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Sample collection as a social process: the influence of interaction between doping control officers and athletes on the implementation of anti-doping policy

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ABSTRACT

In anti-doping policy, the doping control process is approached from a technical point of view in which sample collection is a mechanical part of a standard procedure. In this study, we problematise that perspective by critically examining sample collection as a social process: an encounter between a front-line worker – the Doping Control Officer (DCO) – and a reviewed person – the athlete – who interact with each other. Building on Lipsky's theory of street level bureaucracy and Goffman's dramaturgical perspective, we analyse how sample collection works in practice, what strategies DCOs employ to deal with this intrusive process, and what influence their interaction with athletes has on the implementation of anti-doping policy. As DCOs have less clients, discretion, and autonomy, they differ from many other front-line workers. Nonetheless, sample collection is not a standardised practice that takes the same form and meaning independent of the situation at hand. DCOs and athletes make use of skills and strategies that allow them to follow strict procedures on the one hand and create a human, workable relationship on the other. Displaying dramaturgical loyalty, discipline, and circumspection, DCOs step out of their roles, show emotions and look for the boundaries of what is permissible. This does not necessarily mean that the reliability and credibility of anti-doping policy is at stake. It actually increases athletes' confidence in doping procedures. It does, however, raise the question whether the ability of DCOs to apply discretion may elicit inequitable results in different settings worldwide.

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The gap: sample collection as a social process

Imagine a Doping Control Officer (DCO) arriving at the athlete's home address just as the athlete leaves his house with three suitcases in hand. He is on his way to the airport to catch a plane leaving in a few hours for an important match. According to the rules, the urine sample collection must be carried out immediately, but if this is done, the athlete will miss his plane and arrive too late at the sporting event. What to do?

In this example, which is derived from one of our interviews, the DCO and athlete discussed the situation. The outcome was that they drove together to the airport in the car of the DCO, while the athlete's wife followed them in her husband's car. Thus, the DCO could continuously keep the athlete

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in sight. Once they arrived at the airport, the DCO requested the athlete to provide his urine sample in a public toilet at McDonalds. Those present at the restaurant looked rather strange when they walked out of the toilet together with a transparent bottle of urine.

The solution that this DCO and athlete came up with is not prescribed in the formal procedures and rules of the World Anti-Doping Agency (WADA). WADA is the regulating organisation that has been established in 1999 to lead the global fight against doping. It has created the World Anti-Doping Code (WADC) to harmonise anti-doping policies, rules and regulations, and oversees their acceptance, implementation and compliance. The WADC works in conjunction with eight International Standards which aim to foster consistency in various areas of anti-doping policy (WADA 2019).

One of the standards is the International Standard for Testing and Investigations (ISTI). The ISTI establishes mandatory standards for test distribution planning, notification of athletes, preparing for and conducting sample collection, administration of samples and documentation, and transport of samples to WADA-Accredited Laboratories for analysis (WADA 2020). It describes in detail how urine sample collection should work from a technical and control perspective, with clear objectives, responsibilities, requirements and process steps.

Sample collection is not just a clinical process though. It is the product of a face-to-face interaction between a front-line worker, the DCO, and a reviewed person, the athlete. Following the work of Michael Lipsky (2010), it has been widely demonstrated that front-line workers in such encounters are not 'neutral policy implementers' (Kalkman and Groenewegen 2019).

The DCO and athlete in our opening example creatively sought for a solution by freely interpreting the ISTI. It indicates that DCOs not only base their decisions on prescribed rules and procedures about sample collection that can mechanically be applied on autopilot. Front-line workers encounter unexpected personal situations in which they must improvise pragmatically in interaction with the athlete. They have discretion, both as granted and as used, to manoeuvre within the limits that the rules and regulations pose on them (Hupe *et al.* 2015). Thus far, it is unknown how DCOs deal with their discretion.

The value- and emotion-laden nature of the sample collection process increases the significance of discretion in face-to-face interactions between DCOs and athletes. DCOs have to find ways to make the anti-doping policy work in a situation that infringes the athlete's self-perception, physical integrity and privacy (Hanstad and Loland 2009). The DCO can visit the athlete on any day and time of the year to collect a urine sample, with no advance notice. The DCO must observe from a clear and unobstructed view that the urine leaves the athlete's genitalia and is collected in a container. In some instances, this can take hours in which the athlete has to remain under surveillance of the DCO.

Due to the unequal balance of power between both actors, this can feel for athletes as if they are controlled potential convicts that are being treated in a degrading manner. As Olympic gold and silver medallist and five-time World Champion Lars Riedel once explained: 'Having to urinate into a beaker, on command, in front of strangers, under strict surveillance and without any privacy, indicates to me that they have the power and I need to subdue to them' (Riedel cited in Elbe *et al.* 2012, p. 71). The athlete cannot escape this intrusion: evading, refusing or failing to submit the sample collection is seen as an anti-doping rule violation that can lead to years of suspension and reputation damage. Front-line workers can use a set of skills and strategies to respond creatively to the dilemmas that such situations entail (Durose 2007), but how this manifests itself during encounters between DCOs and athletes is still unexplored.

It is striking how little scholarly attention the interaction between DCOs and athletes has received in the almost overcrowded field of (anti-)doping research. Many aspects of anti-doping policy have received scholarly attention, such as issues related to the harmonisation (f.e. Houlihan 1999), compliance (f.e. Houlihan 2002, Gray 2019), surveillance (f.e. Park 2005, Sluggett 2011) and legitimacy (f.e. Hanstad and Loland 2009, Read *et al.* 2019) of anti-doping policy. Much attention has also been paid to the perspectives of athletes on the functioning of the anti-doping system (f.e. Peters *et al.* 2013, Bourdon *et al.* 2014, Overbye and Wagner 2014, Overbye *et al.* 2015, Efverstrom *et al.* 2016, Overbye 2017, Gleaves and Christiansen 2019, Woolway *et al.* 2020, Qvarfordt *et al.* 2021).

The work of Anne-Marie Elbe is of particular interest here as it focuses specifically on the experiences of athletes with control procedures and the difficulties athletes face with urinating (Elbe *et al.* 2012, Elbe and Brand 2014, Elbe and Overbye 2014, 2015). Building on this, Marie Overbye (2016) investigated whether specific factors such as previous experience of testing and perceived proximity of doping have an impact on athletes' perceptions of the testing system. However, these studies focus on the individual experiences and opinions of the athletes involved (and in a few cases those of DCOs; see Strahler and Elbe 2007, Peters *et al.* 2013). So far, no research has been conducted into the way in which the interaction between DCOs and athletes takes place and what influence this social process has on the implementation and compliance of anti-doping policy, with the exception of a few student master theses (Thorpe 2014, Krugers 2020).

