming has had its share of doping controversies (Longman, 2012; Luebbers, 2012; Wagner, 2011).

As of December, 2012, 34 swimmers are active members of the CCES RTP (CCES, 2012). An equal number of male and female athletes were sampled because doping control is a gender-dichotomized and hetero-normative practice whereby female athletes interact with female DCOs and male athletes interact with male DCOs. Moreover, the process of providing a urine sample is anatomically different for women and men and therefore they may have different experiences of doping control.

In addition, 10 CCES certified DCOs participated in the study. It is estimated that the CCES employs over 50 DCOs. An effort was made to include DCOs who had worked with swimmers, as sport-specific nuances in the doping control process may impact the DCOs' relations with athletes. For example, providing a urine sample may be a more difficult and revealing process when one is required to remove a one-piece competition swim suit. All but one of the DCOs had interacted with elite swimmers. It must be noted that four of the DCOs interviewed had also been employed as anti-doping administrators so they were able to draw on their experiences at this level as well. Similar to the athletes, equal numbers of female and male DCOs were included. Unfortunately, only English-speaking Canadian participants were included due to the significant costs associated with conducting, transcribing and interpreting interviews in a language unfamiliar to the researcher.

One of the DCOs expressed concern related to CCES support of my research project. As an employee of the CCES, the individual was reluctant to provide his/her opinion on anti-doping matters without employer consent. As a result, I contacted the CCES and was asked to describe my project and the possible implications. The CCES needed assurance

that: i) participants were aware that the project was being conducted independent of the CCES, and that ii) DCOs did not reveal any confidential information. This was consistent with the Research Ethics Board approval process at UBC. After a meeting with CCES legal counsel, we agreed that DCOs who participated would complete a confidentiality reminder (see Appendix F). To ensure DCO confidentiality, we agreed that the reminder would be submitted to the researcher as opposed to the CCES. Furthermore, the CCES reviewed all of the anonymous quotations provided by DCOs that were utilized by the researcher to ensure that they did not reveal any information related to: the selection of athletes for doping control, positive test results, investigation activities, appeals or arbitrations related to doping infractions, and medical information and data provided by athletes. I was in agreement with this step as I did not want to unintentionally identify any study participants. The CCES confirmed that none of the quotations used in my thesis violated anonymity or confidentiality. After consultation, one quotation was removed as it specifically outlined a tactic used by the CCES to select athletes for doping control. Table 3.1 lists participant information along with their chosen pseudonyms.

3.3 Feasibility of Study

Accessing data is a common hurdle of a research project (Newman, 2006), but this project was feasible due to existing relationships I had with DCOs and elite athletes. While working as a member of the Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games' (VANOC) doping control team, I came into contact with over 40 CCES DCOs. In addition to these professional relationships, I have personal relationships with several members of the Canadian Senior National Swim Team who are included in the CCES RTP. I utilized these networks as a means to recruit my participants. Despite these

Table 3.1 Participant Type

	Pseudonym	Participant type	Interview type	Gender	Self-defined ethnicity	Experience with doping control
1	Bonnie	Athlete	Skype	Female	White	6-10 years (101-200 tests)
2	Nia	Athlete	In-person	Female	Canadian, White	11-15 years (51-100 tests)
3	Sally	Athlete	In-person	Female	Caucasian	3-5 years (11-50 tests)
4	Verna	Athlete	In-person	Female	Caucasian	3-5 years (11-50 tests)
5	Heidi	Athlete	In-person	Female	Caucasian	3-5 years (11-50 tests)
6	John	Athlete	Skype	Male	Caucasian	6-10 years (11-50 tests)
7	Andrew	Athlete	Skype	Male	Caucasian	6-10 years (101-200 tests)
8	Jay	Athlete	Phone	Male	Caucasian	1-2 years (<10 tests)
9	Custard	Athlete	In-person	Male	Caucasian	1-2 years (<10 tests)
10	Manny	Athlete	In-person	Male	White	6-10 years (11-50 tests)
11	Mary	DCO	In-person	Female	European descent	3-5 years (101-200 tests)
12	Francis	DCO	In-person	Female	Caucasian	3-5 years (51-100 tests)
13	Claire	DCO	Skype	Female	Caucasian	11-15 years (51-100 tests)
14	Winny	DCO	Phone	Female	Caucasian	6-10 years (1000-2000 tests)
15	Louise	DCO	Phone	Female	European descent	6-10 years (201-500 tests)
16	Jose	DCO	In-person	Male	Caucasian	20+ years (10,000+ tests)
17	Maverick	DCO	In-person	Male	Caucasian	3-5 years (11-50 tests)
18	Edward	DCO	Skype	Male	Caucasian	20+ years (201-500 tests)
19	Magnus	DCO	Phone	Male	Caucasian	20+ years (10,000+ tests)
20	Neutral	DCO	Phone	Male	Canadian	6-10 Years (201-500 tests)

*To ensure participant confidentiality years of experience and number of tests are presented in ranges

relationships, I was cognizant of the fact that these individuals have hectic schedules leaving little free time to provide an interview and based on the personal relationships, may feel obligated to participate. In order to overcome these obstacles, I ensured that my schedule was as flexible as possible and that I informed participants that their participation was completely voluntary. In addition, I provided myself ample time for the recruitment and scheduling of interviews as the process took nearly four months to complete.

Furthermore, I acknowledge my reliance on personal relationships can be conceived as a limitation of my study (Seidman, 2012) because although the relationships initiated the conversations, participants may have been reluctant to share sensitive information with someone that they knew. Also, because snowball sampling was employed, participants' opinions and experiences may have been more homogenous as participants invited like-minded individuals.

3.4 Ethical Considerations

Prior to conducting any interviews, ethical approval was obtained from the UBC Research Ethics Board (H13-00563). I obtained informed consent and ensured confidentiality and privacy throughout my research (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2010). Research participants received an informed consent form that was completed prior to the start of each interview (see Appendix G). Participants were informed that their participation in the research project was voluntary and that they could withdraw at anytime or refuse to answer any questions. The potential risk for research participants was low as the research participants' privacy and confidentiality was protected. Given the small number of elite Canadian swimmers and

CCES DCOs, participants' names and personal identifiers (e.g., specific events and training locations) are not divulged in any material generated as a result of this research.

Participants were identified using pseudonyms. All physical data collected during this study was stored securely in a locked cabinet in my office and all electronic data was password protected. Data will be kept for the duration of the five-year study period after which it will be destroyed. Access to this data will be restricted to myself and my thesis supervisor.

3.5 Exit Strategy

At the conclusion of each interview, participants were asked if they would like to review their interview transcript. I ensured that all participants had my contact information allowing them to contact me if they had any further comments or questions, or if there was any information that they wanted deleted. In addition, I ensured that I had their contact information (see Appendix C and E), so that once I completed interview transcription, participants were sent a copy. Transcripts were not thoroughly analyzed until they had been reviewed and returned by the interviewee, a process known as member checking (Creswell & Miller, 2000). Five participants utilized the opportunity to modify their comments. Upon project completion, the 17 participants who had indicated an interest in the findings of the research will be sent a summary report. In addition, a summary report will be sent to the CCES.

3.6 Data Analysis

Each interview was digitally recorded and transcribed verbatim to ensure accuracy. I transcribed all interviews using *Express Scribe* transcription software and transcripts were read and reread to ensure I was intimately familiar with my data (Marshall &

Rossmann, 2006). All transcripts were then uploaded into the program *ATLAS.ti*. The quantitative data analysis (QDA) program enabled me to associate codes with sections of text, allowing me to search for patterns among codes and construct classifications of codes from the underlying data (Lewis, 2004). In order to create these codes I employed thematic analysis, which Bryman (2008b) defined as: “the search for themes” (p. 554). I developed a codebook of central themes and subthemes by using an inductive and deductive approach to data analysis. Data was analyzed inductively as themes were obtained gradually from the data by searching for repetitions, similarities and differences between and among athletes and DCOs (Pope, Ziebland, & Mays, 2000; Ryan & Bernard, 2003). Data was also analyzed deductively as data was mined for theory (e.g., Foucauldian concepts) and related literature (Newman, 2006; Ryan & Bernard, 2003). Careful attention was paid to the means by which data was reduced throughout the research process to avoid the loss of unanticipated findings (Marshall & Rossmann, 2006). The analysis led to the development of a codebook that was organized in relation to the three research questions. As seen in Appendix G, within each research question, three levels of codes were developed: master codes, subcodes and descriptive codes. Master codes were defined as the titles for broad topics, subcodes represented categorized themes within these topics and descriptive codes consisted of direct quotation examples from the data (Sipe & Ghiso, 2004).

3.7 Positionality of Researcher

I acknowledge that my research design and subsequent data analysis was influenced by my epistemological and theoretical assumptions and my reflexive knowledge, all of which is central to the qualitative research process (Mello, 2002). My values, assumptions and experiences have affected how I designed my study, interpreted data and drew

conclusions (Marshall & Rossman, 2006; Newman, 2006). As suggested by Sipe and Ghiso (2004), I need to unpack my own social location to reveal the lenses through which I conducted my study. I am a white, middle-class, heterosexual, male in his early twenties and my interest in doping control arose as a result of my experiences working on the development and execution of the 2010 Olympic and Paralympic doping control program. While serving as the point of contact and assisting in the training of over 300 doping control chaperones, I was immersed in doping control terminology, policy and process. Although I have not experienced doping control in the context of swimming, I have been directly involved in a variety of sports (e.g., hockey, rowing, track and field) as a chaperone where I interacted with athletes and DCOs and attended the submission of roughly 50 urine and/or blood samples. Consequently, I would contend that I have a partial 'insider' status with the athletes and DCOs, as I have witnessed the doping control process numerous times and have heard some of the athletes and DCOs' thoughts regarding doping control relations. However, it must be noted that I have not been subjected to doping control or held the position of DCO. As a result, I wanted to conduct this study in order to gain a better understanding of both athlete and DCO perspectives. Although I cannot disregard my social location and I acknowledge that those with a different social location may interpret the data differently, I attempted to collect and interpret my data in a systematic manner to gain an understanding of athlete and DCO relations from their perspectives.

3.8 Criteria of Soundness

In order to ensure a quality research project, I addressed Lincoln and Guba's (1985) four criteria of sound qualitative research: credibility, transferability, dependability, and confirmability.

3.8.1 Credibility

Credibility refers to the goal of demonstrating: “that the inquiry was conducted in such a manner as to ensure that the subject was appropriately identified and described” (Marshall & Rossman, 2006, p. 201). That is, the findings of the study must be believable to the research participants (Lincoln & Guba, 1985). I utilized several strategies to establish credibility within this study. First, I allowed research participants to review and revise transcripts if they so chose. This process, known as member checking, ensured that the participants had the opportunity to: “confirm the credibility of the information and narrative account” (Creswell & Miller, 2000, p. 127). Second, I presented the data using narrative sections, thereby preserving the integrity of the participants’ contributions (Mello, 2002). Furthermore, I established the boundaries of my study by disclosing my social location and my intention to avoid making unsubstantiated claims (Marshall & Rossman, 2006). I acknowledge that my purposive sample of 10 athletes in the sport of swimming and 10 DCOs is insufficient to make generalizations of the CCES doping control process beyond the perspectives of those involved in my study. Future research is needed to examine whether my findings are consistent among other athletes, sports and doping control personnel in Canada and in other countries.

3.8.2 Transferability

Transferability suggests that a sound project should present findings that are useful to others in similar situations with similar questions (Lincoln & Guba, 1985). As a result, I have attempted to provide sufficient detail regarding the research context and assumptions that were central to the research process. In addition to disclosing my research strategies in this chapter, I have attempted to establish transferability by presenting the demographic

information of research participants (see Table 3.1). Such information allows future researchers to determine whether or not my findings would transfer to their context, such as other Canadian sports.

3.8.3 Dependability

Dependability refers to the notion that a researcher must account for the changing research context (Lincoln & Guba, 1985). To ensure dependability, I have described the exact methods of data collection, analysis and interpretation. The: “dense description of methods provides information as to how repeatable the study might be or how unique the situation” (Krefting, 1991, p. 221). Full disclosure of my research methodology allows the reader to judge the dependability of the research.

3.8.4 Confirmability

The final criterion, confirmability, captures the extent to which other researchers would confirm the findings of the study (Lincoln & Guba, 1985). I strived to ensure that my logical inferences and interpretations made sense to others (Marshall & Rossman, 2006). Throughout the research process I held regular audits and debriefing sessions with my supervisor whose observations, based on extensive academic experience and distance from the research project, continuously challenged my thinking. Lincoln and Guba (1985) have suggested that such audits will improve both the dependability and confirmability of the research. The findings of my research are presented next.

Chapter 4: Findings and Discussion

In this chapter, I describe and analyze athlete and doping control officer (DCO) relations based on data from the 20 interviews I conducted with elite Canadian swimmers and Canadian Centre for Ethics in Sport (CCES) DCOs. I found that not only were Foucauldian concepts present in athlete and DCO relations, they also helped explain similarities and differences in athlete's and DCO's understanding of doping control relations and the contentious elements underpinning these relations.

In order to indicate whether participants' comments were representative of other athletes and DCOs interviewed, in many instances, I included the number participants who shared such an opinion (e.g., 4 of 10 athletes). Caution must be taken when examining this information as based on the open ended nature of my interview guide not all topics were specifically covered by all participants. For example, if I stated that 4 of 10 athletes believed that they should be respectful of DCOs, this does not necessarily indicate that the other six thought they did not have to be respectful; they may have decided to focus on other aspects when asked about their responsibilities during doping control. Nonetheless, the frequencies were helpful in illustrating when there were and were not shared perspectives amongst and between the athletes and DCOs.

The three sections in this chapter address the following research questions: (i) how do athletes and DCOs understand their relations, (ii) which elements of doping control relations are most contentious and (iii) how is Foucault's understanding of power reflected in athlete and DCO relations?

4.1 Athlete and DCO Understanding of Doping Control Relations

In this section, I examine the first research question that asked how athletes and DCOs understand their doping control relations. To do so, I investigated participants' descriptions of the typical relationship between athletes and DCOs which was closely linked to the responsibilities of each party during the process and pros and cons of doping control.

4.1.1 Athlete and DCO relationship

When asked to describe the typical athlete and DCO relationship, three themes emerged: initial negative reaction, the friendly professional, and athlete/DCO familiarity. It must be noted that the following themes are not representative of all athlete and DCO relations. The relationships were not static and did shift over time, especially when contention arose (see section 4.2). Furthermore, relations differed based on the context of the interaction and the demeanor of the participants. The following outlines the most commonly discussed themes.

4.1.1.1 Initial negative reaction

The first tendency was that athletes had a negative reaction when they first encountered DCOs. This theme emerged in several of my conversations with athletes (4 of 10) and DCOs (8 of 10). For example, Nia stated: "most people [athletes] would definitely be like, 'oh crap, like here they [DCOs] come again'" (Female athlete). The initial negative sentiment was understandable due to the nature of doping control as Verna explained: "yea... it [doping control] is just not always the most fun experience" (Female athlete). DCOs also mentioned the initial negative reaction of athletes towards DCOs and Jose provided a detailed explanation of the athlete reaction:

Most athletes... it is kind of a love-hate relationship. They love to see us but they hate it when they are the one who has to provide the sample when the rest of their teammates are done practice and heading off to some recreational facility or bar or whatever they are off to do and these athletes are delayed but for the most part the athletes believe in the program. (Male DCO)

The negative reaction was the result of athletes' understanding that once they were selected by the DCO or chaperone they were required to comply with the process and forego their previous plans or risk facing an anti-doping violation. During the process, however, the negative attitude of the athletes typically subsided once they reflected upon the purpose and the productive nature of doping control. Manny summarized this emotion when he said: "it [doping control] is a little bit of a nuisance but it is one of those... you have to do it, you might as well go and do it right... get it done as fast as you can" (Male athlete).

4.1.1.2 The friendly professional

Two terms were frequently used to describe athlete and DCO relations after the initial negative reaction: professional and friendly. For example, Winny and Custard described the typical relationship as "professional but friendly" (Female DCO) and "professional and friendly" (Male athlete). Six of 10 DCOs used the term professional to describe the relationship, as well as 3 of 10 athletes. Others, such as Manny, alluded to the professional interaction without using the term explicitly:

They [DCOs] are always asking me, can I use this trash can, can I get a glass of water, can I sit here at this table, and can I move this. They [DCOs] don't try and push the boundaries at all and obviously when it comes to when you're half naked peeing in a cup they don't do any more than they need to. They need a clear visual of it coming from my body into the cup and they stand a good distance away. (Male athlete)

Manny's statement described how professionalism was typically maintained in the relationship as the process was carried out in accordance with the rules while DCOs remained cognizant of the invasion of privacy they were making into the athletes' lives.

In addition to the professional component, 6 of 10 athletes used the term friendly to describe the typical interaction. Similarly, 6 of 10 DCOs also used the descriptor friendly or cordial. For instance, Heidi said:

I mean it is usually pretty easy. Usually they are really nice... if you are filling out the forms you just sit there and chat with them. The odd time they are fairly unpleasant but most of the time you can just chat with them or whatever. If you don't have to pee yet you have to hang around and sit there. When they come to your house they say oh yea whatever just do your own thing but because it is weird to sit there and be on your computer or like watching a show and there is just somebody sitting there you generally just kind of chat with them. (Female athlete)

Heidi's description of the interaction highlighted how small talk typically occurred, resulting in a friendly interaction as she felt compelled to entertain the DCOs. All of the athletes included in the study, except for one, expressed a similar sentiment. Alternatively, Andrew stated that: "we [myself and DCOs] don't really chat" (Male athlete). It must be noted that his interaction with DCOs had altered as a result of the 101-200 tests he had completed over his 6-10 years in the registered testing pool (RTP). When describing how his experience with doping control had changed, Andrew said:

I think... yea I know what I am allowed to do and I know that I don't have to sit there and chat for two hours with them if I can't pee. I can leave them in my living room and go sit on the couch and do homework if I need to and, you know, I don't feel guilty about it. I felt like I almost had to entertain them but I think I quickly realized that that's their job, they are getting paid to be there and so really in that case just do your responsibilities and go on with your life if you can. (Male athlete)

It was apparent that he became less friendly with DCOs over time, which was likely due to his higher exposure to the repressive doping control process. This finding supports Waddington's (2010) contention that current doping control procedures can alienate some athletes.

4.1.1.3 Athlete and DCO familiarity

On average, each athlete who participated in the study was tested approximately eight times per year and in many cases, the out-of-competition tests were conducted by the same DCOs. Furthermore, the doping control process did not end until the athlete produced a urine sample that met specific criteria - both Magnus and Jose have described spending over 10 hours waiting for an athlete to provide a sample. As a result, familiarity commonly exists in athlete and DCO relations. Jay, an athlete who became a member of the RTP in the past year, provided an illustration of this when he said: "I think it has been the same couple who has tested me 4 of the 6 times" (Male athlete). Although the percentage of tests conducted by the same DCOs for Jay may not be representative of all the athletes included in my study, the majority of them (6 of 10) discussed how they recognized DCOs and even continued conversations initiated in the past. The DCOs (9 of 10) recounted similar experiences and Neutral described how and why familiar relationships develop:

It is not uncommon to spend an hour and half or two hours with the athlete and you don't sit there and wait for things to happen, you obviously engage these people in conversation sort of thing to try to get them to relax... find out a bit about each other, us about them and them about us. So one tends to develop more of a personal relationship with an athlete simply because you're with them for so many hours and this may occur literally a couple times in a week. (Male DCO)

To implement effective and efficient out-of-competition testing, the CCES employs a select number of highly trained and experienced DCOs strategically located across Canada. To reduce the costs of anti-doping, DCOs typically only conduct tests relatively close to home and thus encounter the same group of athletes at their homes and training locations.

Some athletes and DCOs described how having a familiar relationship with each other can help facilitate the doping control process by making it more comfortable.

There was this couple that came quite a bit. So I definitely had a relationship with them and that was like comfortable. So that was really good and I think that made it easier for me to provide the sample as well. (Nia, Female athlete)

The relationship Nia developed with a couple of DCOs enabled her to experience less anxiety so she produced a sample more quickly thereby reducing the time she spent under their surveillance. DCOs, specifically Neutral, also described how developing familiarity with athletes can improve doping control when he stated: “you can develop very positive relationships with the athletes. Some athletes are a little harder to get along with than others until you spend more time with them and then it becomes a more relaxed atmosphere” (Male DCO). A relaxed athlete and DCO relationship can be important as Elbe and Overbye (2013) determined that 35% of the athletes they surveyed had experienced anxiety due to difficulty in providing a urine sample. Nia and Neutral’s comments suggested that a familiar relationship between athletes and DCOs could reduce these feelings of anxiety.

Other athletes and DCOs however, highlighted how a familiar relationship can become problematic. Jose shared that, as a result of seeing an athlete too frequently:

DCOs get comfortable in the house, they become complacent, the athletes become very comfortable and complacent and I do have an issue with that because we tend to... I wouldn’t say break the rules but I would say slack them a bit or we relax a bit. We’re not as strict because we are trying to be friendly with the athlete and there’s a fine line between being accommodating to the athlete and being friends and being friendly... Some athletes have been tested so often that they start speeding up and going through it because they know what is going to happen and as much as we want to get this over as quickly as possible, we need to have control and maintain control of the whole process to make sure something is not done out of sequence, something is done where we become too complacent and allow the athlete to do it and then all of a sudden our routine is broken up, a step is missed and now the test could be in jeopardy or challenged because something was done wrong and that goes to the integrity of the program itself. (Male DCO)

Jose stressed that DCOs need to maintain control over the doping control process and how becoming too friendly and familiar with an athlete may affect the integrity of the testing process. Mary, Francis, Claire, Winny and Edward also added that DCOs needed to maintain a delicate balance between being friendly with athletes and maintaining the integrity of the doping control process. John also noted that DCOs needed to remain professional, claiming that if the DCOs: “become too friendly with the athletes, then I guess you could almost pull a fast one on them if they weren’t paying attention” (Male athlete). Edward reiterated the challenge that DCOs face:

It [athlete/DCO relations] is a balancing act because you have to be careful to not be too friendly. Yea, it is hard. It is very very difficult actually. That is actually... perhaps with your study here... that is one of the more interesting parts of it because you are trying to do something that is not really... nobody is going to enjoy doing this but you want to make it as less painful as you can and social interaction does help, but then you can’t go too far with it. That is a tricky balance. (Male DCO)

Neutral highlighted a similar challenge: “We [DCOs] can’t be brushed off and athletes who try to brush us off... some cases it ended up in problems for other reasons [positive test results] (Male DCO).

To conclude my analysis of the typical athlete and DCO relationship, I have included the following passages provided by Jay, an athlete, and Mary, a DCO:

It is kind of just... so they show up and you ask who they are testing and you are like, ‘oh damn it is me’. Then they just kind of laugh at it and then if you want some water they’ll bring a bag and you have to grab it out yourself. They will just wait there and they will have a conversation with someone. They obviously have to make sure you’re not...I think doing something weird with the water bottle or something like that. I am not sure what it is. They just have to make sure you’re in the vicinity of their vision and then after that you go into the room and we kind of just chat a little bit. I remember talking to them about some TV show last time and we just talked about that again this time. While we were doing that we were just looking over the forms and just making sure all the numbers matched and all the information was correct. Then we went to the bathroom... it is not an awkward part but it is definitely the most awkward part of the process and then you just go back into the room and you do a little bit more paperwork and then after that they say just have a nice day,

see you later possibly and no news is good news. That is how it kind of goes. (Male athlete)

I think that in the beginning it is... I mean it stays throughout the whole thing as a professional relationship... I don't think it is a negative relationship, I think that it is an amicable relationship. I think that the athlete although frustrated at the time respects the process and most of them are very pro testing because they want to make sure everyone else is playing fairly. I do think that when over time... because I've tested the same athletes over time... you do get to know the athlete to some extent. So you are more than just a stranger coming in ... obviously it is still professional but you do you get to know certain details about the athlete's life and I think that as long as the professionalism is maintained then I think that is OK.
(Female DCO)

Jay's and Mary's synopses of the athlete and DCO relationship contained the key elements discussed above: the initial negative reaction, the professional/friendly interaction, and the familiar relationship. Furthermore, they illustrated how this athlete and DCO have a similar understanding of the relationship.

4.1.2 Responsibilities of athletes

Having a clear understanding of their own and each other's roles in doping control facilitated positive relations. Both athletes (8 of 10) and DCOs (7 of 10) identified the primary responsibility of the athlete was to follow doping control rules and produce a sample. Sally stated that: "I think that we are just required to follow the procedures and don't do anything really out of the norm" (Female athlete). Jay added that: "I don't think it is much more complex than that [providing sample]" (Male athlete). The majority of DCOs agreed that: "well the athlete... their role is to comply with the procedures and the programs" (Edward, Male DCO) and: "in one sentence, the role of the athlete is to provide a sample" (Maverick, Male DCO).

In addition to the primary responsibility, four athletes agreed with Andrew's comment that: "I think all athletes should be respectful of the people there [DCOs], they are

doing their jobs” (Male athlete). Instead of stressing respect, several DCOs (6 of 10) stated that the secondary role of athletes was to be knowledgeable about the doping control process. As Magnus said: “athletes need to know their rights and responsibilities [as outlined by the World Anti-Doping Agency (WADA)]” and Claire added: “if they don’t know what is happening, if the DCO isn’t verbalizing what they’re doing or what the next step is then they need to speak up and ask” (Female DCO). Only one athlete, Heidi, mentioned that as an athlete it was her responsibility to be knowledgeable about doping control.

4.1.3 Responsibilities of DCOs

Similar to athletes, the primary role of DCOs was to follow anti-doping rules and collect a sample. For instance, Manny stated that: “their job [DCOs] is to get a good clean sample from me that hasn’t been tampered with and basically is under all their protocols and standards” (Male athlete). DCOs agreed that the primary role of the DCOs was: “to make sure everything is done according to protocol” (Francis, Female DCO).

Some athletes (4 of 10) and DCOs (4 of 10) agreed that, in addition to collecting a sample, a DCO’s secondary responsibility was to be empathetic and efficient. For instance, Bonnie asserted that: “I think their [DCO] role is to do their job, be respectful, help keep the sport clean but also appreciate the time constraints that the athletes are under and the stress that they are under all the time” (Female athlete). John added that it was important for DCOs to have an: “understanding that it is an inconvenience for the athlete to have to go through this [doping control] process” (Male athlete). Louise explained the importance of empathy: “It is very important to do it [doping control] with compassion and sensitivity... The last thing you want to be is officious because it is nasty enough without being officious and superior. You have to be compassionate” (Female DCO).

Furthermore, all of the DCOs interviewed described to a greater or lesser degree that demonstrating empathy towards athletes improved their relationships with them. For example, Mary said:

I took the approach that I am really sorry that you're going to have to cancel your dinner date tonight. I was understanding and I think that is important in the process. When they hire the DCOs... I think that the CCES would want people who would be personable to make the whole process as comfortable as possible for the athlete. (Female DCO)

The importance of understanding athletes' emotions was reiterated in Winny's statement:

So there can be anger directed at you. The main thing is to try and decelerate the anger. Acknowledge it but bring it down in any way you can. Sometimes it is a matter of telling the athlete to go for a walk with the chaperone. Sometimes it is a matter of just standing with them and talking to them. Sometimes it is bringing in somebody else like a family member who can calm this person down. (Female DCO)

The effectiveness of such strategies was also apparent in my discussions with athletes. For example, when describing her worst out-of-competition testing experience, Sally said:

They [DCOs] knocked on the door and I was like so frazzled because I had to write a test that day and I was like this is just not cool, this is my sleep in day, you woke me up early but they were the sweetest people, like I couldn't even get mad because they were so nice. They were like we didn't really want to do this either. Sorry that it is so early. They were very apologetic. Yea I just think having people who are friendly like that just makes the situation that much better. I mean it is their job and they are told what to do and they have to it. You can't really get mad at them because they are doing what they have to do. (Female athlete)

The applications of several other strategies were also described by DCOs to defuse conflicts and they all related to demonstrating empathy towards athletes.

The final responsibility of DCOs was to minimize the amount of time athletes spent in doping control. Neutral stated: "expediency is very important to these people [athletes]" (Male DCO) and Andrew (Male athlete) added that the process needs to take a reasonable amount of time. The importance of an efficient doping control process was paramount.

When describing his/her best experiences in doping control, 8 of 10 athletes described the process as being completed quickly (e.g., within 10-30 minutes).

4.1.4 Pros of doping control

When asked to describe the pros or positive aspects of doping control, both athletes and DCOs typically referred to an answer they had previously given during the interview, their description of the purpose of doping control. Participants' responses generally fell into two categories: doping control is beneficial because: i) it protects sport or ii) it protects both the sport and the athletes. For instance, Bonnie shared: "I think the positive of doping control is that it at least gives you a sense that it's somewhat fair" (Female athlete) and Heidi added: "yea I mean you want to level the playing field and make sure everyone is sort of starting off at the same point" (Female athlete). Bonnie and Heidi's comments were representative of those given by 8 of the 10 athletes. Similarly, Winny, a DCO commented: "I am there for the athlete to help them ascertain that their sport is fair, to keep it fair" (Female DCO), while Mary said the purpose of doping control was: "to make sure people are adhering to the ethics of true sport" (Female DCO). The responses of the athletes and DCOs supported the notion that doping control was beneficial as it preserved what WADA described as the intrinsic values of sport: "ethics, fair play and honesty" (WADA, 2009f, p.14). Interestingly, the majority of athletes and DCOs were in accordance with what WADA described as the: "fundamental rationale for the *World Anti-Doping Code*" (p.14), despite the findings of Kayser et al. (2007) that suggested that the assumptions regarding fairness in sport and the concept of a level playing field were largely unattainable due to widespread biological and environmental inequalities. For instance, depending on

an athlete's nationality and the sport in which they participated, access to care, coaching and training facilities varied drastically (Kayser et al., 2007).

In addition to protecting sport, seven of the DCOs maintained that doping control was beneficial because it also protected athletes. For example, Edward stated:

It [the purpose of doping control] is to try and protect the rights of the athletes, the ones that are trying to do it clean and that is the primary reason. I think that is the guts of it and to protect sport itself actually. So it is for the athletes and also for the sport itself. (Male DCO)

Neutral, who also stated that doping control protected both sport and athletes, explained that doping control protected athletes because the use of certain banned substances could be quite detrimental to one's health: "the physical damage that can be done to an athlete by taking certain drugs is really something we want to try to keep athletes from getting involved with" (Male DCO). Furthermore, Louise contended that doping control could facilitate athletes' decision to avoid drug use:

I think it is twofold. I think it is an effort to make sure that there's a level playing field for athletes and they are not competing against someone who is cheating but for me I believe the fact that our athletes are tested so often and know that they are tested so often it is an inhibitor in terms of their willingness to take drugs. They are under incredible amounts of pressure from coaches, sponsors, family, friends and their own competitive drive and I think that because they know they are going to be tested they are much more careful to not take anything. (Female DCO)

Louise's comment related to previous findings that confirmed the incredible pressures faced by athletes which may result in some of them seeking an unfair advantage over their competitors (Bloodworth & McNamee, 2010; Ehrnborg & Rosen, 2009; Huybers & Mazanov, 2012; Kayser et al., 2007). Furthermore, Louise's sentiment that athletes were more careful to avoid banned substances as a result of doping control was supported by the work of Bloodworth and McNamee (2010), as they determined that the shame of a doping infraction was the greatest deterrent of performance-enhancing drug (PED) use.

Interestingly, Custard was the only athlete who mentioned that the purpose of doping control was to protect athletes, compared to seven of the DCOs, when he claimed that: “well [doping control] keeps the sport clean, which ultimately I guess is for the athlete’s health and safety” (Male athlete).

Andrew was the only one who tied the benefit or purpose of doping control to nationalism when he said: “[It is] just to ensure that... well I guess for the most part it is CCES testing so... to ensure that the Canadians are testing Canadians to make sure that as a country we are clean” (Male athlete). Andrew’s response was interesting as he stressed how doping control helped ensure Canadian athletes were clean and therefore protected Canada from possible international doping scandals. The relevance of his sentiment cannot be understated as Canada has been on the forefront of the anti-doping movement ever since Ben Johnson’s 1988 Canadian Olympic Gold Medal in the 100 metre race was rescinded following a positive drug test (Canadian Heritage, 2001; Dubin, 1990; Walker, 1988).

4.1.5 Cons of doping control

In addition to describing the pros of doping control, both athletes and DCOs highlighted several cons or drawbacks associated with doping control that affected their relationships, including: i) how it could hinder performance, ii) how it was ineffective, iii) how it violated athletes’ personal integrity, iv) how it was inconvenient, and v) how it was an invasion of privacy.

4.1.5.1 Hindrance to performance

Although many of the athletes were unwilling to use doping control as an excuse for poor performances, several of their comments suggested that doping control had hindered

their athletic performances. Nia, Sally, Heidi and Custard explained that athletes could be required to participate in doping control late into the evening thereby reducing their recovery time for races the following morning. Furthermore Nia added: “you are not allowed to eat in the room, so I am also not refueling my body after competing” (Female athlete). In addition to reducing recovery time and preparation during competition, four athletes described how out-of-competition testing could be detrimental to performance as it decreased training time. Manny provided a vivid description of this drawback:

They [DCOs] showed up and they wanted to do a blood test for me and for a blood test I wasn't allowed to have worked out, I wasn't allowed to have practiced two hours prior to my blood test OK and they showed up at practice. So I am just like OK well let's do the blood test before practice. The blood test didn't take that long but you have to fill out all these sheets and you have to wait for the people ahead of you and an hour goes by... an hour into the practice and then you only have a certain time allotted in the pool, so I've missed half of my practice. So that kind of irritates me as well. (Male athlete)

Manny's frustration was understandable because, as Bonnie described: “in such a competitive environment... you can't afford to mess up one important workout” (Female athlete).