The central question in this article is therefore how urine sample collection works in practice, what strategies DCOs employ to deal with this intrusive process, and what influence their interaction with athletes has on the implementation of anti-doping policy.

To investigate this, we will follow Bartels' research agenda to investigate public encounters as a process of social interaction from a relational, situated, and performative approach (Bartels 2013). This links research into front-line workers, in the tradition of Lipsky, to the work of Erving Goffman (1989, 1961). Goffman's dramaturgical sociology focuses on performance management, role obligations, role takings and role distancing of the individuals who take part in encounters.

Before we set out our methodology, present our findings and draw conclusions, we will first discuss how the combination of these two theoretical traditions have acted for us as a general sense of reference and guidance in approaching the interaction between DCOs and athletes.

Theoretical framework

A bureaucratic organisation has been set up in the Weberian sense of the word for the implementation of the globally coordinated anti-doping policy. According to Max Weber, bureaucracy as an ideal type is an organisational form that is predictable, calculable, and impersonal. By standardising rules and procedures, the bureaucratic organisation functions in a way that can be followed, monitored, and predicted. Officials follow the instructions for action laid down in documents. They do this without regard to the person – *sine ira et studio*, as Weber typifies it (Weber 1985, p. 129). Everyone in the same situation is treated equally. Neither kinship, friendship, admiration, or gratitude, nor aversion or antipathy may influence this.

To emphasise the impartiality of DCOs in the implementation of anti-doping policy, WADA has documented some guidelines for the necessary competencies, qualification requirements and roles and responsibilities of the personnel involved in the sample collection. DCOs need to be adequately trained and qualified and may not have an interest in the outcome of a sample collection session (WADA 2014). This includes that the DCO must not ask athletes for photographs or their autograph, gamble on the outcome of a sporting event, accept gifts from an athlete or sport official, over familiarisation with athletes, and so on (WADA 2011). If a person meets the required conditions, a NADO can provide an accreditation card that identifies this person as DCO by name. This accreditation is valid for a fixed term (usually two years) and is evaluated on a continuous basis. As such, DCOs are supposed to be able to implement the anti-doping policy 'with delegated responsibility for the on-site management of a sample collection session' (WADA 2011).

However, as Michael Lipsky argued in his seminal 'Street-Level Bureaucracy,' 'policy as written' does not equal 'policy as performed' (Lipsky 2010, p. xvii). 'The reality of the work of street level bureaucrats could hardly be farther from the bureaucratic ideal of impersonal detachment in decision making' (Lipsky 2010, p. 9). Street-level bureaucrats use discretion to interpret and shape policy in their day-to-day public encounters. Their 'individual decisions (...), the routines they establish, and the devices they invent to cope with uncertainties and work pressures, effectively *become* the public policies they carry out' (Lipsky 2010, p. xiii, italics in the original).

The concept of street-level bureaucrats refers to a variety of front-line workers with some common elements. First, street-level bureaucrats are in direct contact with individual citizens, for example consumers, clients, pupils, or patients. Second, they are doing their work while in public service, either as formal government employees or as employees of civil society organisations or commercial corporations. Decisive is that they fulfill public tasks for the common good and are held publicly accountable for the results of their work. Third, street-level bureaucrats have a specific occupation for which they have been trained in a sustained way (Hupe and Hill 2007, Hupe and Buffat 2014).

DCOs can be included in this category, although the term front-line workers may be more appropriate than street-level bureaucrats, given the hybrid public-private governance nature of global anti-doping policy (Casini 2009). After all, during the sample collection, the DCO is a professional in function who is in direct contact with a person to whom the policy applies and who benefits from cooperating in this (Manning 2008, Lipsky 2010). DCO is defined by WADA as 'an official who has been trained and authorised by the Sample Collection Authority to carry out the responsibilities given to DCOs in the International Standard for Testing and Investigations' (WADA 2020, p. 22). This responsibility implies that DCOs visit athletes physically to collect a urine sample of the person to be reviewed. The DCOs do so as an employee of a government agency, a National Anti-Doping Organisation (NADO) or a globally operating commercial organisation to which anti-doping testing is outsourced, like Clearidum, PWC and IDTM.

According to Davis (1969), a public service worker has discretion whenever the effective limits on his power leave him free to make a choice among possible courses of action or inaction. Literature on street-level bureaucracy has mainly been dealing with officials that tend to have high levels of discretion. That does not mean that organisations with strict rules and procedures do not offer discretion (Buffat 2015, Van de Walle and Raaphorst 2018). In fact, 'there is a rules/discretion continuum rather than any sharp distinction between discretion-based and rule-based organisations' (Walker and Niner 2005, p. 64).

The degree of discretion varies according to the nature of the task that the front-line worker must perform. This depends on several factors. Front-line workers who perform a strictly defined, critical task for the organisation, such as the collection of taxes or doping samples, will be assessed more strongly on the delivered outputs in the performance of their task, and will therefore experience less discretion (Buffat 2015). Giving them significant discretion while adhering to an extensive set of rules would open the door to all kinds of organisational and service delivery problems (Walker and Niner 2005). They need to 'stick to the rules' and follow, in terms of Weber, a purely bureaucratic goal-oriented rationality. Front-line workers, such as doctors, who perform complex tasks, on the other hand, are given a lot of autonomy in their professional activities and are being accounted more for realised outcomes (Hupe and Hill 2007). Their discretion creates space for value-based rationality which can 'humanise' bureaucracy and make it feel less like an 'iron cage' (Weber 2016).

It is in this context that the degree of professionalisation of front-line workers effects their discretion. The more front-line workers have managed to instil confidence in their profession and be granted autonomy for their professional practice, the more discretion will be granted to them, and used. Nevertheless, here too, front-line workers without much professional status also possess discretion: however strong the regulatory framework is, and how strict and severe the accountability mechanisms are, the essence of all front-line work is that it involves some degree of discretion. Wherever the work is delegated, the delegating person or organisation loses some control (Hupe and Hill 2007).

DCOs will therefore also have discretion, but to a limited extent. Not only do they carry out a strictly defined task that is of critical importance in anti-doping policy. DCOs are also a relatively young professional group. The worldwide acceptance of the WADC, which came into force in 2004, formed the basis of the DCO as professional group. The ISTI defined the DCO as a trained and authorised official in the globally harmonised anti-doping policy. Seventeen years later, DCOs are still professionalised to a limited extent. As far as our information goes, the work of DCOs is performed by

volunteers in some countries and by part-time salaried officials in other countries. Some DCOs are paid for each test taken, while others are compensated for expenses or lost earnings based on daily rates. In some countries, DCOs have an official appointment for a fixed number of hours at the National Anti-Doping Organisation (NADO) (Hanstad and Loland 2005, Thorpe 2014, Koop 2016, Lee and Seok 2018, Krugers 2020).