Five of the DCOs were also cognizant of the negative implications of doping control on athlete performance. For example Maverick stated:

If they miss a training session to attend doping control... you know that is two or three less hours that they got to train that week and those hours are precious. I can definitely appreciate the athlete perspective that it is tough. (Male DCO)

Other DCOs described how they worked with the athletes and coaches to develop strategies to complete it in the least disruptive manner possible. For instance, Mary described how she instructed her staff to allow athletes to complete required sporting activities while remaining under their supervision:

In the competition setting most people believe you really need to allow the athlete to cool down and we do that as DCOs... I've had my chaperones jog the field with athletes just to be with them while they are cooling down. (Female DCO)

Furthermore, Jose and Mary described how dialogues with athletes and coaches enabled them to limit the length of time athletes spent waiting to complete out-of-competition doping control procedures. When they first began regularly testing swimmers, to avoid disrupting practice, they would typically arrive towards its conclusion. After consultation however, they began to arrive at the beginning of practice because swimmers would sometimes urinate in the pool during their workout and as a result, frequently be required to wait hours after practice to be able to provide a sample.

The following statement by Custard summarized how doping control can be detrimental to performance, while acknowledging how DCOs strove to limit the consequences.

It [doping control] can... just the timing can get in the way of... during competition testing can get in the way of your cool down and your recovery... but I mean you have to do it at some point. They [DCOs] do a pretty good job of not getting in your way. (Male athlete)

4.1.5.2 Ineffective testing procedures

The second con of doping control that was often highlighted was the ineffectiveness of the doping control process. The majority of athletes (9 of 10) and DCOs (8 of 10) felt that the current testing procedures were unable to detect sophisticated forms of doping. For example, John stated:

I mean they [doping control tests] are as effective as we can make them. I think that there's... just as much as they are trying to make their processes for determining whose doping and who's not, just as they are trying to make that more effective, so are the people who are cheating. They are trying to make a more refined better product that can help them get away with it. (Male athlete)

Claire shared a similar sentiment when she said:

Sometimes the really smart cheaters are still ahead of the science and still ahead of the process and anti-doping can sometimes be predictable... so sometimes it is not so effective... That's why we do still have a long way to go but I think we're lessening the gap. (Female DCO)

The ability of athletes to avoid detection had also been discussed by several scholars.

Overbye and Wagner (2013) found that athletes' trust in the whereabouts system to catch doped athletes was remarkably low, while Striegel et al. (2010) showed that current anti-doping measures were ineffective because the prevalence of doping in elite sports was more than eight times higher than the frequency suggested by official doping tests.

Doping control was also deemed to be ineffective because administrators utilized improper measures, as Francis explained:

I think that everybody wants numbers. I think that CCES has to report how many tests they've done and FINA [Fédération Internationale de Natation] has to report and Swimming Canada has to report how many tests they've done, so you are going to have to do tests that aren't meaningful. So you test athletes that really are not in a high risk category and I think that that is unfortunate. The media wants numbers, the IOC, WADA... everybody wants numbers but those same organizations say it is not about the numbers, it's really what you're doing and what you are testing for and who you are testing and why you're testing and even when you are testing. (Female DCO)

Francis' critique of insignificant doping control tests was reiterated in the experiences of three athletes. Jay added how this circumstance could induce conflict:

Actually there was another time where somebody [an elite athlete] wasn't there and then one of the coaches got pretty frustrated about it because they [the DCOs] were like we have to test two people so you are going to have to choose two random people from our group. They were kind of like getting into a little bit of an argument... two random people that were not in the RTP ended up getting testing because they needed two random people. I thought... that was a very strange situation. (Male athlete)

Coaches are very protective of their athletes and may have felt their athletes' time was being wasted because they were not specifically identified by the CCES to be subject for testing. Furthermore, they were not considered a high enough priority to be included in the

RTP, yet they were being tested because the DCO was required to complete a certain number of tests.

4.1.5.3 Violation of personal integrity

The majority of participants (8 of 10 athletes, 7 of 10 DCOs) used the terms 'invasive, awkward or uncomfortable' to depict how doping control could violate an athletes' personal integrity. Manny explained that doping control: "is awkward because there's another man watching you pee into a cup basically and your pants need to be below your knees and your shirt needs to be up above your breast line, so it is awkward" (Male athlete). Similarly, Bonnie argued that: "the athlete is the one who is in a vulnerable position; we're the ones who have to take off the clothes" (Female athlete). Similar sentiments were also seen in the work of Elbe and Overbye (2013) who found that 15% of Danish athletes claimed that doping control violated their personal integrity because someone was watching them urinate. Simply put, a con of doping control was that athletes were required to perform private bodily functions in full view of a DCO. The majority (7 of 10 athletes and 8 of 10 DCOs) of participants noted how the process of providing a urine sample was a more uncomfortable process for female athletes than males as a result of anatomical differences. For instance Francis said: "women are squatting uncomfortably and that's not normally how they go to the washroom, whereas I know for the men they don't have to change very much" (Female DCO). Heidi confirmed this when she said:

I mean it is kind of harder to aim that is for sure. Like you need 90 mL to have a large enough sample so you are like I don't want to waste any because if you have a partial it is such a pain because you have to wait and you have to wait to pee again or whatever but yea as a guy it would be definitely easier. You make it work though. (Female athlete).

4.1.5.4 Inconvenience

Half of the study participants (6 of 10 athletes and 4 of 10 DCOs) described how the inconvenience of doping control affected athletes. Mary provided an example of this when she said:

There have been a lot of times when it is not always convenient for testing. Sometimes athletes do have commitments and we have to say that if they don't conform and go along with this test then they potentially could be sanctioned.
(Female DCO)

This quotation expressed how the no notice nature of doping control could be problematic, requiring DCOs to deliver ultimatums instead of being flexible. As a result, athletes must choose between cancelling their plans or risk being banned from their sport. In fact, Jay argued that doping control: "never seems convenient" (Male athlete). The following quotation from Jose exemplified the heightened sense of inconvenience:

I actually showed up at an athlete's house... his friends threw a party for this athlete and I show up and I've notified him and he is subject to testing. He's in the middle of a party and unfortunately now that he has been notified we have to go through the test and he's got family and friends all there and the rules are very clear that once you're notified you don't get out of it unless there are very extenuating circumstances. That's the downside to freedoms that these athletes give up. (Male DCO)

In addition to being tested at anytime, John claimed athlete whereabouts: "is definitely an inconvenience to have to go through" (Male athlete) and Sally confirmed that: "it's the worst... it took me a whole evening to do it" (Female athlete). Overbye and Wagner's (2013) obtained similar findings when they determined that 75% of athletes felt reporting whereabouts was too time consuming and 40% said the joy of being an athlete was diminished as a result of the requirement. These sentiments were predictable as having to determine one's personal schedule three months in advance or risk anti-doping violations can certainly be regarded as a difficult requirement to follow.

4.1.5.5 Invasion of privacy

Contrary to the literature (Elbe & Overbye, 2013; Hanstad & Loand, 2009; Kayser et al., 2007), only a few athletes (3 of 10) and DCOs (3 of 10) highlighted how the invasion of athletes' privacy was a negative consequence of current doping control procedures.

Athletes must invite DCOs into their homes during out-of-competition testing and Louise offered this explanation of this requirement: "their home is their private domain and... you are letting someone in to your private home" (Female DCO). Mary expressed a similar view when she said: "I will always try to test an athlete at practice over the home. I just feel that the invasion of privacy is that much greater if you go to their home, but not everyone [DCO] does that" (Female DCO). Furthermore, the athlete whereabouts requirement that athletes submit their daily overnight residence in addition to their location for a daily 60-minute time slot was perceived as an invasion of privacy, as illustrated in the following statement by Nia:

Why do you need to know every single pretty much moment or hour of my life? No one really needs to know that... I am, like, why do you need to know all of that and don't we have a right to privacy as well? (Female athlete)

Nia's sentiment was shared by Hanstad and Loand (2009) as they argued that doping control is an infringement of individual privacy and the: "right to move freely and live a spontaneous life" (p.7).

4.1.6 Summary

Upon analyzing my interviews with athletes and DCOs, several similarities were apparent in how both groups understand doping control relations. After reviewing the descriptions of their relationships, the responsibilities of both athletes and DCOs and the pros and cons of doping control, their understanding differed only slightly. DCOs

emphasized that doping control was productive because it protected athletes in addition to sport, and DCOs claimed that being knowledgeable of doping control was an athlete's responsibility. In section 4.3, I argued that the similarities in athletes' and DCOs' understandings may be attributed to Foucault's disciplinary power and the workings of governmentality. Next I illustrate the contentious issues that affect athlete and DCO relations.

4.2 Contentious Elements in Athlete and DCO Relations

As outlined above, athletes and DCOs generally had a similar understanding of doping control, and the typical athlete/DCO relationship was described as both professional and friendly. However, there were instances when it became problematic and even rare instances that escalated into verbal altercations. Six athletes and six DCOs reported that they have been angry or frustrated with an athlete or DCO. Furthermore, four athletes shared that conflict existed in their relationships with DCOs and nine DCOs confirmed that conflict with athletes existed. For example, when describing her worst doping control experience Winny claimed: "I got attitude, I got snarlyness, I got everything thrown at me by this athlete" (Female DCO). Similarly, Magnus stated: "certainly there is verbal banter back and forth sometimes... If you don't respect that I am doing what I am sent here to do, and what I am told to do then fine, but that is just the way it is" (Male DCO). Both Winny and Magnus spoke to the presence of verbal altercations with athletes who were frustrated with and critical of the rules they were required to follow.

Both Nia and Andrew suggested that, in some instances, athletes were the cause of this conflict: "I know that athletes sometimes ... were not the easiest to get along with and some of us can be a little bit pigheaded" (Female athlete) and: "I know athletes kind of get

jerkish” (Male athlete). However, Andrew acknowledged that athletes were not alone in taking the blame because: “conflict can arise because they [DCOs] don’t like to be questioned” (Male Athlete). Bonnie shared this sentiment when she said that DCOs: “can be very aggressive and sort of like power hungry” (Female athlete).

In the pages to follow, I outline the contentious elements in athlete and DCO relations that were related to inefficient doping control and rule confusion.

4.2.1 Inefficient doping control

As discussed when examining the responsibilities of DCOs, efficiency was paramount during doping control. A short time in doping control was typically referred to as a best case scenario for athletes and also reduced the opportunity for problematic interactions. Throughout the interviews three general causes of inefficient doping control were alluded to: insufficient infrastructure, human impediment, and frequency of tests.

4.2.1.1 Insufficient infrastructure

Despite some criticisms that doping control invades athlete privacy (Elbe & Overbye, 2013; Kayser et al., 2007), the *Canadian Anti-Doping Program (CAPD)* says it strives to protect athletes’ privacy because doping control must be conducted in a location: “which at a minimum, ensures the athlete's privacy and where possible is used solely [for] doping control” (CCES, 2011c, p.21). Ideally, this consists of a secure area with an adjoining toilet (e.g., dressing room, training room) to ensure that an athlete can provide a sample and complete the required paperwork without encountering other individuals aside from the DCO, chaperone, athlete representative or WADA observer. As Winny described: “we [DCOs and athletes] need privacy... a secure area... we can’t just walk into any old bathroom at any time” (Female DCO). During testing however, space can be limited, as several

athletes must be notified at the conclusion of competition and therefore a number of them may require access to such a space at the same time. As a result of these conditions, athletes are obligated to wait their turn under the surveillance of a chaperone until a processing room and DCO are free. Insufficient infrastructure reflects poorly on the DCOs as athletes feel that they are not being respectful of their time. Bonnie stated: “it is especially frustrating when the drug testers [DCOs] aren’t very respectful of my time... [and] the thing I hate most is when you have to wait for a bathroom” (Female athlete). Sally added: “sometimes ...you have to wait so long... because there’s such a long line up and that can be really annoying too because it takes more time and you are just ready to go but you can’t” (Female athlete). Similarly, Francis shared:

It [the worst experience] is when you only have one processing room, the chaperones don’t show up, you have a ton of athletes waiting and they are ready to give a sample and that is the worst feeling when you know you have athletes who are ready to go and they are waiting... that just sucks. (Female DCO)

Furthermore, when describing his worst experience, Edward said:

I think there were six, maybe more athletes and they all came at the same time. I was trying to process them as who needed it the most but really it got to the point where I just couldn’t do it and some of the athletes were in great distress... (Male DCO)

The quotations illustrated how both athletes and DCOs recognized that insufficient infrastructure could be problematic and result in athlete frustration and physical discomfort. Francis highlighted the importance of proper infrastructure when she shared: “more people [DCOs/chaperones], more processing rooms... just improved preparation usually can resolve a lot of issues” (Female DCO).

4.2.1.2 Human impediment

Another form of inefficient doping control was the notion of human impediment and it emerged in two capacities: the strict application of anti-doping rules and game playing.

Copious rules are used to outline the doping control process, including what WADA outlines as athletes' rights and responsibilities. When an athlete is notified that they have been selected for doping control, the DCO/chaperone is instructed to read the athlete their rights and responsibilities. Athletes are read verbatim that they have the right to:

Have a representative and if available, an interpreter; ask for additional information about the Sample collection process; request a delay in reporting to the Doping Control Station for valid reasons; and request modifications as provided for ... athletes with disabilities. (WADA, 2012a, p. 31)

They have the responsibility to:

Remain within direct observation of the DCO/chaperone at all times from the point of notification by the DCO/chaperone until the completion of the Sample collection procedure; Produce identification... comply with Sample collection procedures (and the athlete should be advised of the possible consequences of Failure to Comply); and report immediately for a test, unless there are valid reasons for a delay... (WADA, 2012a, p. 31)

Athletes are also instructed that consuming any food or fluids prior to completing doping control is at their own risk and that they should avoid excessive hydration as they must provide a sample with a suitable specific gravity for analysis (CCES, 2011c). Furthermore, once they arrive at the doping control station and they are ready to produce a sample, they are required to follow the regimented process of securing their sample. Moreover, during in-competition testing, this process could occur moments after an athlete has finished competing, a situation when they are exhausted, and as Verna explained: "sometimes not fully with it yet" (Female athlete).

Several athletes (6 of 10) described the process of being read their rights and responsibilities as awkward, frustrating and a nuisance. As John confided: "it is a little bit awkward, like someone just following the rules exactly to the T... it is one of those things where it's like OK I get it, I've done this before" (Male athlete). Verna added that: "honestly I

don't listen to the whole thing most of the time, I just sign off... I have read them so I know what they are" (Female athlete). Heidi's frustration was also apparent as her reaction to a DCO or chaperone reading her rights and responsibilities was: "stop [reading], I know them, I've heard it a million times" (Female athlete). Despite the fact that DCOs and chaperones were following WADA's rules, experienced athletes felt as though they were ignorant of their experience and knowledge. They felt the doping control process should be expedited for experienced athletes because the strict application of anti-doping rules further wasted and inconvenienced their time.

DCOs also described the complications associated with reading athletes their rights and responsibilities because they were required to remain rigid in the application of WADA's rules. As Edward stated:

Yea it happens all the time [a negative reaction]. The answer is always the same. Sorry I have to read it to you. A lot of times they just look away and they walk away or whatever. But I can understand that but they have to understand too that it has to be done. (Male DCO)

Similarly, Neutral shared:

The thing is that we have to go through the formalities... we want to make sure everything is done properly. So I know you know your rights and responsibilities but we must read them to you and before you sign you must read the back of the page... So we are pretty firm on the fact... (Male DCO)

Other DCOs, however, were more cognizant of the athletes' frustrations and were more willing to modify the procedure, while ensuring the integrity of the sample collection. For example, Francis claimed:

I would treat athletes who haven't gone through the process a little bit more carefully and I would explain things in more detail but when you have an athlete who is a big name and they have been tested a bunch of times and you are trying to say these are your rights and responsibilities and they are going yea I know... OK well really I need to tell you this... OK. I must admit I have said OK you've waived your right to make me tell you... (Female DCO)

Likewise, instead of remaining rigid in her application of anti-doping rules, Claire claimed she would stop reading athletes their rights and responsibilities if an athlete said it was unnecessary. Instead of continuing to follow the procedure Claire would:

...always say do you know what it is you are signing? So I [would] confirm with the athlete that if they are going to sign that they really understand what it is that they are signing and the answer is always yes. I mean whether that is true or not... I mean it is up to them. They make that decision. (Female DCO)

Claire shared that listening to the athlete and responding with the modification reduced the likelihood of a problematic interaction.

DCOs (7 of 10) also complained that they had been frustrated by athletes who they felt had engaged in game playing by intentionally increasing the duration of the doping control process. For example, Francis described that she has been frustrated with:

Athletes who try to buck the system, who try to extend the time before they go to the doping control station... they know that they are going to have to go anyway but they are just making you go through hoops and follow them around or whatever. (Female DCO)

Winnie added:

I had one athlete once say to me that he wanted to see how many times he could get me to say no because he kept trying to do things that he wasn't supposed to do and I kept stopping him and then he admitted that that was what he was doing. (Female DCO)

Louise described how her worst experience during doping control had been: "when somebody spoke with a foreign language and was not cooperative and started playing games and pretended they didn't understand when I know they did" (Female DCO). The frustration was understandable for DCOs who attempted to ensure that they were respectful of the athletes' time, yet some athletes have not returned the favour.