In Lipsky's tradition, public encounters were initially seen as inherently problematic for a responsible and accountable exercise of public authority (Bartels 2013). Such a perspective implies a focus on the question to what extent the discretion of DCOs can jeopardise or even undermine anti-doping policy. The use of discretion can be quite harmless. Take the example with which we opened this article. Conversely, the case of the Russian doping affair shows that the use of discretion can also be extremely damaging. DCOs working under the direction of RUSADA warned athletes in advance of out of competition testing, allowed athletes to provide preciously collected samples known to be clean, and even routinely accepted bribes from athletes, thereby ensuring that the control test result would not be positive (Pound *et al.* 2015).

More recent research on public encounters highlights another side of the coin, namely how the discretion of front-line workers actually contributes to the quality of public services, decision-making and problem solving. 'Research on street-level bureaucracy by and large stopped seeing discretion as a problem of democratic control and started to consider it as an asset for creative, deliberative, and informed judgment' (Bartels 2013, p. 473). This view stimulated empirical analyses of 'how public professionals make sense of their daily work situations and account for their decisions' (Bartels 2013, p. 473). These analyses identified two narratives. A dominant narrative that describes front-line workers as state agents who act as policy makers. And a counternarrative in which front-line workers describe themselves as citizen agents who act in response to individuals and circumstances (Maynard-Moody and Musheno 2000). They face dilemmas and complexities in public encounters and use a set of skills and strategies to respond creatively to overcome these problems (Gofen 2014).

Because of the direct contact that front-line workers have with their clientele, they do not see them as abstractions but as people of flesh and blood (Maynard-Moody and Musheno 2000, Walker and Niner 2005). This also goes for DCOs. They will have to interact with athletes to get the awkward job of urine sample collection done. They may try to do so in a goal-rational way by approaching it very clinically and dealing with it as quickly as possible. But at the same time, DCOs cannot avoid putting themselves in the shoes of the athlete and assess what behaviour is morally and emotionally appropriate to the situation. After all, it is the athlete who is more or less forced to allow the DCO into his or her private domain for an act that can be experienced as intrusive and humiliating. Non-cooperation by an athlete will be assessed as an anti-doping rule violation.

While the interaction between DCO and athlete is direct and personal, their relationship is characterised by an unequal balance of power (Maynard-Moody and Musheno 2000, Walker and Niner 2005). Athletes have to provide a one-hour time slot in which they are available every day. The DCO can knock on the door of the athlete at any time to obtain a urine sample, even outside their time slot. Within the one-hour time slot, the athlete must be where indicated. Outside the time slot, the chance that the athlete is not on site is at the risk of the DCO. However, if the athlete opens the door outside the time slot, he or she is obliged to cooperate with the procedure. This usually goes smoothly, but unexpected circumstances may arise. The athlete can just have had a major argument with his or her partner, be sitting with a crying child, or may have just gotten sick. Or the athlete may be extremely upset about being woken up from sleep after a period of hard training. Whatever the situation is: the athlete must comply with the requests of the DCO.

At the same time: although the balance of power is unequal, the DCO is also dependent on the cooperation of the athlete (cf. Van de Walle and Raaphorst 2018). The athlete may try to frustrate the sample collection session or withdraw from sight. The DCO may also encounter a situation in which the athlete can consciously or unconsciously create an unpleasant atmosphere.

The result of this is that their encounter is accompanied by uncertainty (Van de Walle and Raaphorst 2018). What can the DCO expect? What kind of reception awaits him or her? How will the athlete behave? Will the athlete manage to urinate? The situation is not much different for the athlete: what kind of person will come in? Will it be possible to urinate on command? How long will it take? Will the DCO be intrusive? What will be the outcome?

The question then is, how they deal with this power asymmetry and uncertainty, and what influence their interaction has on the implementation of anti-doping policy. The goal of such a study is not to analyse the accountability and compliance problem of discretion, but to get a richer understanding of the underlying beliefs, emotions and interpretations that influence their performance and social interaction (cf. Durose 2007). This can help to better align anti-doping policymakers' intentions with front-line implementation actions and reviewed persons' experiences (cf. Gofen 2014).

The work of Erving Goffman can be particularly helpful in this respect, both theoretically and methodologically. Goffman (1989, 1961) has become famous for applying a dramaturgical perspective on role theory. This dramaturgical perspective compares daily social life to a theatrical performance. Any social interaction involves actors who follow role obligations and social scripts and enact performances in particular settings for certain audiences (Harrison *et al.* 2018). Applied to the interaction between DCOs and athletes, this means that they, like actors on stage, are constantly aware of the way they present themselves to each other. For both the DCO and the athlete, this entails certain role obligations and social scripts. Through their behaviour and attitude, they try to make as good or appropriate as possible an impression to maintain their own face and the face of the other.

According to Goffman (1989), people employ common techniques to control the impression they receive of the situation. With these techniques of impression management, they strive to give a credible representation frontstage (formal, public space). Only backstage (informal, private space) they expose what is in conflict with this. In certain situations, people can escape the defining character of frontstage performances by taking a step back from the role they are playing, for example through a wink or joke. The frontstage can thus become backstage and vice versa. This role distance is part of the techniques and strategies with which people try to control or manipulate their presentation of self. For example, front-line workers can switch between their personal and professional roles to avoid or remedy uncomfortable situations (Dubois 2010).

Goffman (1989) suggested that performers use techniques of impression management to recognise, avoid or respond to inconvenient occurrences like unmeant gestures, inopportune intrusions, and faux pas. He labelled these techniques as dramaturgical loyalty, dramaturgical discipline, and dramaturgical circumspection. Dramaturgical loyalty implies that all participants accept the value and rules of the play, and act on it to make it run as smoothly as possible. Dramaturgical discipline means that the performer has the skills to ignore or marginalise disruptive events and to easily switch from private places of informality (backstage) to public spaces of varying degrees of formality (frontstage). In addition to loyalty and discipline, performers exercise prudence and circumspection. They prepare in advance for likely contingencies and exploit opportunities that remain. Sometimes, opportunities can be seized for relaxation. But if the interaction can have important consequences, as is the case with doping controls, great care will be given to the performance.