4.2.1.3 Frequency of tests

The final form of inefficient doping control was the notion of testing frequency. The *World Anti-Doping Code* (WADC) stipulates that athletes can be tested 365 days of the year and that there is no limit to the number of times an athlete can be selected for doping control (WADA, 2009b). Despite this rule, both athletes and DCOs related how athletes and their support personnel became frustrated when they felt that testing had been conducted too frequently and therefore inefficiently. For instance, Neutral stated: "I've had conflict in a couple of situations... it has involved people who have been concerned about how often they've been tested and they're sort of annoyed by the regularity of the testing" (Male DCO). John reiterated Neutral's comments as he said that: "the biggest issue was getting drug tested multiple days in a row and that happens a lot ... that causes tension" (Male athlete). Andrew even complained that he had been: "tested twice in a day and four times in a week" (Male athlete). In addition, Nia described how this can be frustrating to not only the athlete but also her support personnel:

I know with my coach... he wasn't always the happiest to see them [DCOs] if they showed up during a main set [training] and he would ...get frustrated especially if that was the second time in the month. Once I got tested and then like two days later I was tested again... So both he and I were like why are you doing it two days apart? I am, like, isn't that kind of a waste of your time and my time? (Female athlete)

Maverick and Mary explained that this frustration was especially common with Canadian swimmers and support personnel because:

Those team personnel, they are often not just with that one athlete, they are usually with multiple if not a double digit number of athletes at the same time. So I think that is time consuming and that is where the frustration comes from. (Male DCO)

Another contributing factor was revealed:

FINA tests swimmers separate from CCES and we [the DCO] don't know when they test. So sometimes an athlete will have been tested twice in that week, sometimes

twice in that same day. It is unfortunate that the two bodies don't talk to each other.
(Female DCO)

Interestingly, Mary was not the only one to identify how the lack of communication among testing organizations could be problematic, as Heidi agreed that:

It would be nice if WADA communicated with the sort of specific countries [e.g., CCES] or specific sport affiliates [e.g. FINA] because there have been times where CCES comes one day and then WADA comes the next day. You are like I just got tested. I know a fellow swimmer who has had them come twice in a day. They'll come in the morning and they will come at night. It would be nice if there was a little bit more communication that way. (Female athlete)

During a council meeting in 2009, WADA's Athletic Committee: "emphasized the need for National Sports Federations [e.g. FINA], National Anti-Doping Organizations [e.g. CCES] and Major Games Organizers to better coordinate testing plans [which athletes are being tested and when]" (WADA, 2010c, para.5). Despite the Athletic Committee's recommendation and the CADP stipulation that testing be conducted in the most efficient and effective manner to detect, deter and prevent doping practices (CCES, 2011c), the results suggested that coordination has yet to be achieved, resulting in contention between athletes and DCOs because athletes felt their time was being wasted. Conducting multiple tests in close proximity could be further explained by Francis' critique of the ineffectiveness of doping control. Because the anti-doping organizations want to report a high number of completed tests, inconsequential tests may be completed when athletes were easily accessible.

4.2.2 Rule confusion

In addition to inefficiencies in doping control, rule confusion was another contentious issue. During my analysis, disconnect emerged in two main instances: the whereabouts window and requesting a delay in testing.

4.2.2.1 Whereabouts window

All the athletes who participated were currently or had been included in the CCES registered testing pool (RTP). As a result, they were required to provide a: “60-minute time slot between 6:00 a.m. and 11 p.m. during which [they] will be available and accessible for testing at a specified location for each day” (CCES, 2011i, para. 7). To comply, athletes would record their one hour window at a time when they knew where they were going to be and for many athletes (8 of 10) this was during swim practice. Athletes (7 of 10) chose this hour as they considered it to be the most convenient time for doping control and as Louise described and Elbe and Overbye (2013) determined, being tested at their home was more invasive. For example, Heidi explained how she selected her hour:

Yea I usually put my one hour on all the days I have training. I put it the second hour of swim practice in the morning so hopefully they show up halfway through swim practice. You will have to go to the bathroom sometime during practice and it will be easy. (Female athlete)

Similarly, Nia said:

So the one hour window is just one hour where I will definitely be where I say I am going to be. So for me it was easiest just to do it at the pool because I knew that I was going to be there every single night but that can be kind of tricky too because sometimes something happens and you have to run out and the last thing on your mind is switching your whereabouts form... I thought about the 1 hour as what would be the most convenient for me. I always put it for like an hour timeslot at the pool. (Female athlete)

Interestingly, the CCES avoided testing athletes during their one hour window as confirmed in Mary’s statement: “We [DCOs] are given a mission order from CCES and that provides us with the whereabouts information and we test outside of the one hour window unless we are told to test within the one hour” (Female DCO). The rarity of tests carried out during the one hour window was also confirmed by Magnus who had carried out more than 10,000 doping control tests yet shared: “oh I’ve probably only done 20 tests total like that

[one hour test]” (Male DCO). It appeared that the CCES purposely avoided testing in the one hour window. Perhaps this is because if a DCO could not locate an athlete during that time, the athlete received a missed test; three missed tests in an 18-month period may result in an anti-doping rule violation (CCES, 2011h). Despite the CCES’s intentions to spare athletes penalties, the majority of athletes (6 of 10) and Neutral, a DCO, confirmed that avoiding the time slot frustrated athletes. The frustration was exemplified by Bonnie who said:

We used to get so frustrated because they [DCOs] never showed up in the hour we gave them. We would always say why wouldn’t you come in our hour and they are like that hour isn’t supposed to be for your convenience. That is just a doping control rule. I was like OK I understand it is supposed to be random but we choose the hour we choose because that is the best time for you to drug test us... when we 100% know where we are going to be, when we are not in the middle of dinner or the middle of doing something... it is a good time for you to come. I am not saying that they have to come every time in the hour but I was just so frustrated just making sure that I was where I was in my hour and then never getting tested in my hour. The hundred tests I did I never got tested in my hour, like what is that? All the worry I always had about it and then nothing. (Female athlete)

It appeared that athlete frustration with DCOs avoiding the athlete’s one hour window exceeded the context of Canadian doping control as a similar sentiment was shared in a tweet by a US Olympic swimmer:

Figure 4.1 US Olympian Tweet



Source: www.twitter.com

Athletes understood that the: “60-minute time slot does not limit in any way [their] obligation to be available for testing at any time or place” (CCES, 2011i, para. 7). However, as they were unaware that this hour was in fact the time when doping control was least likely to occur, they remain frustrated.

4.2.2.2 Requesting a delay in testing

The second area where athletes demonstrated confusion regarding anti-doping rules was requesting a delay in completing doping control. The CADP stipulates that an athlete may request a delay and leave the doping control station for any: “reasonable circumstances which can be justified” (CCES, 2011c, p. 19). However, the athlete and DCO must agree on the following:

- a) the purpose of the Athlete leaving the Doping Control Station;
- b) the time of return (or return upon completion of an agreed activity);
- c) that the Athlete must remain under observation at all times; and
- d) that the Athlete shall not pass urine until he/she gets back to the Doping Control Station (CCES, 2011c, p. 22)

In addition, the CADP states that: “the DCO shall consider any reasonable request” (CCES, 2011c, p. 22) but adds that: “DCO/chaperone shall reject a request for delay from an athlete if it will not be possible for the athlete to be continuously chaperoned” (CCES, 2011c, p. 20). Furthermore, granting a delay, aside from specified circumstances (e.g. participating in a victory celebration, competing in further competitions, and performing a warm down), is up to the discretion of the DCO (CCES, 2011c).

There were differences in what athletes and DCOs deemed to be reasonable and justifiable circumstances. For example, John said:

The DCO was there to test and we couldn't go [provide a sample] then but we had to go to weights... we had a weight session at a different location. I am not really positive with the rules but I am pretty sure if that happens they have to follow you and they were like no you can't leave. You can't leave until you've done the test and my coach got really mad, like rightfully so because they were kind of impeding our training. (Male athlete)

Heidi added that:

We had one couple [of DCOs] who used to come to the pool and test us all the time and they were unbelievably rude and they were so awful to deal with... One day our coach just lost it on them because there was a time when a girl [athlete] had to get to

an exam at school and they were like no you have to stay at the pool and finish your sample and she was like no you actually have to follow me because it is my time and I have an exam to go to. (Female athlete)

Similarly, Andrew shared:

I had an exam one time and instead of... yes they are supposed to take a sample right at the pool but they would come in the last minute of our training session, which wasn't my 60 minutes [whereabouts window] and then I had to miss an exam because they wouldn't come with me to write an exam. It is just disrespectful when they were always working towards their time and not towards us.

As their statements revealed, some athletes believed that provisions should have been made to ensure training at different locations was not interrupted and that university exams were not missed. In addition, Andrew further highlighted the rule confusion related to the whereabouts window. Jose provided the DCO perspective on granting a delay and moving the testing location:

You obviously try not to do it but ... if you show up at a team training session and a team is training at a particular venue... the team will say to you... I am sorry but we only have this place rented to a certain time and at that time we have to be vacated from the building, somebody else is coming in and we can't use it. We'll try and get the process done but if we are not done by that deadline. It is rare but it does occur on occasion.

Requesting a delay acted as a catalyst for conflict because athlete and DCO interpretations of the anti-doping rules differed. Magnus explained why DCOs are unlikely to request lengthy delays and move testing locations:

Well I think now because the difficulty with that kind of thing is because of the medical, legal stuff you would get into because now the chaperone... is the athlete going to go in your vehicle with you or is the chaperone going to go with the athlete in the athlete's vehicle or what are you going to do... then you get into all this legal nonsense. (Male DCO)

Permitting such a delay and moving testing locations would drastically complicate an already rule intensive process.

In this section, I demonstrated how inefficient doping control and rule confusion were contentious issues that underpinned athlete and DCO relations. In the next section, I illustrate how Foucault's understanding of power helps to explain these relations.

4.3 Foucault's Understanding of Power in Athlete and DCO Relations

Examples demonstrating Foucault's understanding of power were present in all 20 interviews. In the following pages, I utilize evidence from the interviews to illustrate how the nature of his power and its applications (discipline, panopticon, and governmentality) characterized athlete and DCO relations.

4.3.1 Power tactics

Foucault conceptualized power not as a commodity or a privilege that can be held and acquired, but as a series of tactics that are pervasive in social relations (Foucault, 1978; Lovell, 2011). One of the most interesting tactics utilized by DCOs (3 of 10) to mobilize power over athletes was linking doping control to athletic achievement. For example Winny, a female DCO, explained: "... as I always like to say to the athlete, if I am testing you it means you are doing well in your sport". Two other male DCOs were of the same mind that athletes should be grateful to be taking part in doping control because this was an indicator that they have achieved success in their sport. Evidence of the effectiveness of this tactic was apparent, as several athletes (5 of 10) also shared this sentiment. Jay claimed: "I was top 50 in the world last year so then they started testing me" (Male athlete). When asked to describe her first doping control experience, Verna replied: "I ... thought, this is cool, I am fast now. I am getting tested now because I am actually fast" (Female athlete). Likewise, Bonnie stated:

I was not upset at all that I got picked. I thought it was so cool that I got picked to get drug tested. That went along with all the things that represented success for me. You

know, like getting the Canada Cap and getting interviewed after your race and getting drug tested. I felt special. (Female athlete)

Similar thinking was reported in Overbye and Wagner's (2013) study where 75% of the Danish athletes felt that having to report their whereabouts information was regarded as a compliment to some degree. This suggested that DCOs attempted to not only ensure athletes complied with doping control procedures but, through the workings of power, some were also content to do so. Bonnie, however, acknowledged the limitations of this tactic when she continued:

"I mean that [special] feeling kind of faded after awhile... yea then you do it so much that you are like 'oh god I have to warm down... I have a competition' and you just want to go home or see your family or celebrate or go eat and it is already a late night anyways and then on top of that you have to get drug tested. It is another thing you don't want to do because it is just wasting your time. (Female athlete)

As a result, other tactics such as relying on the rules were used to manipulate power in athlete and DCO relations. Canadian swimmers are subject to the 519 pages of anti-doping rules outlined in the WADC, WADA's five international standards, CADP, and the FINA doping control rules (CCES, 2011c; FINA, 2013; WADA, 2009e; WADA, 2009f; WADA, 2011b; WADA, 2012a; WADA, 2012b; WADA, 2013a). CCES DCOs are required to administer these rules in accordance with procedures outlined in the CADP (CCES, 2011c). Unsurprisingly, in all twenty interviews, reference was made to rules (or its synonyms, procedures, protocols). The omnipresence of this tactic was reiterated by Sally who claimed: "there are so many rules" (Female athlete). The importance of this tactic was justified by Maverick who said: "the rules are in place for a reason... as long as all [are] followed, then everyone should feel safe and comfortable and confident" (Male DCO). Therefore, if rules have been outlined, athletes should submit to the directions of the DCOs

who are charged with enforcing them. Misunderstanding or rule confusion, however, did result in contentious relations as described earlier.

These are only two of the Foucauldian tactics of power apparent in athlete and DCO relations. Other tactics including instilling habits, hierarchical observation, and normalization are explored when I discuss Foucault's subsidiary concept of discipline.

4.3.2 Power as repressive and productive

As outlined when I discussed the cons of doping control, the process can be described as repressive because it violates personal integrity, is inconvenient and is an invasion of privacy. In fact, the nature of these protocols had resulted in several criticisms (B. Houlihan, 2002; Park, 2005; Waddington, 2010) and has lead others to advocate for an alternative harm minimization doping policy (Kayser et al., 2007; Kirkwood, 2009; Stewart & Smith, 2008). However, despite the repressive aspects, all 10 athletes and all 10 DCOs agreed that doping control was required to keep some athletes from having an unfair advantage. In this way, the process was also seen as being productive and therefore athletes were willing to submit to DCOs because it enabled them to participate in sport drug-free. Sally explained how the productive aspects of doping control outweighed the repressive aspects:

So if that is what I have to do to prove that I am clean, I mean I will do it. It is a part of sport and it is something you have to deal with but it just kind of sucks when it comes to you. (Female athlete)

This finding was in accordance with previous studies that reported the basic principles of anti-doping were widely accepted by athletes (Backhouse et al., 2007; Breivik et al., 2009; Elbe & Overbye, 2013; Hanstad & Loland, 2009; Overbye & Wagner, 2013; Stamm et al., 2008).

It must also be noted that Bonnie and Andrew, the athletes who had been subject to doping control most frequently (100+ tests), expressed reservations even though they agreed that doping control was required. For example, when asked if doping control was required, Andrew stated:

Like I think obviously the answer is yes but within that I think a lot of the tests are [lagging] behind the drugs that are out there so it almost becomes... the ability of the tests are not up to the ability of the drugs and they might never be... it seems sometimes that it is a bit more of a pain for people that are clean than it would be for the few people that choose to dope. (Male athlete)

Alternatively, Verna who had been tested 11-50 times responded:

I just think it is important for fair sport. I think it is a good idea. I don't mind doing it because I never obviously have problems doing it. I just think it is something that needs to be done if they want to keep our sport clean. (Female athlete)

It appeared that the more experienced male and female athletes were more doubtful of the benefits of doping control. Foucault's idea that power can be both repressive and productive can be used to explain why some athletes were more critical of their relationships with the DCOs because they faced the repressive aspects of doping control more frequently. His understanding could be utilized to explain how inefficient doping control was found to be an area of contention. If the process is deemed inefficient and results in lengthy delays as a result of insufficient infrastructure, human impediment or frequency of tests, the athletes may begin to question its productive value because the repressive aspects are taking precedence.

4.3.3 Resistance

Foucault understood power and resistance to be coextensive because as soon as there are power relations, the possibility for resistance exists (Foucault, 1978). Despite the

fact that athletes and DCOs largely saw doping control as productive, resistance was apparent, particularly in two capacities: verbal altercations and game playing.

The first form of resistance was the notion of verbal altercations, which was previously discussed. In addition to its presence, it should be noted the verbal resistance moved beyond athlete and DCO interactions and involved members of the athlete's support team, specifically their coaches. Maverick explained that: "team staff... voice opinions, criticisms or feedback more often than the athlete will" (Male DCO). Claire agreed that: "coaches are really protective of their athletes... so I can see how coaches and DCOs have definitely not gotten along before" (Female DCO). John, an athlete, provided a similar example: "I remember when we were training one time; my old coach kind of lost it on the DCOs" (Male athlete). Some coaches may have felt the need to advocate for their athlete as a result of the imbalanced power relations between the athletes and DCOs. Heidi cautioned that athletes may be unwilling to initiate conflict because: "you don't want to put yourself in that position where you are freaking out at the people drug testing you; it just seems like a bad idea" (Female athlete). Current rules permit DCOs to mobilize power over athletes because they can be banned from sport for failure to comply whereas a coach cannot. The role of the coach in athlete and DCO relations is an important consideration in future research because of the interventionist role they sometimes assume, but also because athletes are more likely to dope if advised to do so by a coach (Huybers & Mazanov, 2012) and doping typically involves participation of the coaching staff (Pappa & Kennedy, 2013).