Methodology

If public encounters are examined as relational, situated performances, as Bartels (2013) has advocated, it is appropriate to use qualitative methods such as observations, interviews, and narrative inquiry. Relational means that we need to consider encounters between DCOs and athletes as a process of relation-building work, in which they try to resolve practical problems, inconvenient occurrences and potential or actual conflicts. Seen as situational practices, means that we need to be alert of the multifaceted and variable forms and meanings that these encounters can take,

depending on the situation at hand. And understanding these encounters as performances implies that we should pay attention to the roles DCOs and athletes play backstage and frontstage and the skills and strategies of impression management that they use.

To bring this in practice, our initial aim was to get permission to observe sample collection sessions. Yet even before we could request a NADO for permission to do so, we had to drop this option because of the measures taken by the national government in March 2020 to prevent the spread of Covid-19. Alternatively, we asked the NADO for contact details of DCOs to invite them for an interview. When it became clear that the NADO did not want to cooperate with this, we approached DCOs directly. To this end, we collected names of DCOs based on public documents and searched for their contact details via social media. This led to three types of response: a few DCOs agreed to meet, others declined, and a final group complained about this to the NADO.

In response to this, the NADO contacted us for clarification and to give some background information about their refusal to cooperate with us. It emerged from this that NADOs shield their DCOs to a great extent, to prevent the doping control process from being influenced by external parties. This certainly applies to family members and lawyers who represent the interests of reviewed athletes. It also applies to journalists and researchers who, for other reasons, want to follow the sample collection process closely. According to the NADO, such external influences create a feeling of unease and insecurity for DCOs and put unwanted pressure on sample collection sessions.

As an alternative, the NADO offered to conduct some interviews with former DCOs who are still employed by the NADO. We supplemented these interviews with respondents who were still employed as DCOs and agreed with an interview, and with athletes who have regularly undergone doping controls. To further enrich this information, we extended our respondents with two other circles of involved persons. First, other officials who are present during in-competition sample collection: chaperones (officials who are trained and authorised to carry out specific duties during sample collection sessions) and sports (team) doctors. Both chaperones and doctors observe the encounter and interactions between DCO and athlete during in-competition testing and can therefore speak about this from a third person perspective. Second, policy officers of anti-doping organisations and sports organisations, who are not directly involved in sample collection sessions, but who do make policy to train DCOs and facilitate the execution of their work. The interviews with these groups of respondents were aimed at getting additional information from various perspectives about how the sample collection process works in practice. By putting the experiences of all these respondents together, we have tried to reveal what and how social interaction takes place between DCOs and athletes.

In total, eighteen interviews were conducted, including six elite athletes, four active DCOs, three NADO officers (including two former DCOs), two chaperones, a sports team doctor, and two anti-doping policy officers from sport organisations. Because of COVID-19, all interviews took place by telephone or video call by the first author as part of his master thesis. During the interviews, a topic list was used to create some structure and to gather information from the respondents about the central research questions. However, a lot of space was created for the respondents to talk freely about the sample collection processes and the interaction between DCOs and athletes. This was done by asking open questions, listening, summarising, and asking further questions. In this way an attempt was made to find as many examples and details as possible and to uncover deeper layers.

In all interviews, the respondent was asked for informed consent, as well as permission to record the conversation audibly. After transcription, the interviews were open, axially, and selectively coded (Corbin and Strauss 2015). This has resulted in a code tree that served as a guideline for structuring the data analysis. In addition to these interviews, policy manuals and documents were analysed that provide insight into the training of DCOs and the procedures they must follow. These documents were also analysed by coding on main and sub themes. Specific attention was paid to topics that did come up in the interviews but were not mentioned in these texts.

Findings

Discretion-as-granted

Sample collection is a critical task in anti-doping policy. To ensure the reliability and credibility of this policy, strict procedures have been elaborated in comprehensive instructions for the execution of this task. However, the strictness of the rules is not perceived as a form of unyielding bureaucracy and cumbersome red tape. DCOs and athletes alike recognise that procedures and instructions give clarity about the job to be done. The rules also protect both parties from arbitrariness and favouritism, and allegations thereof.

'In my experience, everything was just systematic and structured. This happens first and then that. This we do so and that in that way. Yes, that was just very structured. So, you didn't have the idea that anything could go wrong' (Athlete 2)

'The margins of interpretation are very narrow. Actually, it is impossible . . . it is precisely formulated how it needs to take place (. . .) If you would deviate from the instructions, the athlete could state 'I declare that the procedure did not go according to the rules, as he touched the sample'. Therefore, the DCO will make sure he will stay really strictly to the rules.' (Sports team doctor)

Insofar as discretion is granted, this concerns preconditions, such as who is allowed to be present at the sample collection, the way in which the identity of the athlete is established, and the determination of exceptional circumstances under which a sample collection session does not lead to the intake of the desired sample (WADA 2020). Moreover, there is some room for manoeuvre to execute the sample collection process in a specific way.

'I think that every DCO has his own interpretation of the script. But the script must be followed, point by point. So, the essentials are the same for everyone.' (DCO 2)

'That is just sacred. You have a number of rules that you just have to comply with. You can navigate within that and that's just it. (. . .) You should just never lose sight of an athlete. That is an important rule. (. . .) You will always have to find a solution in which that rule persists. So yes, same with a visual check, so that you are there when the athlete urinates. And you see that the sample comes from that person and goes into the cup.' (DCO 1)

Discretion-as-used

That being said, DCOs do not turn off their human feelings and social antenna. They are likely to start each encounter with a dialogue to put the athlete at ease. The way in which this interaction takes place is based on their personal social skills. Many DCOs are doctors by profession, besides their work as doping control officer. They are therefore used to interacting with a client or patient.

'It is just normal human behavior. I am a GP too, so it is more to put the people at ease, it is not part of the procedures, it is not written in there, but we try as good as possible to catch them up in a normal way.' (DCO 4)

DCOs are very well aware of the privacy-sensitive context of doping controls and the effect controls can have on an athlete, especially when the athlete is not familiar with it yet. They will try to put an athlete at ease, without letting go the procedure:

'If it happens to an athlete for the first time, it can be very intimidating. The athlete might be insecure how it works, and maybe he or she thinks "I do everything according to the rules, but what if I test positive?" So, what you do as a DCO is calming down the athlete and explaining the sample collection step by step. This is who I am, this is how the process goes, this is what is going to happen. (. . .) For me the final result was always key and the result I wanted was a successfully executed test.' (Policy officer NADO 3)

DCOs show patience to the athletes and tell them they have all the time of the world, as they know that hurrying them would only work counterproductive. DCOs also suggest common-or-garden tricks to the athletes to make it easier for them to produce a urine sample, like drinking water, walking bare feet on the cold floor or putting on the water tap.

When we zoomed in on uncomfortable or intrusive situations in the encounters between DCOs and athletes, examples emerged in which DCOs empathised with the athlete, recognised his or her sentiments, and used discretion as a source of personal responsiveness. Within the narrow boundaries set by the international standard for testing and investigations, they assessed their room for manoeuvre in line with their own norms and values (Maynard-Moody and Musheno 2000, Van de Walle and Raaphorst 2018).

'I am a social person. I am the first one in being flexible to find a solution. If you think in problems, you will not find the solution, but if you think in solutions, you can always find one. . . . All ways lead to Rome. As long as the rules are observed, much is possible.' (DCO 1)

'Empathy is pleasurable as you do feel vulnerable when you are standing there that way.' (Athlete 5)

These situations mainly related to witnessing the passing of the urine sample. In those situations, some DCOs tried to solve the social discomfort of that act by taking some extra steps away or leaving the door ajar, especially when they had the feeling that the athlete found it difficult to produce a sample under surveillance. In doing so, they seek the limits of what is possible within the procedure to make the process run as nicely and humanly possible for the athlete. Direct observation of the urine passing from the athlete into the collection vessel is critical. According to WADA's guidelines, the DCO must have a clear and unobstructed view of the passing of the sample from the athlete to the collection vessel to ensure there is no interference with substitution, or contamination of the sample. There have been numerous examples in anti-doping history of such evasive behaviour.

'I remember one of the first times a DCO came by. So, then you need to go, with your pants below your knees and your shirt above your nips, and there is a stranger in your house looking at your penis, while you have to pee into a jar, well, good luck. A bit overstated, but it is what it is. And at that moment the DCO says "You know, I have seen it, I will take a step back, put the door ajar and then it is fine". And those things are of help in such moments.' (Athlete 5)

'You have people who find it very difficult, and cannot urinate in presence of somebody else. Then sometimes a DCO adapts and says: "I understand your problem, we go to the toilet, I halfly close the door so I cannot look at you, but I will stay on one or two meters." (. . .) I think you have to deal with that a bit smoothly within the possibilities.' (Sports team doctor)

Another uncomfortable moment occurs when the athlete cannot produce a urine sample right away. The DCO must then wait and keep an eye on the athlete, even if this takes a longer time. In this situation too, the DCO tries to put the athlete at ease and to radiate calm and confidence.

'They want to make you feel comfortable, take it easy, and yes, that a controller says "I've got all the time in the world, I don't care when you're ready", you know, not that they try to chase you, because then it doesn't work at all.' (Athlete 4)

'My experience is that the Doping Control Officer in question sat down quietly and read a book and waited until the time had come.' (Sports team doctor)

Power imbalance

From the moment the DCO rings the doorbell, the athlete knows that he or she will have to undergo a doping control. There is no way back; the urine sample needs to be produced. The damage that a refusal can bring about, is simply too great. Athletes are completely aware of this and therefore usually cooperate well. The sooner the urine sample is collected, the sooner they can go their own way.

'A DCO must be very hard in that and say: "this is what now needs to happen, I notified you, this is the task I got, and we are going to execute the test".' (Policy officer NADO 3)

This especially applies to visits by DCOs at an inappropriate time outside of the time slots provided by the athletes. NADOs take these time slots into account, but they are authorised to collect a urine sample 24 hours a day, 7 days a week.

'I have also had that they came outside my time slot. If you then open the door, you must cooperate even though you need to leave ten minutes later, for example. And then it is . . . also because you just know . . . but they will make clear that in the end we need to do this, one way or another, so let's do it well with the two of us.' (Athlete 6)

Nonetheless, there are occasions in which athletes are obstructive or irritated. This is usually due to inconvenient timing (the day before an important competition or immediately after a lost match) or when the athlete is checked several times in a row. In these occasions, DCOs try to show understanding.

'I once had to visit an athlete; that was the third time he was controlled in two weeks. (. . .) Then we usually put this people at ease, we chat a bit and that always works out. (. . .) I also said that I understood him one hundred percent. That I would also be annoyed, that I actually find it a bit difficult, but that he is simply on the list. And he knows very, very well that nothing more can be done.' (DCO 2)

In this way, DCOs try to de-escalate and give the athlete an opportunity to let off steam. If the athlete continues to refuse to cooperate, the DCO must take a more hierarchical position to successfully complete the sample collection. However, DCOs are trained not to come across as authoritarian in their performance.

'I've never used a compelling tone.' (DCO 3)

'They are also just very friendly; it does not feel as if it is very compelling or that there is some kind of power imbalance present.' (Athlete 6)

'The DCO seeks dialogue in a pleasant way, continues to seek that dialogue and hardly has to go on the hierarchical tour. (. . .) However, the procedures must be followed.' (Policy officer NADO 2)

Taking up a hierarchical position is especially challenging when the sample collection concerns an elite athlete who has become a national or international celebrity for whom the DCO has a certain respect and awe. But it is precisely in this situation that the DCO must demonstrate the courage and authority to make use of his or her formal powers.

'That does mean that sometimes as a DCO you could be at the toilet and you need to say to an Olympic champion 'Sorry, but you need to drop your pants' (. . .) Yes, that requires a certain sense of authority, otherwise you will not be able to do that of course. You tell a Chris Froome, you tell him to do it. That is not easy!' (DCO 1)

It not only requires authority from a DCO, but also the social skills to communicate this in an appropriate manner.

'Then you do not have to say, 'Hey drop your pants!', no, then you say 'Hey I cannot see it completely, could you please put your trousers down a little further so I can see it better? Could you move a bit more to the side of the toilet, so I do have a better view?' If you say it that way, you will get it done.' (DCO 1)

The social position of elite athletes who have become celebrities exceeds that of the DCO. For elite athletes, the DCO might just be an anonymous link in the global anti-doping system. However, the same DCO can impose his or her will on the celebrity during the sample collection. As was illustrated with a quote from a gold medallist and world champion in the introduction, this can reinforce the athletes' perception that they are treated in a degrading manner.

Informality and familiarity

DCOs are aware of the importance of keeping their distance from athletes. However, if they meet them more often and get to know them better, the relationship becomes more informal.

'The first time I visit an athlete, it is usually fairly formal. After that it is different. Then it becomes very informal.' (DCO 1)

'It depends on the number of doping controls I have carried out with that person, but I can say that when the number of controls rises, the informality also rises, up till a certain point.' (Athlete 5)

If the relationship becomes too friendly, the strict adherence to procedures and instructions may weaken.

'Because they see each other too often, yes. It is important that a number of things are mentioned about the procedure. (...) If you build up a relationship of trust, then (...) the athlete might say "yes, I know all this" and just starts doing all kinds of things. Then those things are no longer explicated and that is not good.' (Policy officer NADO 1)

Both DCOs and athletes indicate that DCOs consciously prevent the atmosphere from becoming too friendly or familiar.