Second, as discussed previously, instances of game playing were observed by several DCOs. Jose illustrated and explained this form of resistance when he said:

When we test them after a game, you know, they have a couple hours before they actually have to report and produce and they have to do it... there's no getting out of

it, but I have no doubt in my mind that these athletes could provide a sample immediately but to show that they are in control, to show that they are the boss, they will wait... just to keep me waiting to show that they are in control and they have that control because until they give me a sample there is nothing I can do. I can make them sit down, I can make them go somewhere but nothing happens until they produce that sample. There are occasions when I know full well that an athlete could provide a sample at any point and they're not because of that. (Male DCO)

The comment demonstrated how athletes attempted to shift power relations by utilizing one of the few strategies available to them, the ability to inconvenience DCOs by making them wait. Neutral summarized the athlete strategy of game playing: "well it is personal empowerment - 'I'll produce a sample when I want to produce a sample' - some people have sort of this snarky attitude" (Male DCO). When DCOs felt that athletes were wasting their time or trying to renegotiate power relations, they were described as having attitude problems.

4.3.4 Power knowledge link

In his definition of power, Foucault (1977) stressed the reciprocal link between power and knowledge whereby power produces knowledge and knowledge produces power. The importance and relevance of Foucault's power-knowledge link in athlete and DCO relations was apparent in comments made by both parties. When asked if he had ever experienced conflict with DCOs John stated: "No. I've never had any issues or conflict, but I mean I adhere to the rules that they provide and it's a pretty simple process and like I have a very firm understanding of why they are doing it" (Male athlete). Likewise, when describing why she had not experienced conflict in her experiences with athletes, Claire shared:

I think what it is, is that athletes in Canada are fairly familiar with doping control and what it consists of more or less. I think because they know what can happen they are more open to it or they understand it better... (Female DCO)

DCOs were able to mobilize power and avoid resistance if athletes shared similar knowledge of what doping control was and why it was deemed necessary. However, if that knowledge differed (e.g., rule confusion), points of resistance were mobilized (Foucault, 1977; Lovell, 2011). For example, if DCOs explained why they are deliberately avoiding the one hour window that athletes have provided, based on Foucault's power knowledge link, it is likely that athlete frustration would decrease.

In addition, Foucault's understanding of power and knowledge could explain why DCOs thought it was the athletes responsibility to be knowledgeable about doping control. Through the process of being educated by DCOs, athletes were more likely to understand doping control in the same manner as DCOs and thereby comply with doping control procedures.

The findings of this thesis reiterated the importance of shared knowledge to facilitate power relations and negate resistance. Both athletes and DCOs agreed that the sharing of such information could be improved in several areas.

First, athletes (3 of 10) alluded to improving the anti-doping education process. For instance, Bonnie stated:

I wish there was more like cut and dry... this is what... these are the rules and the drug testers [DCOs] know them and the swimmers know them as well. The athletes know them so that you can say like no, that is not... in the back of mind I am like maybe this is a rule, I don't know what to do. There needs to be cut and dry rules with CCES or FINA or WADA or whoever is testing you... this is what a drug tester can make you do and these are your rights and I think that would make the situation way smoother. If that was actually in writing... you have to stand up and pee with the cup a foot away from your body... people would be like that is ridiculous... no... nobody can do that and so if you could just go in the CCES website and said like these are the things that you'll have to do during your drug test. (Female athlete)

Bonnie's statement highlighted how athlete education that simplified the process in addition to adapting sport-specific rules would have helped improve her understanding.

The need for improved athlete education can also be inferred by Custard's description of the manner in which he completed the CCES athlete educational material: "I mean you just kind of put it on mute and wiz through it and then answer questions and just hope you get the right answers" (Male athlete). Bonnie's recommendation and Custard's admission were in accordance with Weaving and Teetzel's (2008) finding that few athletes take CCES's online athlete education seriously and that there is a need for more effective anti-doping education. Adapting such a strategy could reduce conflict between athletes and DCOs by reducing rule confusion.

In addition to improving the manner in which athletes are educated, Francis recommended improving the process of collecting athlete feedback when she said:

There's that stupid comment section on the doping control form. So it would be like at the end of this interview you'd say OK Francis my supervisor wants to know if there's anything that I can improve on or whatever. Well I would have to be a pretty strong individual to write down right in front of you, give you the form saying well Dan did this and I don't approve of that and that is how we ask athletes how to give us feedback on what the DCO and the procedures we are doing and I don't think that is the best way to do it.

She further highlighted how the feedback mechanism was ineffective as very little feedback was reported: "they almost all say no comment" (Female DCO).

4.3.5 Discipline

Foucault's subsidiary concept of disciplinary power and how it produces docile bodies was evident among the all testimonies of elite athletes and DCOs. To achieve docility, both parties were subject to tactics including rules, habits and hierarchical observation to ensure that they practised techniques of self-surveillance to correct abnormal behaviour and therefore normalize their actions to that desired by WADA and

the CCES (Foucault, 1977; Lynch, 2011; Markula & Pringle, 2006). Below I provide examples of these processes and discuss the implications for athlete and DCO relations.

4.3.5.1 Rules, habits, and hierarchical observation

Foucault (1977) claimed that in conjunction with rules, the establishment of habits facilitates discipline in subjects. In the case of athlete and DCO relations, it was apparent that the enforcement of copious rules became a repetitive habit that disciplined both athletes and DCOs. This notion was evident in Maverick's comment that: "it is a surprise to be notified for doping control but beyond that everything should be the same, following the rules each and every time" (Male DCO). This was also illustrated by Nia who said: "I mean over the years, I definitely got more comfortable being uncomfortable in that situation than when I first got tested at fourteen years old and I was, like, what do you want me to do?" (Female athlete). A similar sentiment was shared by Custard who, when discussing how his experiences with doping control had evolved over time, stated: "yea it is more routine now" (Male athlete). The interviews revealed that doping control also became habit for DCOs as Edward described how his comfort conducting the procedures increased the more frequently he conducted tests:

When I first started with CCES I was a little uncomfortable because the procedures were much more detailed than I was used to...it took a while to get comfortable with that... I feel much better about that and it is easy now because I know them. (Male DCO)

Ensuring that the doping control process was the same each time enabled doping control to become habit, a tactic of discipline. Furthermore, it ensured the power relations were sustained when related knowledge was known and shared.

Foucault (1977) contended that hierarchical observation is also a critical component to achieve discipline and the presence of a complex network of surveillance

was evident in the comments made by both athletes and DCOs. The most obvious form of surveillance was expressed in the following statement by Verna, when she was asked to describe her typical doping control experience: “They [DCOs] have to keep their eyes on you the whole time” (Female athlete). Mary also articulated this notion of surveillance when she provided the DCO perspective on its complexity:

And then once you’re with the athlete... I mean you are always conscious [of what they are doing]... You watch them carefully through the pouring of the samples. When I am walking with the athlete I am always walking behind them so I can have my eyes on them the whole time. Through the passing of the sample they are obviously in your sight. It is always just being aware. (Female DCO)

Moreover, the interview evidence suggested that multiple and indirect levels of surveillance were at work in the doping control process. The CCES ensured the effectiveness of the first level of surveillance by reviewing the paperwork completed by DCOs as Louise described: “whatever you do wrong they [the CCES] tell you about it and they ask you to send in documents that will fill in the blanks” (Female DCO). Neutral added that: “well, they [the CCES] are the bosses, we [the DCOs] are just the messengers” (Male DCO). The importance of the CCES in the surveillance of DCOs was furthered highlighted in Maverick’s observation: “Well the CCES would tell DCOs when, where and how to carry out the test” (Male DCO).

A few athletes (4 of 10) were also aware of the CCES surveillance role over DCOs and expressed the sentiment that they should not be disrespectful of DCOs because they were simply doing a job. DCOs do not control who is selected for doping control, they simply follow instructions from the CCES. In addition, WADA’s involvement increased the complexity of the surveillance. Magnus described WADA’s role in the hierarchy when he commented that: “well I think WADA are basically the people that supervise everything and

establish the manner in which we have to run everything” (Male DCO). Manny added that WADA: “should be watching the centers for each country to make sure there’s no corruption in any of those agencies” (Male athlete). These quotations illustrated the complex surveillance mechanism that was in operation as the DCOs watched athletes, the CCES watched DCOs and WADA watched the CCES. In this way, hierarchical observation was clearly evident in doping control relations.

4.3.5.2 Normalization

In his explanation of discipline, Foucault (1977) theorized that certain behaviours are deemed desirable while others are shunned as being abnormal. Normalization is particularly relevant in the study of doping control because doping was a practice that had been normalized for many years. Pappa and Kennedy’s (2013) investigation of athletes who admitted to doping determined that PED use was widespread and was thought to be necessary to achieve success in competitive track and field. Some athletes rationalized PED use because they felt it was required to win (Pappa & Kennedy, 2013). Similar findings were reflected in the following statement by Jose:

I’ve had professional athletes tell me they’ve done things [PEDs] in the past. They’re not proud of but they did it because other athletes, in their mind, are stealing their money, their contracts and they’re doing it to balance ... or level the playing field. They know it is not right, they don’t like to do it, but until it’s cleaned up they feel they are forced to do what everybody else is doing. (Male DCO)

Normalized doping has implications for athlete and DCO relations as the presence of DCOs could be seen as a threat to athletes’ participation in sport and therefore resistance would be more likely. This was evident in the following statement by Mangus: “Like I said, I think the frequency of conflict [verbal altercations] relates to the sport and the number of high profile adverse findings there has been” (Male DCO).

However, in the context of Canadian swimming, it appeared that doping was not normalized. For example, Bonnie stated that: “I feel like swimming is a pretty clean sport” (Female athlete). Manny (Male athlete) agreed that doping was less likely in swimming because there is not as much money involved in the sport and therefore athletes did not have the same access to prohibited substances compared to other sports such as cycling or baseball.

What also emerged was that the process of doping control, even though it has repressive aspects, became normalized, especially when athletes were subjected to it frequently over time. Sally provided evidence of this when she said:

From an outsider’s perspective, it [doping control] is really, really awkward and weird and I always would kind of get scared when I did swim meets thinking, ‘like, oh my goodness, I am actually going to have to do this’. But once you do it once it is really like... who cares. Like, other people do it, everyone does it so it’s not a big deal. It is very, very uncomfortable when they walk into the stall with you and they are, like, ‘OK, pull your pants down’... you kind of feel an invasion of privacy but yea, like I’ve said, once you’ve done it once and you do it so many times it’s like, ‘OK, whatever. Let’s just get this done so I can get back in the pool or get back to my normal life’, just shoo them out of here. (Female athlete)

The quotation is telling as it showed how Sally justified the invasion of privacy because everybody else was doing it. The normalizing force of doping control altered Sally’s behaviour because she was less nervous about the process because other athletes were undergoing the same procedure. Moreover, Jose reinforced how normalization was related to the consistent application of doping control rules: “Every athlete should know that everybody does it the exact same [way] all the time. That would be the ultimate step for WADA to do” (Male DCO). Jose stressed the importance of normalization in order to accomplish WADA’s mission of drug free sport because if all athletes felt they were undergoing the same procedure, their compliance was more probable. In addition,

normalization can be employed to explain how athletes and DCOs arrived at a similar understanding of the need for doping control. A key component of establishing a level playing field was ensuring that doping control was administered in the same manner each and every time. By following rules the process became habit and was normalized. As a result, it is not surprising that the athletes' and DCOs' descriptions of their relationships, their primary responsibilities, and the cons of doping control, were quite similar.

4.3.5.3 Self-surveillance

Foucault (1977) stated that discipline is achieved when subjects internalize habits of self-surveillance to monitor their own behaviour. This was apparent in the comments of half of the athletes included in the study and was exemplified by Sally when she said: "I was more conscious of what I was actually taking. Like if I had a cold, I would be more conscious if I am actually taking the right stuff or if it's going to test positive" (Female athlete). Other athletes including Bonnie, Nia, Custard and Manny all shared the similar sentiment that once they became subject to regular doping control, they began to monitor what medications and supplements they ingested more carefully. Alternatively, Verna, Heidi, John, Andrew and Jay stated they had not experienced any changes based on exposure to doping control. Possible explanations for these viewpoints are described next as I examine the applicability of Foucault's Panopticon.

4.3.5.4 Panopticon

Jeremy Bentham's Panopticon prison design was utilized by Foucault to illustrate how power relations can be maximized to discipline subjects. Perhaps the most important feature of the Panopticon was that the design ensured that prisoners were under the impression of constant visual surveillance yet they could not determine whether or not

they were being watched (Foucault, 1977; Markula & Pringle, 2006). Although five athletes indicated a habit of self-surveillance, none of the athletes interviewed felt that they were under constant watch, as Custard illustrated:

“I feel like they [the CCES] just forget about me or it’s like... they always say it is random testing but they always randomly test the fastest people at a meet so I don’t know. I don’t... I feel like they could show up at anytime. So I feel like I do need to be careful about what I do all the time but I don’t feel uncomfortable like I am being watched.” (Male athlete)

Despite her increased exposure to doping control (100 tests compared to six for Custard) Bonnie shared similar feelings: “I didn’t feel like it [the surveillance] was 24 hours a day. It just seemed like hit and miss” (Female athlete). John even admitted that he was not very worried about updating his whereabouts information: “I put a standard time in everyday and it is difficult to just change but it is kind of one of those things... I’ll take the risk because I am not tested that often at my house” (Male athlete). Several DCOs (6 of 10) agreed that athletes are not under constant surveillance. Francis provided an explanation for this when she stated: “I don’t think we do enough tests to give them that feeling [constant surveillance]. I think that their tests are too few and far between to get that feeling.” (Female DCO). She added that surveillance only occurred during the duration of the athlete/DCO interaction. Handstad and Loland (2009) had similar findings when they determined that only 25% of athletes surveyed felt that whereabouts was a Big Brother system. The scholars explained that athletes’ whereabouts requires active contribution from the person under surveillance and because athletes must submit the required information they were not being watched covertly, a fundamental component of Foucault’s Panopticon. Alternatively, Overbye and Wagner (2013) argued that the athletes’ whereabouts system can be perceived of a representation of a Panopticon because 40% of

athletes they surveyed felt they were under a complex surveillance mechanism that: “aims at both athletes’ self-regulation and the creation of a distinguished identity as a [successful] elite athlete” (p. 15).

Although disciplinary power was apparent in athlete and DCO relations, it appears the workings of power had not been maximized through the establishment of a Panopticon. Even though it is possible for athletes to be tested at anytime, they and several DCOs did not feel that this was likely, and they did not feel that they were being watched constantly or covertly.

4.3.6 Governmentality

The final Foucauldian concept I examined was the notion of governmentality. Foucault coined this term to describe processes of managing the population through the establishment of various tactics and strategies that direct or provide guidance for action rather than inhibiting action. Foucault claimed that disciplinary power is a component of governmentality and that these processes were rationalized to improve and secure the welfare of the population (Foucault, 1991; Foucault 2007).

After a review of WADC and other CCES policy documents, it was evident that anti-doping strategies have been justified as a means to maintain the welfare of athletes and the sporting community. WADA: “strives to establish a level playing field” (WADA, 2009c, para. 2) with the fundamental purpose: “to protect the athlete’s fundamental right to participate in doping-free sport and thus promote health, fairness and equality for athlete’s worldwide” (WADA, 2009, p. 11). To secure athletes’ welfare, WADA employs a two prong approach: first, the establishment of doping controls that inhibit action or punishes athletes (e.g., through code compliance monitoring, research to detect doping substances and

cooperation with law enforcement) and second, the employment of education strategies to encourage athletes to avoid the utilization of PEDs (WADA, 2009d). The workings of governmentality are reflected in both prongs. I have previously outlined how the establishment of doping controls were related to Foucault's understanding of power and discipline, however, the second prong was also very apparent throughout the transcripts. For example, when asked to describe the purpose of doping control, several participants (3 of 10 athletes and 8 of 10 DCOs) nearly quoted its purpose verbatim as outlined by WADA (2009b). For example Nia said: "to make sure that every athlete who is competing is on the same playing field" (Female athlete) and Louise said: "I think it is an effort to make sure that there's a level playing field for athletes and they are not competing against someone who is cheating" (Female DCO). These quotations illustrated the workings of governmentality because it was clear that some athletes and DCOs have internalized and normalized WADA's guidelines. Moreover, Jose outlined the importance of education in achieving anti-doping strategies and the role that DCOs could play when he stated that: "the more face time we get with the athletes the more we can emphasize the rights and wrongs of sport and what they are involved in, the better chance we can to prevent these positives [test results]" (Male DCO). He and other DCOs believed that if athletes were better educated about the wrongs of doping they would make the correct choice and choose not to dope. Furthermore, Maverick discussed the notion of potentially abandoning the first prong of punishment by relying solely on the second prong of education instead to prevent doping in sport. The following quotation illustrated his sentiment: "My long term vision would be to hopefully eliminate doping control because you don't need it at some point. I think that comes from a lot more education, a changing of mindsets in sport and society" (Male DCO).