'I always keep a certain distance, to be honest.' (DCO 2)

'I do have the idea that they are given such rules of conduct that they keep athletes at a distance.' (Athlete 3)

To prevent the development of an overly friendly relationship between the athlete and DCO, NADOs strive to rotate DCOs among the athletes to be reviewed. When athletes are confronted with varying DCOs, the predictability of specific behaviours or responses of DCOs in the doping sample process will decrease.

'Take, for example: I live somewhere, I first go to athlete A, then I go to athlete B. If you do that very often, athlete A can inform athlete B that "he will be right there" because that just happens often.' (Policy officer NADO 3)

In this way, the NADO accounts for the human impact that front-line workers can exert on the sample collection process. However, logistical and financial factors limit the possibilities for this. According to the interviewed athletes, they are often visited by the same small group of DCOs for out-of-competition sample collection.

'It was always the same woman who tested, so then it was "Oh, there is the lady of the doping again".' (Athlete 4)

'I honestly think I have only had two or three different doping control officers in recent years.' (Athlete 6)

This does not necessarily have a negative effect on the sample collection process. On the contrary, athletes indicate that repeated encounters with the same DCO can create a feeling of trustworthiness.

'It is a face you know. You do not have to ask questions about such a person. I know she is legit; she knows how it works, she does it for years. And that is only comfortable.' (Athlete 4)

Concluding discussion

In anti-doping policy documents, the process of sample collection is mainly approached as a technical part of a standard procedure. In this study, we have problematised that perspective by critically examining sample collection as a social process: an encounter between a front-line worker – the DCO – and a reviewed person – the athlete – who interact with each other.

The purpose of this analysis was not to demonstrate that the implementation of anti-doping policy is inadequate or that DCOs do not or not properly comply with the requirements and procedures of this policy. This research did aim to provide a clearer picture of how the DCO, as a front-line worker, performs the urine sample collection in interaction with the athlete and deals with the problems and uncertainties that this precarious, intrusive process can entail. Thus far, this topic has received little attention in both the scientific literature and formal anti-doping policy procedures.

DCOs as front-line workers

DCOs can be characterised as front-line workers but differ in a few ways from other street-level bureaucrats on which most research in the Lipsky tradition has focused. DCOs are a young professional group with little autonomy and discretion. Their role is limited to a strictly defined, critical task in the implementation of anti-doping policy. This task is to collect urine samples and not to analyse these samples or make judgements and decisions about it. As a result of this limited task, the role of DCOs hardly raises questions about their influence on policy implementation.

Still, DCOs cannot do their job properly without discretion. Although the rules and procedures leave little discretion-as-granted, the interaction with athletes shows that DCOs do make use of discretion-as-used. They do not do so as a form of policy making, as the dominant state-agent narrative suggests. Nor do DCOs make use of this discretion to make judgements of individual citizen clients based on their own moral values, as emerges from the alternative citizen-agent narrative (Maynard-Moody and Musheno 2000). Discretion for DCOs is above all an indispensable element in dealing with uncertainties, uncomfortable situations, and unexpected events. They do this based on their own insights and values within the strict straitjacket of ISTI rules and procedures.

Interaction strategies

DCOs define their work in terms of rules and relationships. They are convinced of the importance of the anti-doping policy that is partly implemented through them. This includes rules and procedures that must be followed carefully. But they cannot follow these rules and procedures on automatic pilot. Urine sample collection is not only a cornerstone of anti-doping policy full of rules and procedures. It is also an intrusive and infringing part of this policy which requires social and communicative skills.

To implement this policy correctly and smoothly, DCOs interact with athletes and try to take specific situations and circumstances into account. In that interaction, DCOs simultaneously have the regulatory authority and the athlete's personal situation as a frame of reference. The task here is to meet the requirements of accountability, compliance and efficiency on the one hand, and show sensitivity, understanding and flexibility on the other. Therein lies the importance and stake of discretion-as-used for DCOs.

In their interaction with athletes, DCOs make use of skills and strategies that allow them to create a human, workable relationship while following the prescribed rules and procedures. As soon as a DCO rings the bell or enters the room of an athlete, they are both turned 'on' into their front stage roles. DCOs adopt a professional attitude that complies with the role obligations that their function entails (cf. Goffman 1961). In word and gesture, they create distance from the athlete and try to avoid an atmosphere that is too amicable, which could influence the procedure. Both parties have an interest in showing dramaturgical loyalty in this respect: by accepting the value and rules of the game, and act accordingly, the sample collection will run as smoothly as possible (cf. Goffman 1989).

If inconvenient situations or disruptive events occur, DCOs create a temporary backstage status and make use of the strategy of role distancing (Goffman 1989, p. 139). By showing they understand the situation of the athlete and can place themselves into the shoes of the other, DCOs step out of their own role. Another strategy is by taking on the role of a 'non-person': being 'invisibly' present, for example by reading a book in a corner of the room (Goffman 1989, p. 150). An alternative is to assume the role of a 'regular visitor' and start a conversation with the athlete or other attendees about different subjects than the doping control. Athletes also apply role distancing, by putting the formal relationship aside for a while, invite the DCO to sit down for a cup of coffee or tea, and start a chit-chat.

The strategy of role distancing has its limits. While having a chit-chat with the athlete, DCOs remain focused on the situation to ensure that the procedure is not violated. This requires dramaturgical discipline: DCOs switch regularly between their public frontstage role and personal backstage role to provide tailor-made solutions for inconvenient occurrences in the encounter with athletes (cf. Dubois 2010).

The way DCOs deal with these role changes and role distancing differs per person, depending on their social skills, personality, training and experience. It also depends on the social relationship of the interaction, which is by definition asymmetric. Simply put: the DCO decides what needs to be done and the athlete has no choice than to follow the instructions. This unequal balance of power during the sample collection may be the reverse of their position on the social prestige hierarchy, in which the athlete is a public figure and the DCO a public nobody. DCOs use dramaturgical prudence and circumspection to deal with this social discrepancy. But when it comes to their core task, DCOs create distance and concentrate on displaying a front stage role performance (cf. Goffman 1989).

Research agenda

To understand policy implementation and compliance, micro-sociological interactions 'on the spot' deserve more attention. The scientific literature on anti-doping policy is extensive, but there is a gap in this respect. Many aspects of the governance, effectiveness and consequences of anti-doping policy have received attention, as mentioned in the opening section. The experiences of athletes have also been chosen quite a lot as object of study. However, there has been (too) little research into how social interactions take place at crucial junctures in doping policy (like urine sample collections, doping control sample analyses or anti-doping judicial panel discussions).