Although he saw current doping controls as productive because it enabled athletes to participate in sport drug-free, he hoped to see their demise as he stressed that they were also costly and repressive.

The presence of Foucault's concept of governmentality in athlete and DCO relations was supported by the work of Park (2005) who saw it as being fundamental to both prongs of WADA's governing practices, as it aims to shape athletic conduct through athlete's desires, aspirations and beliefs. Moreover, governmentality can be utilized to explain similarities in athletes and DCOs understandings of the benefits of doping control because their attitudes and beliefs have been shaped by WADA's education strategies. Although I previously highlighted how these strategies are sometimes ineffective, the pervasiveness of these strategies was demonstrated by athletes and DCOs regurgitation of WADA's narrative about the notion of a level playing field, which in turn protected what WADA deemed to be the intrinsic value of sport. Although athletes' and DCOs' understanding of the pros of doping control differed slightly, one possible explanation for the similarities is that the education strategies for DCOs are effective in indoctrinating WADA's message. DCOs are exposed to doping control information at a much greater frequency than athletes and therefore have internalized that doping control protects: "the athlete's fundamental right to participate in doping-free sport" (WADA, 2009, p.11).

In this section, I demonstrated how Foucault's understanding of his power characterized athlete and DCO relations. Furthermore, I illustrated how they can be used to explain similarities and differences in athletes' and DCOs' understandings of doping control relations and the contentious elements apparent in these relations.

Chapter 5: Conclusions and Recommendations

By engaging directly with 10 athletes and 10 doping control officers (DCOs), this study facilitated a detailed examination of participants' perspectives on doping control relations. In this chapter, I conclude my thesis by summarizing the findings in relation to each research question, describing the contributions to the literature and providing recommendations for future research.

5.1 Summary

5.1.1 Athlete and DCO understandings of doping control relations

As a means to better understand athlete and DCO relations, I examined the main themes that characterized their relationships, athlete/DCO responsibilities and the pros and cons of doping control. The athletes and DCO relations were most often described as being professional and friendly, although athletes commonly had an initial negative reaction towards DCOs when they were notified to complete doping control. Moreover, I found that familiarity develops between athletes and DCOs over time, which can be both beneficial and problematic. While increased familiarity may increase athlete comfort resulting in the athlete being able to provide a urine sample more quickly, it could also negatively affect the integrity of the doping control process if a DCO succumbs to the demands of an athlete and disregards doping control rules.

During the examination of athlete and DCO responsibilities, I found that both parties believed that the primary responsibility of both athletes and DCOs was to follow doping control rules and produce/collect a sample. Athletes suggested that it was important to be respectful of DCOs and DCOs added that athletes needed to be knowledgeable of the doping

control process. Participants also stressed that it was the DCOs' responsibility to be empathic and ensure that the doping control process was completed in a timely manner.

In addition, I determined that most athletes understood doping control to be beneficial as it protected sport and the majority of DCOs added that it protected both sport and athletes. However, both athletes and DCOs highlighted several drawbacks associated with doping control including that it was a hindrance to performance, inconvenient and a violation of personal integrity. The process was also ineffective at times and a few said it was an invasion of privacy

5.1.2 Areas of contention

Despite athletes and DCOs' similar understanding of doping control, there were instances where tension arose in athlete and DCO relations when doping control was inefficient and when there was rule confusion. Inefficiencies that involved insufficient infrastructure, human impediments, and a high frequency of testing resulted in increased resistance in athlete and DCO relations as athletes felt their time was being wasted. Furthermore, athletes were commonly frustrated because they were not being tested during their one hour whereabouts window, an hour they had strategically selected as the best time to complete doping control, or because DCOs would not allow them to request a delay or location change in order to more conveniently complete out-of-competition doping control.

5.1.3 Foucauldian power in athlete and DCO relations

Foucault's understanding of power and its applications was reflected in all 20 interviews. First, participant comments illustrating how power may be conceptualized as a series of tactics were apparent including linking doping control with athletic success, and

through the establishment of copious rules. Examples of Foucault's ideas about both the repressive and productive aspects of power were also evident. All athletes and DCOs advocated for the current anti-doping policy even though it repressed athletes due the intrusive rules, inconvenience, and invasion of privacy because the policy was seen as being productive by enabling athletes to participate in drug-free sport.

The coexistent nature of power and resistance was demonstrated by the athlete and DCO accounts of verbal altercations that commonly involved members of the athlete support staff. Further evidence of resistance was provided as DCOs described how athletes attempted to manipulate power by playing games, thereby extending the duration of the doping control session.

In addition, the notion of a power knowledge link was illustrated when athletes were more likely to submit to the directions of the DCO when they had a firm understanding of the purpose and process of doping control. Moreover, I illustrated how discipline was achieved in athlete and DCO relations as both parties were subject to routines and hierarchical observation that encouraged them to practise techniques of self-surveillance, thereby normalizing their behavior to what was desired by the CCES and WADA.

Although the workings of disciplinary power were apparent in doping control relations, it was clear that they were not maximized through the establishment of a Panopticon as not all athletes practised techniques of self-surveillance, nor did they feel that they were being watched covertly. Despite the lack of a Panopticon, it was suggested that governmentality was at work in athlete and DCO relations because both parties had internalized WADA's rationale regarding athlete abstention from performance-enhancing

drugs (PEDs). Furthermore, I demonstrated how governmentality in addition to the workings of disciplinary power resulted in athletes and DCOs having similar understandings of doping control.

5.2 Contributions

Overall this project addressed a substantive gap in the literature, as athlete and DCO relations have not been examined, nor have the perspectives of DCOs. As illustrated throughout the study, the process of abiding by and enforcing intrusive, inconvenient and inefficient rules can lead to awkward and in some instances very adversarial relations. Despite these circumstances, athlete and DCO relations were typically described as professional and friendly and Foucault's understanding of power was helpful in explaining how that came about.

In accordance with Hanstad and Loland (2009), Overbye and Wagner (2013), Pappa and Kennedy (2013), and Park (2005), who had all adapted Foucauldian concepts to their respective studies on doping control, this study illustrated how Foucault's understanding of power can be utilized to explain the similarities in athlete/DCO understanding of doping control relations, in addition to why contentious issues arose.

Moreover, by addressing the limitations of Foucault's theory that has been criticized for not emphasizing possibilities for change (Cheek & Porter, 1997; McTaggart, 1991; Weedon, 1996), I was able to present athlete and DCO recommendations for enhancing the doping control process. Both athletes and DCOs suggested that improving anti-doping education as well as methods of obtaining and acting upon athlete feedback, and ensuring that anti-doping organizations share testing information could decrease conflict in athlete

and DCO relations. Also, when DCOs demonstrated empathy towards athletes, instances of conflict decreased, yet it was unclear whether this point is emphasized in their training.

This study also confirmed findings from other studies on anti-doping. For instance, current anti-doping practices are described as being ineffective (Overbye & Wagner, 2013; Striegel et al., 2010), doping control violates athlete's personal integrity, and when it is conducted at the athlete's home it is more of an invasion of privacy (Elbe and Overbye, 2013). In addition, some athletes experience anxiety due to difficulty in providing a urine sample (Elbe & Overbye, 2013), the requirement of reporting whereabouts information is too time consuming (Overbye & Wagner, 2013) and doping control can infringe on the athlete's right to live a spontaneous life (Hanstad & Loland, 2009).

Yet, despite the ineffectiveness, intrusive rules and the inconvenience, the basic principles of anti-doping are widely accepted by athletes (Backhouse et al., 2007; Breivik et al., 2009; Elbe & Overbye, 2013; Hanstad & Loland, 2009; Overbye & Wagner, 2013; Stamm et al., 2008) and the requirement of completing anti-doping was regarded as a signifier of athletic performance achievement (Overbye & Wagner, 2013). In addition, I confirmed that the presence of Foucault's governmentality was fundamental in WADA's governing practices (Park, 2005) and, in contrast to Overbye and Wagner's (2013) conclusion and in support of Hanstad and Loland's (2009) determination, Foucault's Panopticon is not fully established in doping control as the surveillance is not completely covert.

5.3 Future Research

Throughout the execution of this project a number of questions requiring further investigation emerged. Suggestions for future research are outlined next. As described in the methodology, this study entailed 10 interviews with Canadian Olympic swimmers to

uncover their perspective on athlete and DCO relations. It is possible that the accounts of athletes participating in other sports would differ in some respects or they could confirm the findings of this study. It would be interesting to see if there are more contentious issues in sports like cycling and track and field that have had a history of doping scandals compared to those in fencing and badminton where doping is thought to be less prevalent (Burn-Murdoch, 2012). In addition to exploring the relationship between Olympic level athletes and DCOs who follow WADA regulations, additional research could examine if/how athlete and DCO relations differ in professional sport. North American professional sport leagues such as Major League Baseball (MLB) and the National Hockey League (NHL) employ doping control procedures that differ from those prescribed by WADA. For instance, MLB and NHL athletes are not required to submit whereabouts information, no-notice testing is less common and the number of times an athlete can be tested in a season is limited (MLB, 2012; Spencer, 2011). Furthermore, the doping control is conducted by an organization that employs different operating standards from those of the CCES. It would also be interesting to compare if athlete and DCO relations differ in other countries.

This study also highlighted how athletes were not the only group who interact with DCOs. When contentious issues arise in athlete and DCO relations, coaches commonly felt obligated to protect their athletes, leading to heated exchanges with the DCOs. Future research could include the voices of coaches to examine their relationships with DCOs and determine the circumstances under which they become involved in athlete/DCO relations.

Finally, the anti-doping rules (e.g., *Canadian Anti-Doping Program (CADP)*, *World Anti-Doping Code*) are consistently evolving to improve their effectiveness and negate the notion that: “drugs are always going to be ahead of the drug testers” (Bonnie, female

athlete). For example, after I had conducted my interviews, the CCES launched the Report Doping Hotline (CCES, 2013b) to enhance intelligence-based anti-doping efforts. The hotline allows athletes to call or email the CCES anonymously to share sensitive information related to doping activities. The CCES claims that with the increased intelligence: “we can test the right athlete, at the right place and at the right time” (CCES, 2013a, para. 4) and thereby increase the effectiveness of the CADP. The inception of the hotline could impact athletes’ understanding of doping control, as they may feel that they are under a more complex surveillance mechanism as other athletes and support personnel join the hierarchical observation conducted by DCOs, the CCES and WADA. Also, WADA president Sir Craig Reedie recently revealed that athletes may soon be required to submit hair samples for testing as the use of certain drugs remains evident in hair follicles for longer periods compared to urine and blood (Rumsby, 2013). The collection of hair samples could alleviate contention in athlete and DCO relations as it is generally perceived to be less invasive and less time consuming. Future studies could examine the ramifications of specific rule changes in athlete/DCOs relations and determine if they help stakeholders feel comfortable being uncomfortable.

References

- Alaranta, A., Alaranta, H., Holmila, J., Palmu, P., Pietila, K., & Helenius, I. (2006). Self-reported attitudes of elite athletes towards doping: Differences between type of sport. *International Journal of Sports Medicine*, 27(10), 842.
- Albergotti, R., & O'Connell, V. (2012, October 11,). Drug case against Armstrong detailed. *The Wall Street Journal*. Retrieved from <http://online.wsj.com/news/articles/SB10000872396390444799904578048352672452328>
- Amis, J. (2005). Interviewing for case study research. In D. L. Andrews, D. S. Mason & M. L. Silk (Eds.), *Qualitative research methods in sports studies* (pp. 104-138). New York, NY: Berg.
- Arksey, H., & Knight, P. (1999). *Interviewing for social scientists*. Thousand Oaks, CA: Sage.
- ASADA. (2010). Reputation. Retrieved from <http://www.asada.gov.au/education/reputation.html>
- Athletes CAN. (1994). Athlete-centered sport: Discussion paper. Retrieved from <http://www.athletescan.com/leadership/resources/athletescan-publications/>
- Backhouse, S., McKenna, J., Robinson, S. & Atkin, A. (2007). International literature review: Attitudes, behaviours, knowledge and education. Retrieved from http://www.wada-ama.org/Documents/Education_Awareness/SocialScienceResearch/Funded_Research_Projects/2006/Backhouse_et_al_Full_Report.pdf
- Baumann, G. P. (2012). Growth hormone doping in sports: A critical review of use and detection strategies. *Endocrine Reviews*, 33(2), 155-186.
- Bergsgard, N. A., Houlihan, B., Mangset, P., Nodland, S. I., & Rommetvedt, H. (2007). *Sport policy*. Oxford, UK: Elsevier Ltd.

- Bloodworth, A., & McNamee, M. (2010). Clean Olympians? Doping and anti-doping: The views of talented young British athletes. *International Journal of Drug Policy*, 21(4), 276-282.
- Breivik, G., Hanstad, D. V., & Loland, S. (2009). Attitudes towards use of performance-enhancing substances and body modification techniques. A comparison between elite athletes and the general population. *Sport in Society*, 12(6), 737-754.
- Bryman, A. (2008a). Interviewing in qualitative research. In A. Bryman (Ed.), *Social research methods* (pp. 515-471). New York, NY: Oxford University Press.
- Bryman, A. (2008b). Qualitative data analysis. In A. Bryman (Ed.), *Social research methods* (pp. 537-563). New York, NY: Oxford University Press.
- Burn-Murdoch, J. (2012, July 4). Doping in Olympic events: How does each sport compare? *The Guardian*. Retrieved from <http://www.theguardian.com/sport/datablog/2012/jul/04/olympics-2012-athletics>
- Callewaert, S. (2006). Bourdieu, critic of Foucault: The case of empirical social science against double-game-philosophy. *Theory, Culture & Society*, 23(6), 73-98.
- Canadian Heritage. (2001). Canada takes the lead in developing the first world-wide inter-governmental treaty on anti-doping in sport. Retrieved from http://www.pch.gc.ca/newroom/index_3.cfm?fuseaction=displayDocument&DocIDCd=1NR055
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada & Social Sciences and Humanities Research Council of Canada. (2010). Tri-council policy: Ethical conduct for research involving humans. Retrieved from http://www.pre.ethics.gc.ca/pdf/eng/tcps2/TCPS_2_FINAL_Web.pdf

CBC Digital Archives. (1988). Ben Johnson: Canada's shame. Retrieved from http://archives.cbc.ca/sports/drugs_sports/clips/8702/

CCES. (2011a). Anti-doping sanctions. Retrieved from <http://www.cces.ca/en/sanctions>

CCES. (2011b). Athlete biological passport FAQ. Retrieved from <http://www.cces.ca/en/abpfaq>

CCES. (2011c). *Canadian anti-doping program*. Ottawa ON: Canadian Centre for Ethics in Sport.

CCES. (2011d). History of anti-doping in Canada. Retrieved from <http://www.cces.ca/en/historyadic>

CCES. (2011e). Mission and vision. Retrieved from <http://www.cces.ca/en/mission>

CCES. (2011f). Registered testing pool. Retrieved from <http://www.cces.ca/en/registeredtestingpool>

CCES. (2011g). Sample collection procedures. Retrieved from <http://www.cces.ca/en/samplecollection>

CCES. (2011h). Strikes. Retrieved from <http://www.cces.ca/en/whereaboutsstrikes>

CCES. (2011i). Submission requirements. Retrieved from <http://www.cces.ca/en/submissionrequirements>

CCES. (2011j). Values and principles. Retrieved from <http://www.cces.ca/en/values>

CCES. (2012). CCES registered testing pool. Retrieved from <http://www.cces.ca/files/pdfs/CCES-PUB-RTP-E.pdf>

CCES. (2013a). Intelligence-based anti-doping efforts in Canada receive a major boost in funding. Retrieved from <http://www.cces.ca/en/news-249-intelligence-based-anti-doping-efforts-in>

- CCES. (2013b). Report doping. Retrieved from <http://www.cces.ca/en/reportdoping>
- Cheek, J., & Porter, S. (1997). Reviewing Foucault: Possibilities and problems for nursing and health care. *Nursing Inquiry*, 4(2), 108-119.
- Cousins, M., & Hussain, A. (1984). *Michel Foucault: Theoretical traditions in the social sciences*. New York: St. Martin's Press.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into Practice*, 39(3), 124-130.
- Dimeo, P., & Hunt, T. (2014). Anti-doping policy: Historical and contemporary ambiguities in the fight for drug-free sport. In I. Henry, & L. Ko (Eds.), *Routledge handbook of sport policy* (pp. 241-249). New York: Routledge.
- Dubin, C. L. (1990). *Commission of inquiry into the use of drugs and banned practices intended to increase athletic performance*. Ottawa ON: Supply & Services Canada.
- Dunn, A., & Zuk, R. (1996). *Playing field beings to level but earnings lag behind for female athletes*. Greenwich, Conn: Women's Sports Foundation and Evian.
- Ehrnborg, C., & Rosen, T. (2009). The psychology behind doping in sport. *Growth Hormone & IGF Research*, 19(4), 285-287.
- Elbe, A., & Overbye, M. (2013). Urine doping controls: The athletes' perspective. *International Journal of Sport Policy and Politics*, (ahead-of-print), 1-14.
- Evans A., Elford J., & Wiggins D. (2008). Using the internet for qualitative research. In Willig C., & Stainton-Rogers W (Eds.), *The sage handbook for qualitative research in psychology* (pp. 315-333). London: Sage.
- FINA. (2013). FINA doping control rules. Retrieved from http://www.fina.org/H2O/docs/rules/FINAdopingcontrolrules_20132017.pdf

- Foucault, M. (1977). *Discipline and punish: The birth place of the prison*. New York: Vintage Books.
- Foucault, M. (1978). *The history of sexuality, volume 1: An introduction*. London: Penguin Books.
- Foucault, M. (1982). The subject and power. In H. L. Dreyfus, & P. Rabinow (Eds.), *Michel Foucault: Beyond structuralism and hermeneutics* (pp. 208-228). Chicago: University of Chicago Press.
- Foucault, M. (1988). Technologies of the self. In L. H. Martin, H. Gutman & P. H. Hutton (Eds.), *Technologies of the self: A seminar with Michel Foucault* (pp. 16-49). Amherst, MA: University of Massachusetts Press.
- Foucault, M. (1991). Governmentality. In G. Burchell, C. Gordon & P. Miller (Eds.), *The Foucault effect: Studies in governmentality* (pp. 119-150). Chicago: University of Chicago Press.
- Foucault, M. (2000). In Faubion J. (Ed.), *Power: Essential works of Foucault 1954-1984*. New York: The New Press.
- Foucault, M. (2007). *Security, territory, population: Lectures at the Collège de France 1973-1974*. New York: McMillan.
- Government of Canada. (1991). Minister Cadieux announces four-year penalty, framework and launch of anti-doping organization. Retrieved from <http://www.cces.ca/files/pdfs/GOC-MR-CADOLaunch-E.PDF>
- Hanna, P. (2012). Using internet technologies (such as Skype) as a research medium: A research note. *Qualitative Research*, 12(2), 239-242.

- Hanstad, D. V., & Loland, S. (2009). Elite athletes' duty to provide information on their whereabouts: Justifiable anti-doping work or an indefensible surveillance regime? *European Journal of Sport Science*, 9(1), 3-10.
- Hanstad, D. V., Smith, A., & Waddington, I. (2008). The establishment of the world anti-doping agency: A study of the management of organizational change and unplanned outcomes. *International Review for the Sociology of Sport*, 43(3), 227-249.
- Heller, K. J. (1996). Power, subjectification and resistance in Foucault. *SubStance*, 25(79), 78-110.
- Houlihan, B. (1997). *Sport, policy, and politics: A comparative analysis*. New York: Routledge.
- Houlihan, B. (2002). Managing compliance in international anti-doping policy: The world anti-doping code. *European Sport Management Quarterly*, 2(3), 188-208.
- Houlihan, B. (2004). Civil rights, doping control and the world anti-doping code. *Sport in Society*, 7(3), 420-437.
- Huybers, T., & Mazanov, J. (2012). What would Kim do: A choice study of projected athlete doping considerations. *Journal of Sport Management*, 26(4), 322-334.
- IAAF. (2007). Drugs in sports. Retrieved from <http://www.iaaf.org/mm/Document/imported/42026.pdf>
- Jackson, G., & Ritchie, I. (2007). Leave it to the experts: The politics of 'athlete-centeredness' in the Canadian sport system. *International Journal of Sport Management and Marketing*, 2(4), 396-411.
- Jette, S. (2009). *Governing risk, exercising caution: Western medical knowledge, physical activity and pregnancy*. (Doctoral dissertation, University of British Columbia).

- Kayser, B., Mauron, A., & Miah, A. (2007). Current anti-doping policy: A critical appraisal. *BMC Medical Ethics*, 8(1), 2.
- Kendall, G., Wickham, G. (1999). *Using Foucault's methods*. London: Sage.
- King, N. (2004). Using interviews in qualitative research. In C. Cassell, & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 11-22). London, UK: Sage.
- Kirkwood, K. (2009). Considering harm reduction as the future of doping control policy in international sport. *Quest*, 61(2), 180-190.
- Kokotailo, P. K., Henry, B. C., Kosciak, R. E., Fleming, M. F., & Landry, G. L. (1996). Substances use and other health risk behaviors in collegiate athletes. *Clinical Journal of Sport Medicine*, 6(3), 183-189.
- Krefting, L. (1991). Rigor in qualitative research: The assessment of trustworthiness. *The American Journal of Occupational Therapy*, 45(3), 214-222.
- Lasne, F., Martin, L., Martin, J. A., & De Ceaurriz, J. (2009). Detection of continuous erythropoietin receptor activator in blood and urine in anti-doping control. *Haematologica*, 94(6), 888-890.
- Lewis, R. B. (2004). NVivo 2.0 and ATLAS.ti 5.0: A comparative review of two popular qualitative data-analysis programs. *Field Methods*, 16(4), 439-464.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.
- Longman, J. (2012). China pool prodigy churns wave of speculation. *New York Times*. Retrieved from <http://www.nytimes.com/2012/07/31/sports/olympics/chinese-swimmers-record-raises-doping-concerns.html?pagewanted=all&r=0>

- Lovell, M. (2011). Foucault, Michel (1926-1984). In K. Dowding (Ed.), *Encyclopedia of power* (pp. 260-262). Thousand Oaks: Sage Publications Inc.
- Luebbers, M. (2012). Olympics controversy and scandal in swimming. Retrieved from <http://swimming.about.com/od/swimmingolympics/tp/Olympic-Swimming-Controversy.htm?p=1>
- Lynch, R. (2011). Foucault's theory of power. In D. Taylor (Ed.), *Michel Foucault: Key concepts* (pp. 13-26). Durham: Acumen Publishing Limited.
- Manias, E., & Street, A. (2000). Possibilities for critical social theory and Foucault's work: A toolbox approach. *Nursing Inquiry*, 7(1), 50-60.
- Markula, P., & Pringle, R. (2006). *Foucault, sport and exercise: Power, knowledge and transforming the self*. London: Routledge.
- Marshall, C., & Rossman, G. B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage.
- McLaren, M. A. (2002). *Feminism, Foucault, and embodied subjectivity*. Albany, NY: State University of New York Press.
- McTaggart, R. (1991). Principles for participatory action research. *Adult Education Quarterly*, 41(2), 168-187.
- Mello, R. A. (2002). Collocation analysis: A method for conceptualizing and understanding narrative data. *Qualitative Research*, 2(2), 231-243.
- Miller, J. (1993). *The passion of Michel Foucault*. New York: Anchor Books.
- Mills, S. (2003). *Michel Foucault*. London: Routledge.
- Minister of Fitness and Amateur Sport. (1991). *A Canadian policy against doping in sport*. Ottawa ON: Supply & Services Canada.

- MLB. (2012). Major league baseball's joint drug prevention and treatment program.
Retrieved from <http://mlb.mlb.com/pa/pdf/jda.pdf>
- Møller, V., & Dimeo, P. (2013). Anti-doping—the end of sport. *International Journal of Sport Policy and Politics*, (ahead-of-print), 1-14.
- Newman, W. L. (2006). *Social research methods: Qualitative and quantitative approaches* (6th ed.). Boston, MA: Pearson.
- Olsen, M. (1999). *Michel Foucault: Materialism and education*. Westport, CT: Bergin & Garvey.
- Overbye, M., & Wagner, U. (2013). Experiences, attitudes and trust: An inquiry into elite athletes' perception of the whereabouts reporting system. *International Journal of Sport Policy and Politics*, (ahead-of-print), 1-22.
- Pappa, E., & Kennedy, E. (2013). 'It was my thought... he made it a reality': Normalization and responsibility in athletes' accounts of performance-enhancing drug use. *International Review for the Sociology of Sport*, 48(3), 277-294.
- Park, J. (2005). Governing doping bodies: The world anti-doping agency and the global culture of surveillance. *Cultural Studies & Critical Methodologies*, 5(2), 174-188.
- Pope, C., Ziebland, S., & Mays, N. (2000). Analysing qualitative data. *BMJ*, 320(7227), 114-116.
- Rabinow, P. (1984). Introduction. In P. Rabinow (Ed.), *The Foucault reader* (pp. 3-29). New York: Pantheon Books.
- Rumsby, B. (2013, December 31). World anti-doping agency president sir Craig Reedie pioneers hair test to catch drugs cheats. *The Telegraph*. Retrieved from <http://www.telegraph.co.uk/sport/othersports/drugsinsport/10545043/World-Anti->

Doping-Agency-president-Sir-Craig-Reedie-pioneers-hair-test-to-catch-drugs-cheats.html

Rupert, J. (2009). Transcriptional profiling: A potential anti-doping strategy. *Scandinavian Journal of Medicine & Science in Sports*, 19(6), 753-763.

Ryan, G. W., & Bernard, H. R. (2003). Techniques to identify themes. *Field Methods*, 15(1), 85-109.

Sadan, E. (1997). Theories of power. *Empowerment and community planning: Theory and practice of people-focused social solutions* (pp. 32-71). Tel Aviv: Hakibbutz Hameuchad Publishers.

Schaeffer, N. C. (1991). Conversation with a purpose - or conversation interaction in the standardized interview? In P. P. Biemer, R. M. Groves, L. E. Lyberg, N. A. Mathiowetz & S. Sudman (Eds.), *Measurement errors in surveys* (pp. 367-391). New York, NY: John Wiley.

Seidman, I. (2012). *Interviewing as qualitative research: A guide for researchers in education and the social sciences* (Forth ed.). New York: Teachers College Press.

Semotiuk, D. M. (1994). Restructuring Canada's national sports system: The legacy of the Dubin inquiry. In R. C. Wilcox (Ed.), *Sport in the global village* (pp. 365-376). Morgantown WV: Fitness Information Technology Inc.

Sipe, L. R., & Ghiso, M. P. (2004). Developing conceptual categories in classroom descriptive research: Some problems and possibilities. *Anthropology & Education Quarterly*, 35(4), 472-485.

- Spencer, D. (2011, November 7). Dick pound knocks NHL drug policy - again. *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/sports/hockey/pound-still-critical-of-nhl-drug-policy/article4179954/>
- 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*, 26(3), 235-242.
- Stewart, B., & Smith, A. (2008). Drug use in sport implications for public policy. *Journal of Sport & Social Issues*, 32(3), 278-298.
- Stewart, B., & Smith, A. (2010). Player and athlete attitudes to drugs in Australian sport: Implications for policy development. *International Journal of Sport Policy*, 2(1), 65-84.
- Striegel, H., Ulrich, R., & Simon, P. (2010). Randomized response estimates for doping and illicit drug use in elite athletes. *Drug and Alcohol Dependence*, 106(2), 230-232.
- Taylor, C. (1984). Foucault on freedom and truth. *Political Theory*, 12(2), 152-183.
- The Associated Press. (2013, January 18). Lance Armstrong admits to doping in Oprah interview. Retrieved from <http://www.cbc.ca/sports/cycling/story/2013/01/17/sp-lance-armstrong-oprah-winfrey-interview-live-tweets.html>
- Thibault, L., Kihl, L., & Babiak, K. (2010). Democratization and governance in international sport: Addressing issues with athlete involvement in organizational policy. *International Journal of Sport Policy*, 2(3), 275-302.
- Thomas, J. O., Dunn, M., Swift, W., & Burns, L. (2011). Illicit drug knowledge and information-seeking behaviours among elite athletes. *Journal of Science and Medicine in Sport*, 14(4), 278-282.
- Voy, R., & Deeter, K. D. (1991). *Drugs, sport, and politics*. Champaign Ill: Leisure Press.

- WADA. (2009a). Annex to the international standard on protection of privacy and personal information. Retrieved from http://www.wada-ama.org/Documents/World_Anti-Doping_Program/WADP-ISPPPI/Annex_Retention_Time/WADA_ISPP_Annex_Retention_Time_EN.pdf
- WADA. (2009b). Anti-doping quiz. Retrieved from http://www.wada-ama.org/Documents/Education_Awareness/Play_True_Quiz/Quiz_english.pdf
- WADA. (2009c). Athletes. Retrieved from <http://www.wada-ama.org/en/anti-doping-community/athletes/>
- WADA. (2009d). Priorities. Retrieved from <http://www.wada-ama.org/en/About-WADA/History-Mission-Priorities-and-Strategic-Plan/Priorities/>
- WADA. (2009e). Protection of privacy and personal information. Retrieved from http://www.wada-ama.org/Documents/World_Anti-Doping_Program/WADP-IS-PPPI/WADA_IS_PPPI_2009_EN.pdf
- WADA. (2009f). World anti-doping code. Retrieved from http://www.wada-ama.org/Documents/World_Anti-Doping_Program/WADP-The-Code/WADA_Anti-Doping_CODE_2009_EN.pdf
- WADA. (2010a). A brief history of anti-doping. Retrieved from <http://www.wada-ama.org/en/about-wada/history/a-brief-history-of-anti-doping/>
- WADA. (2010b). Doping control video. Retrieved from <http://www.wada-ama.org/en/education-awareness/tools/doping-control-video/>
- WADA. (2010c). WADA athlete committee offers recommendations to further enhance anti-doping programs. Retrieved from <http://www.wada-ama.org/en/media-center/>

archives/articles/wada-athlete-committee-offers-recommendations-to-further-enhance-anti-doping-programs/

WADA. (2011a). Strategic plan. Retrieved from <http://www.wada-ama.org/en/About-WADA/History-Mission-Priorities-and-Strategic-Plan/Strategic-Plan/>

WADA. (2011b). Therapeutic use exemptions. Retrieved from http://www.wada-ama.org/Documents/World_Anti-Doping_Program/WADP-IS-TUE/2011/WADA_ISTUE_2011_revJanuary-2012_EN.pdf

WADA. (2012a). International standard for testing. Retrieved from http://www.wada-ama.org/Documents/World_Anti-Doping_Program/WADP-IS-Testing/2012/WADA_IST_2012_EN.pdf

WADA. (2012b). Laboratories. Retrieved from http://www.wada-ama.org/Documents/World_Anti-Doping_Program/WADP-IS-Laboratories/ISL/WADA_Int_Standard_Laboratories_2012_EN.pdf

WADA. (2013a). The 2013 prohibited list. Retrieved from http://www.wada-ama.org/Documents/World_Anti-Doping_Program/WADP-Prohibited-list/2013/WADA-Prohibited-List-2013-EN.pdf

WADA. (2013b). Athlete committee. Retrieved from <http://www.wada-ama.org/About-WADA/Governance/Athlete-Committee/>

Waddington, I. (2010). Surveillance and control in sport: A sociologist looks at the WADA whereabouts system. *International Journal of Sport Policy*, 2(3), 255-274.

Wagner, U. (2011). Towards the construction of the world anti-doping agency: Analyzing the approaches of FIFA and the IAAF to doping in sport. *European Sport Management Quarterly*, 11(5), 445-470.

- Waldie, P. (2012, July 23). London Olympics already impacted by doping. *Globe and Mail*
- Walker, W. (1988, September 27). Drug scandal shatters Canada's Olympic glory: Stripped of gold medal Johnson banned for life. *Toronto Star*, pp. A1.
- Waltzer, M. (1988). *The company of critics*. New York: Basic Books.
- Wang, P., Fedoruk, M. N., & Rupert, J. L. (2008). Keeping pace with ACE: Are ACE inhibitors and angiotensin II type 1 receptor antagonists potential doping agents? *Sports Medicine*, 38(12), 1065-1079.
- Weaving, C., & Teetzal, S. (2008). A sociocultural analysis of gender and doping. Retrieved from http://www.wada-ama.org/Documents/Education_Awareness/SocialScienceResearch/Research_Projects/2008/WEAVING_full_report_2008.pdf
- Weedon, C. (1996). *Feminist practice and poststructuralist theory*. Blackwell Cambridge, MA.

Appendix A: Athlete Interview Guide

POWER AND ACTION IN DOPING CONTROL: A STUDY OF ATHLETE/DOPING CONTROL OFFICER RELATIONS

BACKGROUND INFORMATION:

The first questions attempt to uncover your personal experience with respect to doping control.

- Can you give me a brief overview of your experiences with doping control?
 - Approximately how many times have you been tested?
 - Can you name the different organizations that have tested you?
 - How long have/were you included in a registered testing pool?
 - When was the last time that you were tested?
- Can you describe the typical doping control process?

PURPOSE OF DOPING CONTROL:

The second area of questioning attempts to capture your understanding of doping control.