With regard to urine sample collection, no previous research has been conducted into the discretion that DCOs have in the implementation of anti-doping policy. Our study shows that the discretion-as-used by DCOs does not affect the reliability and credibility of anti-doping policy. The DCOs do not define their discretion in terms of bending or ignoring rules, but as pragmatic improvisations in response to uncomfortable situations and unexpected events. The question then is, to what extent does this differ from other contexts? Or more specifically: how does discretion-as-used by DCOs in the scope of one NADO relate to other national contexts? This requires further international comparative research.

In addition to that, further research is required into the effect of various variables on the sample collection process. What influence do the time of sample collection, the setting in which it takes place, and the style of the DCO exert on the athlete's experience, assessment, and cooperation? What are the effects of outsourcing sample collection to internationally operating commercial organisations for the discretion-as-used by DCOs and their social interaction with athletes? How do DCOs affect athletes' confidence in anti-doping policies?

On the one hand, these research questions demand a larger-scale follow-up study in which more DCOs are involved in different contexts. On the other hand, they point to the need for additional research methods, in particular observations, simulation studies, field experiments, and surveys.

Policy implications

The findings of this study indicate the importance of the social interaction between DCO and athlete in the sample collection process in three respects.

Firstly, the social interaction is important to run the sample collection smoothly. If a conflict or dilemma does arise, an appeal is made to the social skills of DCOs. It follows that anti-doping organisations should pay more attention to the different styles, functions and impacts of social interaction during sample collection. Our recommendation therefore is that this should be part of both the preliminary training of DCOs and interim reflections with them on their work experiences.

Secondly, it is important that athletes feel confident with doping controls. At the same time, DCOs should remain aware of their professionalism and avoid making the relationship too familiar, which could jeopardise the procedure. It is therefore advisable to sometimes have the doping controls of the same athletes carried out by different DCOs, without continuous alternation becoming the rule. WADA and NADOs should also leave room for social interaction in the doping control procedures and train DCOs in understanding and utilising their discretion. It is therefore important for NADOs to be aware of the impact of their choices and to find the right balance.

Thirdly, it emerges that the encounter between athletes and DCOs contributes to giving anti-doping policy a human face. Athletes indicated in the study that good interaction and understanding with DCOs can increase their confidence in anti-doping policy in general. As the DCO figures as the personification of the implementation of anti-doping policy for the athlete, the significance of this trust building can transcend the sample collection process and have impact on the credibility of anti-doping policy as such (cf. Manning 2008, Bartels 2013, Houlihan 2014). This further emphasises the importance of how DCOs handle their discretion in day-to-day encounters with athletes.

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References

- Bartels, K.P.R., 2013. Public encounters: the history and future of face-to-face contact between public professionals and citizens. *Public administration*, 91 (2), 469–483. doi:10.1111/j.1467-9299.2012.02101.x
- Bourdon, F., et al., 2014. French speaking athletes' experience and perception regarding the whereabouts reporting system and therapeutic use exemptions. *Performance enhancement & health*, 3 (3–4), 153–158. doi:10.1016/j.peh.2015.10.002
- Buffat, A., 2015. When and why discretion is weak or strong: the case of taxing officers in a public unemployment fund. In: P. Hupe, M. Hill, and A. Buffat, eds. *Understanding street-level bureaucracy*. Bristol/Chicago: Policy Press, 79–96.
- Casini, L., 2009. Global hybrid public-private bodies: the World Anti-Doping Agency (WADA). *International organizations law review*, 6 (2), 421–446. doi:10.1163/157237409X477644
- Corbin, J. and Strauss, A., 2015. *Basics of qualitative research: techniques and procedures for developing grounded theory*. Newbury Park: Sage.
- Davis, K.C., 1969. *Discretionary justice: a preliminary inquire*. Baton Rouge: Louisiana State University.
- Dubois, V., 2010. *The bureaucrat and the poor. Encounters in french welfare offices*. London: Ashgate.
- Durose, C., 2007. Beyond 'street level bureaucrats': re-interpreting the role of front-line public-sector workers. *Critical policy analysis*, 1 (2), 217–234.
- Efverström, A., et al., 2016. Anti-doping and legitimacy: an international survey of elite athletes' perceptions. *International journal of sport policy and politics*, 8 (3), 491–514. doi:10.1080/19406940.2016.1170716
- Elbe, A. and Brand, R., 2014. Urination difficulties during doping controls: an act of rebellion? *Journal of clinical sport psychology*, 8 (2), 204–214. doi:10.1123/jcsp.2014-0022
- Elbe, A. and Overbye, M., 2014. Urine doping controls: the athletes' perspective. *International journal of sport policy and politics*, 6 (2), 227–240. doi:10.1080/19406940.2013.801361
- Elbe, A. and Overbye, M., 2015. Providing support for athletes with negative experiences during urine doping controls. *Journal of sport psychology in action*, 6 (3), 188–198. doi:10.1080/21520704.2015.1072120
- Elbe, A., Schlegel, M.M., and Brand, R., 2012. Psychogenic urine retention during doping controls: consequences for elite athletes. *Performance enhancement & health*, 1 (2), 66–74. doi:10.1016/j.peh.2012.01.001
- Gleaves, J. and Christiansen, A.V., 2019. Athletes' perspectives on WADA and the code: a review and analysis. *International journal of sport policy and politics*, 11 (2), 341–353. doi:10.1080/19406940.2019.1577901
- Gofen, A., 2014. Mind the gap: dimensions and influence of street-level divergence. *Journal of public administration research and theory*, 24 (2), 473–493. doi:10.1093/jopart/mut037