- What do you see as the purpose of doping control?
 - Do you feel doping control is required? Why/Why not?
 - What are the pros and cons of doping control?
- Do you believe current doping control protocols are effective?
- What do you believe is the role of the athlete during doping control?
- What do you believe is the role of the doping control officer during doping control?
- Describe athlete's whereabouts information?
 - Do you feel that it is necessary?
 - How should doping control officers use whereabouts information?
- Can you describe how DCOs witness the passing of a sample?

DOPING CONTROL RELATIONS

The third section of questions focuses specifically on doping control relations.

- How would you describe the relationship between athletes and doping control officers?
 - How do athletes and doping control officers typically interact?
 - How should athletes and doping control officers interact?
- What boundaries (physical & social) exist/must exist between the doping control personnel and the athlete?
- Does conflict occur in athlete and doping control relations?
 - If so, provide an example.
 - Does conflict occur in some situations more than others?
 - Have you ever been angry or frustrated with a DCO?
- Has your life changed since you were included in a registered testing pool (RTP)?
 - If so, describe how and provide an example
- Do you feel that some athletes are treated differently than others?

- Should this occur?
- Can you remember the first time you were involved in doping control?
 - If so, please describe your experience.
 - Have your experiences with doping control changed since then?
- Do you feel as though you are always being watched by doping control officers?
- What is the role of other individuals in doping control relations (chaperone, athlete representative, coach, parents, etc.)?
- What is the role of the Canadian Centre for Ethics in Sport (CCES) in athlete/doping control officer relations?
- What is the role of the World Anti-Doping Agency (WADA) in athlete/doping control officer relations?
- Can you think of any other elements of the doping control relations that we have not yet discussed?

IDENTIFYING CONTENTIOUS ELEMENTS OF DOPING CONTROL RELATIONS

The fourth and final section of questions concludes the interview by identifying the key aspects of doping control relations which are most contentious among athletes/doping control officers and possible strategies to overcome them.

- Could you describe your best in-competition testing experience with a doping control officer?
- Could you describe your worst in-competition testing experience with a doping control officer?
 - What are your recommendations to improve this experience?
 - In hindsight is there anything you would do differently?
- Could you describe your best out-of-competition testing experience with a doping control officer?
- Could you describe your worst out-of-competition testing experience with a doping control officer?
 - What are your recommendations to improve this experience?
 - In hindsight is there anything you would do differently?
- What is your most memorable doping control experience?

Appendix B: DCO Interview Guide

POWER AND ACTION IN DOPING CONTROL: A STUDY OF ATHLETE/DOPING CONTROL OFFICER RELATIONS

BACKGROUND INFORMATION:

The first questions attempt to uncover your personal experience with respect to doping control.

- Can you give me brief overview of your experiences as a doping control officer?
 - Can you describe the varying positions and responsibilities that you have held over your career in doping control?
 - Describe a few sport events that you have overseen.
 - Approximately how many times have you processed an athlete?
 - Have you worked for different anti-doping organizations?
- Can you describe the typical doping control process?

PURPOSE OF DOPING CONTROL:

The second area of questioning attempts to capture your understanding of doping control.

- What do you see as the purpose of doping control?
 - Do you feel doping control is required? Why/Why not?
 - What are the pros and cons of doping control?
- Do you believe current doping control protocols are effective?
- What do you believe is the role of the athlete during doping control?
- What do you believe is the role of the doping control officer during doping control?
- Describe athlete's whereabouts information?
 - Do you feel that it is necessary?
 - How should doping control officers use whereabouts information?
- Can you describe how DCOs witness the passing of a sample?

DOPING CONTROL RELATIONS

The third section of questions focuses specifically on doping control relations.

- How would you describe the relationship between athletes and doping control officers?
 - How do athletes and doping control officers typically interact?
 - How should athletes and doping control officers interact?
- What boundaries (physical & social) exist/must exist between the doping control personnel and the athlete?
- Does conflict occur in athlete and doping control relations?
 - If so, provide an example?
 - Does conflict occur in some situations more than others?
 - Have you ever been angry or frustrated with an athlete?
- Do you feel that some athletes are treated differently than others?

- Should this occur?
- Can you remember the first time you were involved in doping control?
 - If so, please describe your experience?
 - Have your experiences with doping control changed since then?
- Do you feel as though you are always watching athletes?
- What is the role of other individuals in doping control relations (chaperone, athlete representative, coach, parents, etc.)?
- What is the role of the Canadian Centre for Ethics in Sport (CCES) in athlete/doping control officer relations?
- What is the role of the World Anti-Doping Agency (WADA) in athlete/doping control officer relations?
- Can you think of any other elements of the doping control relations that we have not yet discussed?

RQ3: IDENTIFYING THE CONTENTIOUS ELEMENTS OF DOPING CONTROL RELATIONS

The fourth and final section of questions concludes the interview by identifying the key aspects of doping control relations which are most contentious among athletes/doping control officers and possible strategies to overcome them.

- Could you describe your best in-competition testing experience with an athlete?
- Could you describe your worst in-competition testing experience with an athlete?
 - What are your recommendations to improve this experience?
 - In hindsight is there anything you would do differently?
- Could you describe your best out-of-competition testing experience with an athlete?
- Could you describe your worst out-of-competition testing experience with an athlete?
 - What are your recommendations to improve this experience?
 - In hindsight is there anything you would do differently?

Appendix C: Athlete Demographic Questionnaire

The following questionnaire will capture basic background information and will be used for research purposes only. All information will be kept confidential. If you wish, you may decline to answer any questions.

If you would like to create your own pseudonym please include it below (a 'made up' name will be used to protect your identity):

I have experience in doping control because I am an:

Athlete currently in a registered testing pool Athlete formally in a registered testing pool

In which international federation(s) do/did you compete?

For how many years/how many times have you been exposed to doping control?

In what province/state do you currently reside?

Gender: Female Male

Age: <20 yrs 20-29 30-39 40-49 50-59 60+

How would you describe your ethnicity?

What is your highest level of educational achievement?

High School Diploma College Diploma or Degree University Degree

Graduate Degree Other _____

Please indicate if you would like to receive a copy of the summary report of this study?

Yes No

Please provide your contact information in the space provided on this form. Data completed on this form will be separated from any identifying information (using chosen pseudonym). This form, in addition to your consent form, will be kept in a locked filing cabinet.

Name:

Phone Number:

Email:

Thank you!

Appendix D: DCO Demographic Questionnaire

The following questionnaire will capture basic background information and will be used for research purposes only. All information will be kept confidential. If you wish, you may decline to answer any questions.

If you would like to create your own pseudonym please include it below (a 'made up' name will be used to protect your identity):

I have experience in doping control because:

I am currently a doping control officer I used to be a doping control officer

For which organization(s) do/did you carry out testing missions?

How many years/how many times have you been involved in doping control?

In what province/state do you currently reside?

Gender: Female Male

Age: <20 yrs 20-29 30-39 40-49 50-59 60+

How would you describe your ethnicity?

What is your highest level of educational achievement?

High School Diploma College Diploma or Degree University Degree

Graduate Degree Other _____

Please indicate if you would like to receive a copy of the summary report of this study?

Yes No

Please provide your contact information in the space provided on this form. Data completed on this form will be separated from any identifying information (using chosen pseudonym). This form, in addition to your consent form, will be kept in a locked filing cabinet.

Name:

Phone Number:

Email:

Thank you!

Appendix E: Interview Invitation



School of Kinesiology
War Memorial Gymnasium
210-6081 University Blvd, Vancouver, BC, V6T, 1Z1

Dear _____:

I am a graduate student from the School of Kinesiology at the University of British Columbia who is inviting you to participate in a research project entitled *Power and Action in Doping Control: A study of athlete/doping control officer relations*.

The purpose of this research is to examine athlete/doping control officer relations. The following questions will guide the research project:

1. Are there similarities and differences in how athletes/doping control officers understand relations with one another during doping control?
2. How are Foucault's concepts of discipline, panopticon, and governmentality reflected in athlete/doping control officer relations?
3. Which elements of doping control relations are most contentious and do athletes and doping control officers have ideas for improving them?

Participants do not receive any financial benefit. Possible benefits of this study include providing a voice to both athletes and doping control officers. The collective voices of athletes and doping control officers could inform how policy-makers could improve doping control policy and in turn, enhance the process for both athletes and doping control officers. There are no known or anticipated risks associated with participation in this study.

If you agree to participate, you will be invited to take part in an interview that will last approximately 1 hour. The interview will be conducted at a time and location that is convenient to you. Interviews can be conducted in person, by phone or via Skype. The discussions that take place will be audio-recorded and transcribed for analysis. Participation in this study is voluntary. If you wish, you may decline to answer any questions or participate in any component of the study. Further, you may decide to withdraw from this study at any time.

If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598. If you would like more information about how to become involved in this study please contact me.

Thank you,

Student Investigator:

Dan Thorpe, MA Student
School of Kinesiology
University of British Columbia
(604) 362 3529
dgthorpe@interchange.ubc.ca

Faculty Supervisor:

Dr. Wendy Frisby, Professor
School of Kinesiology
University of British Columbia
(604) 822 6445
wendy.frisby@ubc.ca

Appendix F: Confidentiality Reminder



School of Kinesiology
War Memorial Gymnasium
210-6081 University Blvd, Vancouver, BC, V6T, 1Z1

Doping Control Officer (DCO) Confidentiality Reminder

RE: DCO Participation in a Research Study

The CCES has facilitated the participation of DCOs in a research study being conducted by Dan Thorpe, a Masters Student in the School of Kinesiology at the University of British Columbia. This research aims to examine the relationship between athletes and DCOs.

Through your invitation to participate, you will be asked questions around your knowledge and experiences which may include sensitive and confidential information. As you are aware, as a DCO you have signed a Confidentiality Agreement with the CCES. Therefore, while participating in this study, you are reminded not to divulge any information specifically, but not limited to the following:

- Selection of athletes for Doping Control.
- Positive test results information on an athlete or group of athletes.
- Investigation activities.
- Appeals or arbitrations related to doping infractions.
- Medical information and data provided by athletes and/or physicians involved in athletes care.

By signing below you agree that you are aware of, and will abide by all aspects of the CCES Confidentiality Agreement while participating in this study and that you understand the consequences of any breach of the Confidentiality Agreement.

DCO Name DCO Signature

Date

Appendix G: Consent Form



School of Kinesiology
War Memorial Gymnasium
210-6081 University Blvd, Vancouver, BC, V6T, 1Z1

CONSENT FORM

Power and Action in Doping Control: A study of athlete/doping control officer relations

Student Investigator:
Dan Thorpe, MA Student
School of Kinesiology
University of British Columbia
(604) 362 3529
dgthorpe@interchange.ubc.ca

Faculty Supervisor:
Dr. Wendy Frisby, Professor
School of Kinesiology
University of British Columbia
(604) 822 6445
wendy.frisby@ubc.ca

PURPOSE OF PROJECT

The purpose of this research is to examine athlete/doping control officer relations. The following questions will guide the research project:

- Are there similarities and differences in how athletes/doping control officers understand relations with one another during doping control?
- How are Foucault's concepts of discipline, panopticon, and governmentality reflected in athlete/doping control officer relations?
- Which elements of doping control relations are most contentious and do athletes and doping control officers have ideas for improving them?

WHAT'S INVOLVED

If you agree to participate you will be asked to answer a series of questions designed to reveal your experiences of doping control relations. Participation in the interviews will last approximately 60 minutes. With your permission, interviews will be audio-taped and transcribed in order to ensure accuracy. The interview will be scheduled at a time and location that are convenient for you.

POTENTIAL BENEFITS AND RISKS

Participants do not receive any financial benefit. Possible benefits of this study include providing a voice to both athletes and doping control officers. The collective voices of athletes and doping control officers could inform how policy-makers could improve doping control policy and in turn, enhance the process for both athletes and doping control officers. There are no known or anticipated risks associated with participation in this study.

CONFIDENTIALITY

All information you provide is considered confidential; your name will not be included or, in any other way, associated with the data collected in the study. All physical data collected during this study will be stored securely in a locked cabinet in the office of the student investigator. All electronic data will be password protected. Data will be kept for the duration of the two-year study period after which it will be destroyed. Access to this data will be restricted to faculty advisors and research assistants.

Appendix H: Codebook

RQ#1 - How is Foucault's understanding of power and his concepts of discipline, panopticon, and governmentality reflected in athlete/doping control officer relations?			
Master Code	Sub Code	Descriptive Code	
Power	Tactics/Strategy	See master code discipline & panopticon	
		Linking DC with success	
	Limiting possible action	Athlete doesn't want to question DCO	
		DC limiting choice of actions	
	Repressive	Power imbalances: Athlete < DCO	
		Power imbalances: Athlete > DCO	
	Productive	Pros of DC outweigh cons	
	Resistance	Improper name	
		Game playing	
		Verbal resistance	
	Knowledge/ Power	Different knowledge = reduction of power	
		Shared knowledge/understanding facilitates DC	
	Discipline & panopticon	Habits, rules, orders and authority (tactics of power)	Repetition results in DC as habit
Following rules - Athlete			
Following rules - DCO			
Reduction of DCO authority			
DCO has authority/provides orders			
Provision of sample male vs. female			
Surveillance by others		Hierarchical observation	
		Surveillance during process	
		Constant surveillance	
Self-surveillance		Athlete altering behaviour based on DC	
Normalization		Comfortable with DC	
		Making DCO as 'normal' as possible	
		Doping can be normalized	
Governmentality		Guidance for conduct	Changing mindsets
			CCES
	WADA		
	Goals of governmentality	Taught language	

RQ#2 - How do athletes/doping control officers understand relations with one another during doping control?

Master Code	Sub Code	Descriptive Code
Purpose of DC	Protect sport	Fair sport
		Clean sport
		Level playing field
		Stop cheating
		Catch cheaters
	Protect athlete	Athlete health
		Facilitates decision-making
		Right to clean sport
	Protect Canada	Clean sport
	DC Required	Yes
Alternative problematic		
Win at all costs		
Prove fair sport		
Hesitation		Pros may not outweigh cons
DC Effective	Room for improvement	Drugs/methods ahead of tests
		Questions sanctioning
		Athletes continue to cheat
		Improper measures of success
		Inadvertent positives
	Yes	Small percentage of positive tests
	Unsure	Not enough knowledge
	DC in Canada	Protection of athlete
		International corruption
		Prevalence of doping in Canada
Whereabouts	Submission of information	Difficulties
		Last minute changes
		Whereabouts has improved
	Required?	All yes except
Pros of DC	Pros for Athlete/Sport	See purpose of DC
	Pros for DCO	Access
Making contribution		
Cons of DC	Drawback felt by athletes & DCOs	Time consuming
		Inconvenient
		Intrusive rules
		Impacts performance/training
		Uncomfortable
	DC as a process	Effectiveness
		Expensive

		Efficiency
Role of athlete	Provide sample	Primary
		Secondary
	Follow rules	Primary
		Secondary
	Respectful	Primary
		Secondary
	Cooperate	Primary
		Secondary
	Knowledgeable	Primary
		Secondary
	Ask questions	Primary
		Secondary
Role of DCO	Limit Intrusion/make best of the situation	Overall theme
	Be empathic	Primary
		Secondary
	Make sure rules are followed/Collect sample	Primary
		Secondary
	Efficient	Primary
		Secondary
	Be friendly	Primary
		Secondary
	Athlete/DCO relations	Typical
Friendly		
Becomes familiar		
Professional		
Initial negative reaction by athlete		
DCO the messenger		
Positive		
Ideal		Facilitates process
		Accommodate athlete
		Expedites process
		Positive athlete attitude (Also see outside stressors)
Problematic		Conflict? (examples of conflict see contentious issues)
		Angry/frustrated?
		Tension
		Too familiar (Friendly not friends)
		Rules/Outside stressors impact relationship

Other Individuals /groups	Coach	Athlete advocate/conflict
		Involved in process
	Athlete representative	Needed?
		Problematic
	Athlete Family	Problematic
		Interested/informed
	Chaperone	Problematic
	BCO	Problematic
CCES	See Governmentality	
WADA		

RQ#3 - 3. Which elements of doping control relations are most contentious and do athletes and doping control officers have ideas for improving them?

Master Code	Sub Code	Descriptive Code
Contentious issues	Slowing down of process	Game playing
		Reading R&R/Filling out forms
		Lack/improper of infrastructure and personnel
	Test selection	Timing of tests
		Proximity/number of tests
		Lack of tests
	Locating athletes	Dealing with athlete family/friends
		Access to residences
	Doping control rule misunderstanding /avoidance	Summary sentence
		1 hour window explanation
		Number of 1 hour window tests
		Reporting to DC
		Provision of sample
		Moving with athlete
		Non compliance/testing positive
Recommendations	Improved education	Athlete (1 hour window in particular)
		Athlete household
	Improved information share	Coach/Athlete/DCO (stop shooting messenger) (education of CCES too)
		NADOs & WADA & IFs (Multiple tests/ more intelligence testing)
	Improve effectiveness of tests	Incomplete panopticon
	Conflict inevitable but DCOs can help	Friendly empathetic DCOs can decelerate conflict
		Calm athletes provide sample more quickly
		Maintain that boundary