- Goffman, E., 1961. *Encounters: two studies in the sociology of interaction*. Harmondsworth: Ravenio Books.
- Goffman, E., 1989. *The presentation of self in everyday life*. Cambridge: Penguin Books, orig, 1959.
- Gray, S., 2019. Achieving compliance with the world anti-doping code: learning from the implementation of another international agreement. *International journal of sport policy and politics*, 11 (2), 247–260. doi:10.1080/19406940.2018.1550798
- Hanstad, D.V. and Loland, S., 2005. *What is efficient doping control? A study of procedures and their justification in the planning and carrying out of doping control in sport*. Oslo: Norwegian School of Sport Sciences/Anti-Doping Norway.
- Hanstad, D.V. and 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. doi:10.1080/17461390802594219
- Harrison, M.A., et al., 2018. Frontline employees in the health clinic: impression management multiplexing when performing in-the-round. *Communication monographs*, 85 (3), 309–330. doi:10.1080/03637751.2018.1429638
- Houlihan, B., 1999. Anti-doping policy in sport: the politics of international policy co-ordination. *Public Administration*, 77 (2), 311–334. doi:10.1111/1467-9299.00156
- Houlihan, B., 2002. Managing compliance in international anti-doping policy: the world anti-doping code. *European sport management quarterly*, 2 (3), 188–208. doi:10.1080/16184740208721922
- Houlihan, B., 2014. Achieving compliance in international anti-doping policy: an analysis of the 2009 world anti-doping code. *Sport management review*, 17 (3), 265–276. doi:10.1016/j.smr.2013.10.002
- Hupe, P. and Buffat, A., 2014. A public service gap: capturing contexts in a comparative approach of street-level bureaucracy. *Public management review*, 16 (4), 548–569. doi:10.1080/14719037.2013.854401
- Hupe, P. and Hill, M., 2007. Street-level bureaucracy and public accountability. *Public administration*, 85 (2), 279–299. doi:10.1111/j.1467-9299.2007.00650.x
- Hupe, P., Hill, M., and Buffat, A., 2015. Introduction: defining and understanding street-level bureaucracy. In: P. Hupe, M. Hill, and A. Buffat, eds. *Understanding street-level bureaucracy*. Bristol/Chicago: Policy Press, 3–24.
- Kalkman, J.P. and Groenewegen, P., 2019. On frontline workers as bureau-political actors: the case of civil-military crisis management. *Administration & Society*, 51 (7), 1148–1170. doi:10.1177/0095399718780581
- Koop, M., 2016. *Mega event organizing committees: investment in anti-doping personnel*. Ottawa: University of Ottawa.
- Kruijers, J., 2020. 'Dopingcontroleurs zijn ook gewoon mensen'. Een onderzoek naar de invloed van sociale interacties op de implementatie van het antidopingbeleid tijdens het uitvoeren van dopingcontroles. Utrecht: Utrecht University.
- Lee, S. and Seok, C., 2018. A critical review on operation and management system of doping control officer in Korea anti-doping agency. In: Park J., Loia V., Yi G., Sung Y., eds. *Advances in Computer Science and Ubiquitous Computing. CUTE 2017, CSA 2017*. Lecture Notes in Electrical Engineering, vol 474. Singapore: Springer.
- Lipsky, M., 2010. *Street-level bureaucracy: dilemmas of the individual in public service*. orig. 1980. edn. New York: Russell Sage Foundation.
- Manning, P.K., 2008. Goffman on organizations. *Organization Studies*, 29 (5), 677–699. doi:10.1177/0170840608088767
- Maynard-Moody, S. and Musheno, M., 2000. State agent or citizen agent: two narratives of discretion. *Journal of public administration research and theory*, 10 (2), 329–358. doi:10.1093/oxfordjournals.jpart.a024272
- Overbye, M., et al., 2015. Athletes' perceptions of anti-doping sanctions: the ban from sport versus social, financial and self-imposed sanctions. *Sport in Society*, 18 (3), 364–384. doi:10.1080/17430437.2014.982539
- Overbye, M., 2016. Doping control in sport: an investigation of how elite athletes perceive and trust the functioning of the doping testing system in their sport. *Sport management review*, 19 (1), 6–22. doi:10.1016/j.smr.2015.10.002
- Overbye, M., 2017. Deterrence by risk of detection? An inquiry into how elite athletes perceive the deterrent effect of the doping testing regime in their sport. *Drugs: education, prevention and policy*, 24 (2), 206–219.
- Overbye, M. and Wagner, U., 2014. Experiences, attitudes and trust: an inquiry into elite athletes' perception of the whereabouts reporting system. *International journal of sport policy and politics*, 6 (3), 407–428. doi:10.1080/19406940.2013.791712
- Park, J., 2005. Governing doped bodies: the world anti-doping agency and the global culture of surveillance. *Cultural studies, critical methodologies*, 5 (2), 174–188. doi:10.1177/1532708605274945
- Peters, C., Postler, T., and Oberhoffer, R., 2013. Dopingkontrollen in Deutschland. Eine Befragung von Athleten und Dopingkontrollleuren. *Sportwissenschaft*, 43 (1), 20–33. doi:10.1007/s12662-013-0283-y
- Pound, R.W., McLaren, R.H., and Robertson, J., 2015. *The Independent Commission Report #1. Final Report*.
- Qvarfordt, A., et al., 2021. Limitations and duties: elite athletes' perceptions of compliance with anti-doping rules. *Sport in Society*, 24 (4), 551–570. doi:10.1080/17430437.2019.1681404
- Read, D., et al., 2019. Legitimacy driven change at the world anti-doping agency. *International Journal of sport policy and politics*, 11 (2), 233–245. doi:10.1080/19406940.2018.1544580
- Sluggett, B., 2011. Sport's doping game: surveillance in the biotech age. *Sociology of sport journal*, 28 (4), 387–403. doi:10.1123/ssj.28.4.387
- Strahler, K. and Elbe, A., 2007. Wollen, aber nicht Können. Das Problem Dopingkontrolle. *Leistungssport*, 37 (4), 35–38.
- Thorpe, D.G., 2014. *Comfortable being uncomfortable: a study of athlete and doping control officers' relations*. Vancouver: The University of British Columbia.

- Van de Walle, S., and Raaphorst, N., eds. 2018. *Inspectors and enforcement at the front line of government*. Cham: Palgrave Macmillan.
- WADA, 2011. *Doping control officer's training tool kit*. Montreal: WADA.
- WADA, 2014. *Sample collection personnel. Recruitment, training, accreditation and re-accreditation guidelines*. Montreal: WADA.
- WADA, 2019. *World anti-doping code 2015 with 2019 amendments*. Montreal: WADA.
- WADA, 2020. *International Standard for Testing and investigations*. Montreal: WADA.
- Walker, B. and Niner, P., 2005. The use of discretion in a rule-bound service: housing benefit administration and the introduction of discretionary housing payments in great britain. *Public administration*, 83 (1), 47–66. doi:[10.1111/j.0033-3298.2005.00437.x](https://doi.org/10.1111/j.0033-3298.2005.00437.x)
- Weber, M., 1985. *Wirtschaft und Gesellschaft. Grundriss der verstehende Soziologie. orig.* Tübingen: J.C.B. Mohr (Paul Siebeck), 1921/1922.
- Weber, M., 2016. *Die protestantische Ethik und der 'Geist' des Kapitalismus. orig.* Heidelberg: Springer, 1904/1905.
- Woolway, T., et al., 2020. 'Doing what is right and doing it right': A mapping review of athletes' perception of anti-doping legitimacy. *International Journal of Drug Policy*, 84. article 102865. 1–12. stylefix. [10.1016/j.drugpo.2020.102865](https://doi.org/10.1016/j.drugpo.2020.102865).